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Political Instability and the Roles of Governments in the Implementation of the Education Reform Policy in Thailand from 1999-2009

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Abstract

Throughout history, Thailand has been attempting to reform its educational system. The first reform occurred during the reign of King Rama V in order to supply the modern bureaucratic system, the main organisation for a modern centralised state, with a sufficient number of literate officials. The most recent attempt of the education reform in Thailand emerged when Thailand faced the severe economic crisis in 1997. The education reform policy officially began in 1999, when the National Education Act came into force. It was considered the most comprehensive reform in Thailand's history. From 1999 to 2009, many governments and ministers of education assumed power. Their roles in implementing the education reform policy as stipulated in the National Education Act were significant. This paper begins by explaining a theoretical framework and elaborating the political situation in Thailand from 1999-2009. This paper argues that based on a top-down approach to policy implementation analysis, political instability, especially from 2006 to 2009, was a major obstacle to the implementation of the education reform policy because each government needed to focus on how to deal with the pro- and the anti- Thaksin protesters. The education reform policy disappeared from the public interest and the governments' agenda.

Keywords: policy implementation, education reform policy, political instability

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Introduction

Before the major education reform in the reign of King Chulalongkorn (King Rama V), from 1868-1910, monasteries were the centres of education, and the monks were the main teachers who could teach every subject deemed necessary for young men (Fry, 2002, p. 4).

According to Fry (2002, p. 21), education reform in Thailand can be divided into four phases. The first phase occurred during the reign of King Rama V. Kullada Kesboonchoo-Mead (2004, p. 68) argued that the main rationale for the education reform in this period was to supply the modern bureaucratic system, the main organisation for a modern centralised state, with a sufficient number of literate officials.

The second phase of education reform in Thailand occurred after the uprising of university students to topple the authoritarian regime in 1973. The key feature was the unification of the basic education including primary and secondary education under the Ministry of Education. Moreover, it was the period in which there was a demand for a more open curriculum, and many Marxist writings were allowed (Fry, 2002, pp. 12-13).

The third phase of education reform in Thailand occurred in 1990-1995 in response to globalisation and internationalisation of the Thai economy. Cooperation and integration between numerous actors in society such as the government, teachers and schools, parents, religious leaders, businessmen and industrialists was needed in order to improve the quality of the education system of Thailand (Commission on Thailand's Education in the Era of Globalization: Towards National Progress and Security in the Next Century, 1996 p. 36).

The fourth phase began in 1997 when Thailand was confronted with the most severe economic crisis in its modern history. This crisis had an unprecedented traumatic effect on people's daily lives. The country's education system was blamed on the ground that it had failed to prevent the crisis in the first place. On the other hand, it was also put forward as a solution to revive the country's economy from the recession, to lay a strong foundation to enhance the country's competitiveness in the era of globalisation, and to promote the wellbeing of Thai people in every perspective.

Before the promulgation of the National Education Act B.E.2542 (1999), which is commonly known as The Education Reform Act, there were some critical problems in Thailand's education system, which urgently needed to be resolved, exemplified by the inequality of access to high quality education between urban and rural children. There were about 7.1 million children between 13 and 24 who were excluded from the compulsory education system. Worse still, when compared to 47 other countries, Thailand's competitiveness ranked lowly at 33, which also reflected on the poor quality of the education system (Office of Education Reform, 2001 p. 1). Additionally, there were other weak points that exacerbated the education system. These included: (1) the lack of reliable indicators to measure the standards of schools and other educational institutions nationwide; (2) the teacher-centred teaching method, which has ignored the true potential of learners; (3) the centralised administrative system which has led to the inefficiency, rigidity and inertia of decision-making procedures,

as well as the low-level of participation of civil-society organisations and ordinary citizens. Consequently, the demand for a comprehensive education reform had been continuously increasing in Thai society.

The most significant milestone which turned the education reform vision into reality was the Constitution of the Kingdom of Thailand B.E.2540 (1997), which was commonly known as the 'People's Constitution'. It was the first constitution of Thailand having the most tangible provisions on education in Chapter 3-*Rights and Liberties of the Thai People in Article 43* and in Chapter 5-*Fundamental Principles of the State in Article 81*. The first paragraph of Article 43 stipulates that "Persons have the equal right to receive not less than twelve years of basic, quality of education which must be provided free of charge by the government on generally available basis." (The Royal Thai Government, 1997, p. 10). Furthermore, Article 81 of the constitution stipulates that "The state must provide education and training, support the private sector to provide education and training to give rise to knowledge coupled with ethics, arrange to have a national education law..." (The Royal Thai Government, 1997, p. 16).

Two years later on 19 August, 1999, in order to comply with the provisions of the Constitution, Thailand's first national education law was published in the Royal Government Gazette and came into force the day after (The Royal Thai Government, 1999, pp. 1-23). It has become the master plan and framework for the education reform policy of Thailand in later years.

Every step to implement the education reform policy as stipulated in the National Education Act seemed to be smooth when the Democrat Party and Chart Thai Party were responsible for the education reform policy after the Act came into force. The 27th Prime Minister of Thailand, Abhisit Vejjajiva, was the Deputy Leader of the Democrat Party and the Minister of the Prime Minister's Office responsible for formulating the education reform policy in 1999. Mr Somsak Pritsananthakul of the Chart Thai Party was the Minister of Education. However, the major obstacle to the education reform policy began when the Chuan Leekpai government dissolved the House of Representatives on 9 November, 2000, and called for a general election on Sunday 6 January 2001 (The Royal Thai Government, 2000, pp. 1-2).

Thaksin Shinawatra became the 23rd Prime Minister of Thailand after he led his Thai Rak Thai (TRT) Party to defeat the Chuan Leekpai's Democrat Party government. Thaksin's political party won almost half of the seats in the House of Representatives, 248 out of 500 (Pongsudhirak, 2009, p. 32).

The government, led by Thai Rak Thai (TRT) Party with Thaksin as the Prime Minister, delivered a policy statement before the joint parliamentary session on 26 February, 2001. In that policy statement, the education reform agenda was not one of the government's urgent policies. The urgent policies of the Thaksin government were mainly about reviving the economy of Thailand from recession: (1) Three-year individual small farmers' debt suspension; (2) Establishment of the one-million baht Village and Urban Community Revolving Fund; (3) Establishment of the People's Bank; (4) Establishment of the Small-and Medium sized Enterprise Bank; (5) Establishment of a National Asset Management Corporation in order to comprehensively solve the problem of Non-Performing Loans (NPLs) in the

commercial banking system; (6) Development of State Enterprises; (7) Universal Health Care Insurance Scheme in which Thai people needed to pay only 30 baht when they went to hospitals; (8) Illegal drugs clamp down; and (9) Corruption elimination (The Secretariat of the Cabinet, 2001). The government declared the education policy as follows:

the Government is determined to launch educational reforms in accordance with the provisions and the spirit of the 1997 Constitution and the 1999 Education Act, with the aim of developing Thailand into a knowledge-based society, which is a pre-requisite for becoming a knowledge-based economy. The reforms will provide the Thai public with equal access to life-long education and training, enabling them to acquire knowledge and capital to generate income and to eventually pull the country out of the economic and social crisis. Towards this end, the Government will abide by the principle that “Education Builds the Nation, Empowers the Individual and Generates Employment”... (The Secretariat of the Cabinet, 2001).

This engendered doubts among officials and scholars in the education sector as well as ordinary people about the sincerity of the government to push forward the education reform policy.

Furthermore, during five years of the Thaksin administration from 2001-2006, the cabinet was reshuffled several times with the rotation of six Education Ministers including Thaksin himself. Every time the new Education Minister assumed power, the education reform came to a standstill. In 2002, when Suwit Khunkitti became the Minister of Education, the *National Education Act 2542 B.E. (1999)* was amended in order to separate the organisations responsible for religious and cultural missions, to establish the Ministry of Culture, which caused further delays to the education reform schemes (The Royal Thai Government, 2002, pp. 16-21).

From the end of 2005, the Thaksin government was met with strong resistance from the People’s Alliance for Democracy (PAD), or the yellow-shirt protestors, and Thaksin was toppled in the bloodless coup d’état of 19 September 2006. Until the end of 2008, the political situation in Thailand was dominated by the conflicts between the pro- and anti- Thaksin movements, so the agenda of the education reform almost entirely disappeared from the public interest. Even though the 2007 Constitution of Thailand, which was drafted after the coup d’état, also recognised the rights of Thai people to access high quality education free of charge in Article 49 (The Royal Thai Government, 2007, p. 15), the Thai government appointed by the military junta (2006-2007) was only interested in pushing forward the privatisation of public universities in Thailand. At the end of 2008, when the Democrat Party came to power and Jurin Laksanawisit, the deputy leader of the Democrat Party who was responsible for drafting policies of the party for the 2007 general election campaign, was appointed the Minister of Education. The situation seemed to be slightly better when he commenced to undertake tangible measures to implement the education reform policy, for example, the 15-Year Quality and Free Education for all Children in the academic year 2009 and the Tutor Channel Project.

The main objective of this paper is to analyse how political instability affected the implementation of the education reform policy in Thailand from 1999-2009 based on a top down approach to policy implementation analysis. This paper begins by explaining a theoretical framework. The latter part elaborates in detail the political situation in Thailand from 1999 to 2009. The last part showed how the situation had impacts on the education reform policy.

Top-down approach to policy implementation analysis

Mazmanian and Sabatier (1983, pp. 20-21) presented a definition of implementation as:

Implementation is the carrying out of a basic policy decision, usually incorporated in a statute but which also take the form of executive orders or court decisions. Ideally, that decision identifies the problem(s) to be addressed, stipulates the objective(s) to be pursued, and in a variety of ways, 'structures' the implementation process. The process normally runs through a number of stages beginning with passage of the basic statute, followed by the policy outputs (decisions) of the implementing agencies, the compliance of target groups with those decisions, the actual impacts – both intended and unintended – of those outputs, the perceived impacts of agency decisions, and finally, important revisions (or attempted revisions) in the basic statute.

According to Hill (2009, pp. 174-195), there are two main models for the study of policy implementation. The first model is the top-down model. This model separates the stage of policy implementation from policy formulation. People involved in the implementation process are directed by the objectives set in policy decisions (Meter & Horn, 1975, p. 445). The other model is the bottom-up model, which emphasises the roles of what Lipsky calls 'street-level bureaucrats' (Hill & Hupe, 2002, p. 51). Street-level bureaucrats, in dealing with their daily workloads, have to make choices on their own how to make use of their scarce resources. Controlled and directed from the top will lead to worse service delivery (Hill & Hupe, 2002, pp. 52-53).

Hill and Hupe (2002, pp. 45-51) referred to some scholars who contributed to the top-down approach of policy implementation, for example, Van Meter and Van Horn, Sabatier and Mazmanian, Hogwood and Gunn. To begin with, according to Matland (1995, p. 147), there are some general points which top-down theorists share: "(1) make policy goals clear and consistent; (2) minimise the number of actors; (3) limit the extent of change necessary; and (4) place implementation responsibility in an agency sympathetic with the policy's goals."

Van Meter and Van Horn (1975, p. 458) firstly identified two features affecting policy implementation: the level of change required and the level of goal consensus among actors involved in implementation. Concerning the level of change required, according to Van Meter and Van Horn (1975, p. 458), "incremental changes are more likely to engender a positive response than will drastic ones." Moreover, implementation would be more likely to succeed if the agencies involved would not be required to reorganise themselves to a considerable degree (Meter & Horn, 1975, p. 459). When discussing the level of goal consensus, they focused on the level of participation from subordinates or implementers "in the making of the policy

decision” (Meter & Horn, 1975, p. 459). Van Meter and Van Horn (Meter & Horn, 1975, p. 461) therefore concluded that in principle “implementation will be most successful where only marginal change is required and goal consensus is high.” However, they also noted that high level of goal consensus would not necessarily remove all problems of policy implementation (Meter & Horn, 1975, pp. 459-460). They went on to identify six variables which affect the implementation phase of public policy (Meter & Horn, 1975, pp. 462-474): (1) policy standards and objectives, which “move beyond the generalities of the legislative document to provide concrete and more specific standards for assessing program performance” (Meter & Horn, 1975, p. 464); (2) resources must be available; (3) interorganisational communication and relationships, especially if there is one superior organisation which can direct and influence others; (4) the characteristics of the implementation agencies, for example, the competence and size of the agency, the degree of hierarchical control, the political resources of the agency, the agency’s links with the policy-making body etc.; (5) economic, social and political conditions; and (6) disposition and attitudes of implementers towards the goals and standards of a policy.

Mazmanian and Sabatier (1989, p. 21) divided a large number of factors affecting implementation into three categories: “(1) the tractability of the problem(s) being addressed; (2) the ability of the statute to structure favourably the implementation process; and (3) the net effect of a variety of political variables on the balance of support for statutory objectives.”

In the first category, there are four issues to be considered: (1) technical difficulties; (2) diversity of proscribed behaviour; (3) the size of a target group (the smaller the target group is, the more likely the implementation to be successful; (4) extent of behavioural change required (Mazmanian & Sabatier, 1989, pp. 21-25). The issues in the second category (the ability of the statute to structure the implementation process) include: (1) clear and consistent objectives; (2) valid causal theory; (3) initial allocation of financial resources; (4) hierarchical integration within and among implementing institutions; (5) decision rules of implementing agencies; (6) officials commitment to objectives; and (7) formal access by outsiders (Mazmanian & Sabatier, 1989, pp. 25-30). Finally, nonstatutory variables are the followings: (1) socioeconomic conditions and technology; (2) public support; (3) attitudes and resources of constituency groups; (4) support from sovereigns; and (5) commitment and leadership skill of implementing officials (Mazmanian & Sabatier, 1989, pp. 30-35).

Hogwood and Gunn (1984, pp. 199-206), provided ten recommendations for policy makers to ensure successful policy implementation which could be summarised as follows: (1) external circumstances should not be constraints; (2) adequate time and resources must be provided; (3) required resources must be available for each stage in the implementation process; (4) a policy needs to be based on a valid theory of cause and effect; (5) the cause and effect relationship is direct; (6) there is one implementing agency without the need to be dependent on others; (7) complete understanding of, and agreement on objectives to be achieved; (8) the tasks to be performed by each participant is specified in detail; (9) perfect communication and communication between agencies involved; and (10) the authorities of those in command.

Based on the top-down approach of policy implementation proposed by many scholars, there were five main aspects which could be used to analyse the obstacles to the implementation of the education reform policy in Thailand from 1999 to 2009, namely: (1) the size of target groups involved and affected and the extent of change required by the policy; (2) the ambiguity of the National Education Act as the main framework for the education reform policy; (3) the lack of one main agency responsible for implementation and the lack of agreement on the education reform policy; (4) Different levels of commitment and leadership of the governments responsible for policy implementation; and (5) political instability in Thailand.

This paper focuses only on how political instability affected the implementation of the education reform policy in Thailand from 1999-2009.

Political instability and the implementation of the education reform policy

In 1999, when the National Education Act came into force, Thai politics was relatively stable. The transition of power was within a democratic framework based on the provisions of the constitution. Prime Minister Chuan Leekpai dissolved the House of Representatives at the end of 2000. In 2001, Thaksin's political party won almost half of the seats in the House of Representatives, 248 out of 500 MPs (Pongsudhirak, 2009, p. 32). Thaksin and his political party could win the votes from both impoverished people in the rural areas and the urban middle class in Bangkok and other major cities. It was the first government of Thailand which could overcome the dilemma of Thai democracy, which Anek Laothamathas explained as "a tale of two democracies" (Laothamathas, 1996, p. 201). Before 2001, the urban and educated middle class and the rural impoverished voters always elected the candidates with different qualifications. As Anek (Laothamathas, 1996, pp. 221-222) explained the different voting patterns, "When the rural electorate chooses its candidates, it chooses patrons to look after its welfare and represent its communities. When the middle class evaluates the performance of the elected politics, it looks for political executives or professional lawmakers who could operate effectively at the national level." As the majority of Thai people still live in the rural areas, they have always been the people who put the government into being. On the other hand, the urban middle class who had less influences in determining who would be the government ironically had more power to topple the democratically-elected government by aligning themselves with the military to stage a coup d'état.

The slogan of Thaksin's party during the election campaign was "think anew, act anew". Thaksin and his Thai Rak Thai Party pledged to lead Thailand out of the economic crisis which endured since 1997. Thaksin captured a golden opportunity from the economic crisis when the Democrat Party was accused of assisting only the financial sector and neglecting the production sector and the impoverished people in the rural areas of Thailand.

When speaking to the rural voters, Thaksin promised to deliver unprecedented social welfares and economic opportunities such as universal health care scheme in which Thai people needed to pay only 30 baht every time they went to see doctors. When speaking to the urban middle class in major cities, Thaksin positioned himself as a successful businessman who would lead the country out of the economic crisis and to compete with other countries in the international arena. He promised to

strengthen every perspective of Thai economy and reformed the education system of the country to serve that purpose. The main indicator of his success was the electoral result in Bangkok; out of 37 constituencies in Bangkok, Thaksin's political party won 29 seats (The Royal Thai Government, 2001a, pp. 3-4; 2001b, p. 12).

The Thaksin government focused mainly on resolving the economic crisis and bolstering the economic growth of Thailand, not the education reform policy (Yampracha, 2001 p. 77), which was labelled by many scholars, both Thais and foreigners, as "Thaksinomics". Pasuk Phongpaichit and Chris Baker (2004, p. 100) explained that the main idea of Thaksinomics was the shift from neoliberalism, which IMF had imposed on Thailand before 2001, towards developmentalism, which the government had to "play a positive role in protecting and promoting firms and sectors to overcome the disadvantages of competing against more advanced economies.

The government implemented a 'dual track' policy. The first track was the stimulation of domestic consumption and providing more economic opportunities and welfare for the impoverished people. The second track was enhancing the Thai economy to be able to compete with other countries in the international arena (Phongpaichit & Baker, 2004, pp. 121-122). The Thaksin government's 'dual track' economic policy was popular with the electorate, especially its populist policy such as a universal health care scheme in which Thai people needed to pay 30 baht every time they visit doctors and the establishment of the one-million baht Village and Urban Community Revolving Fund (Funston, 2009, p. XV). It was the first government in Thai political history which could serve the full four-year term. Even though the Cabinet was reshuffled many times and there were five Education Ministers in the first term of the Thaksin government, it was Thaksin's decision to change his ministers. It was not the result of the political instability at all as the popularity of the Thaksin governments was high.

At the general election held on 6 February 2005, Thaksin's Thai Rak Thai Party won a landslide victory and could secure an absolute majority in the House of Representatives, 377 out of 500 MPs (Pongsudhirak, 2006, p. 286). Thaksin's Thai Rak Thai party could form a majority government in its own right for the first time in Thailand's political history since its democratic revolution in 1932. The three opposition parties had only 123 seats combined. The number of seats Thai Rak Thai won clearly indicated that the Opposition led by the Democrat Party could not launch a censure debate against Prime Minister Thaksin and could not do so against ministers on corruption allegations based on the 1997 Constitution (The Royal Thai Government, 1997, pp. 46-47, 299). The second Thaksin government therefore could not be scrutinised in Parliament effectively. The second Thaksin government was mainly about abuse of power, manipulation and political interference in independent organisations set up by the 1997 Constitution. Mutebi (2006, p. 303) referred to the second Thaksin government as "semi-authoritarian", "soft-authoritarian" or "diminished democracy". Mutebi (2006, pp. 303-304) also argued that "there is little doubt that Thaksin's administration has shown greater authoritarian tendencies in comparison to his immediate predecessors". The Thaksin government after the 2005 election, was accused of interfering in the selection processes of positions of many independent organisations including the positions of Auditor-General, the commissioners of the National Counter Corruption Commission, the commissioners of the National Broadcasting Commission as well as the National Telecommunication

Commission as people selected was believed to have some connections with Thaksin or his government (Mutebi, 2006, pp. 306-314).

The political crisis began when Thaksin decided to take Sondhi Limthongkul's weekly current affairs programme called *Muang Thai Raisapda* or *Thailand Weekly*, which tended to criticise the Thaksin government more frequently and more severely in 2005 over corruption charges and disloyalty to King Bhumibhol of Thailand, off a state-owned Channel 9 television station on 16 September 2005 (Montesano, 2006, p. 2). However, Sondhi moved to host his programme at Lumpini Park in Bangkok Central Business District, which the audience continuously increased. Later, Sondhi's movement expanded to form the anti-Thaksin movement called the People's Alliance for Democracy (PAD), and it was commonly known as the Yellow-Shirt protesters at the beginning of 2006. According to Thitinan Pongsudhirak (Pongsudhirak, 2006, p. 297), Sondhi's movement was composed of "Bangkok-based social activists, NGOs, the intelligentsia, the disaffected middle class, and disgruntled businessmen". They mobilised mass rallies against the Thaksin government frequently in 2006.

The movement gained momentum when Thaksin decided to sell his family-owned telecommunication company, Shin Corporation, to the Singaporean government's Temasek Holdings. The deal was worth 73 billion baht and Thaksin did not have to pay any taxes for this sale. The deal triggered mass rallies against the government. Thaksin later dissolved the House of Representatives and called an early election on 2 April 2006, at which three opposition parties: the Democrat Party, the Chart Thai Party, and Mahachon Party, after failing to convince the government and the Thai Rak Thai party to agree to a political reform agreement, boycotted. This led to political brinkmanship in 2006. The election was later nullified by the ruling of the Constitutional Court of Thailand. The judges argued that the 37-day period between dissolution of the House and the Election Day, though technically not violating the constitution, had led to political problems severe enough for the election to be disqualified. Another rationale was that the positioning of ballot boxes violated the secrecy of the vote. Ultimately the court found that "The election yielded results which are unfair and undemocratic, and are therefore unconstitutional...from the beginning of the election process, i.e. from the scheduling of the elections, the application of candidates, the ballots, and the announcement of the election results" (Dressel, 2010, p. 679).

Finally, on 19 September 2006, while Thaksin travelled overseas, Thailand's military led by General Sonthi Boonyaratglin, the Army Commander, launched a bloodless coup d'état which toppled the Thaksin government and chose General (retired) Surayud Chulanont to be Prime Minister.

After the coup, the United Front for Democracy against Dictatorship (UDD) or the Red-Shirt protesters, the pro-Thaksin movement was established. Thailand has been deeply divided from that moment. At the 2007 general election, the People's Power Party, the nominee of Thaksin's Thai Rak Thai Party, won 233 out of 480 seats contested and formed a coalition government in 2008 led by Prime Minister Samak Sundaravej (Ockey, 2009, p. 318). The People's Power Party government attempted to amend the 2007 Constitution which had been drafted after the coup and passed the referendum in August 2007, in order to pave the way for Thaksin's return to Thailand as innocent and to whitewash other allegations against him. This triggered a new

round of the protests led by the PAD, which lasted for 193 days. The PAD illegally seized the Government House in Bangkok, where the Prime Minister works and the Cabinet meeting is held. When the Government House was taken over by the Yellow-Shirt Protesters, the Prime Minister and other Ministers including the Minister of Education and could not work effectively.

In September 2008, the Constitutional Court ruled that Samak violated the Constitution by working for a private company and must be removed from the position. Somchai Wongsawat, the Minister of Education of the Samak government and Thaksin's brother-in-law was appointed Prime Minister on 18 September 2008 (The Royal Thai Government, 2008 p. 1). However, the PAD continued to protest against the new Somchai government. Somchai could not enter the Government House to work, and his government was paralysed. Finally, when Somchai planned to return from the APEC Summit in Peru, the PAD protesters move to shut down the Suvarnabhumi Airport to prevent his return. The blockade did tremendous damage to Thailand's economy (Ockey, 2009, p. 327). In December 2008, the Constitutional Court stepped in to end the political impasse by dissolving the People's Power Party on the ground of electoral frauds and alleged vote-buying and banning the party's executives including Somchai from politics for five years. The PAD protesters stopped protesting. A faction of the People's Power Party MPs led by Newin Chidchop and other political parties turned to support Abhisit Vejjajiva, the leader of the Democrat Party to be the third Prime Minister in 2008 alone.

Leelavadee Vajropala (2012), former Parliamentary Secretary to Minister of Education Somchai Wongsawat, summarised the political situation when she faced the anti-government protesters in 2008 (the yellow-shirt protesters) that when Thai politics was not stable, everybody including herself were always scared of what would happen, which gate of which ministry the protesters would block. They always listened to the radio and surfed the internet to follow the news on the situation. Therefore, they did not concentrate on putting forward the education reform policy, and the policy did not proceed as expected.

When the Democrat Party was able to form the government, the Red Shirt protesters did not accept its legitimacy simply because the Democrat Party did not win the 2007 general election and it was believed that the army convinced or even induced Newin and other political parties to desert Thaksin and support Abhisit (Stent, 2012 p. 33). The Red Shirt began protesting against the government and in April 2009 stormed the venue of the ASEAN Summit and other related meetings in Pattaya, a major tourist attraction in the eastern part of Thailand. As a result, Abhisit needed to cancel all meetings, declared the state of emergency in Pattaya and evacuated the leaders attending the meetings (Thai protests cancel Asian summit 2009). Kevin Rudd's jet plane had to make a sudden about-turn to Canberra (Allard & Gordon, 2009). When Abhisit returned to Bangkok and went to the Ministry of Interior and announced the state of emergency in Bangkok, the red-shirt protesters surrounded his car and pelted it with rocks, flags, chairs and sticks ("Two dead as violent clashes rock Thai capital," 2009). The army then encircled the protesters and the leaders decided to end their protest. Even though the Abhisit government survived the protests of the red-shirts, it showed that the legitimacy and stability of his government was challenged from the beginning, and Thai politics since 2006 was dominated by the conflict between the pro- and anti- Thaksin movements. This inevitably affected the implementation of the

education reform policy as the governments had to spend a tremendous time and effort dealing with the protests.

Conclusion

As described above, before 2006, Thai politics was relatively stable as there was no violent protest against the governments. The education reform policy therefore could be more or less implemented. However, from 2006-2009, Thai politics was not stable and was full of protests of the pro- and the anti- Thaksin movements. In 2008 alone, there were three prime ministers and three Education Ministers. Each government needed to focus largely on how to deal with protesters, and the education reform policy was not the governments' priority. Political instability was a major obstacle to the successful education reform in Thailand during the first decade.

The logo for iafor (International Association for Business and Public Policy) is centered on the page. It consists of the lowercase letters "iafor" in a light blue, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs: a larger light blue arc and a smaller, slightly offset light red arc.

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Bankruptcy Cancellation in Indonesia: A Labirin for Curator Fee Execution

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Abstract

This article investigates the application of Article 17 paragraph (2) of Law No. 37 of 2004 on Bankruptcy and Suspension of Payment (“Bankruptcy Act“) in Indonesia. Article 17 paragraph (2) Bankruptcy Act states that the Supreme Court have to set curator fee in case of bankruptcy cancellation petition granted. This research indicate that The Supreme Court Verdict which does not specify the amount of curator fee as mandated by Article 17 paragraph (2) Bankruptcy Act. The research also found that curator applying curator fee determination to the Commercial Court if The Supreme Court Verdict which does not specify the amount of curator fee. Curator fee determined by the commercial court is contrary to Article 17 paragraph (2) Bankruptcy Act which states the absolute competence of the Supreme Court to set curator fee in case of bankruptcy cancelation. This research provides solutions to protection curator fee is not specified Supreme Court without violating Article 17 paragraph (2) Bankruptcy Act.

Keywords: bankruptcy cancelation, commercial court, curator fee, Indonesia, supreme court

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Introduction

Indonesia bankruptcy regulation when Dutch colonialization period was *Staatsblad* 1905 No. 217 and *Staatsblad* 1906 No. 348 on *Verordening op het Faillissement en Surceance van Betaling*. It was replaced by Law No. 4 of 1998 on Stipulation of Government Regulation No. 1 of 1998 on Bankruptcy. At last, it was replaced by Law No. 37 of 2004 on Bankruptcy and Suspension of Payment (Bankruptcy Act). Bankruptcy Act establish commercial court with bankruptcy jurisdiction that replaced the district court jurisdiction (Tata Wijayanta, 2004).

The Commercial Court establishment is an effort to accommodate the court renewal need that has authority check and decide for bankruptcy cases more quickly, effectively and efficiently after the economic crisis in Indonesia. *When Indonesia crisis Indonesia period, bankruptcy process by district court less effective, less efficient wasting time (Tata Wijayanta, 2010)*. Establishment of commercial courts holds general principles and modern competent, independent and impartial, accountable, participatory, transparent, accessible, quick process and the rule of law. Article 6 Bankruptcy Act have set any quickly insolvency process, such as setting a date for a hearing no later than three (3) days after the bankruptcy petition filed, the petition examination begins no later than 20 (twenty) days from the petition filed, the verdict against the bankruptcy petition shall be made no later than 60 (sixty) days after the bankruptcy petition filed, the decision of a bankruptcy petition submission no later than three (3) days after the date of the decision, management and settlement of the bankruptcy estate process until the appeal is filed no later than 8 (eight) days from the decision of bankruptcy declaration. Simple verification is requirement of the bankruptcy decision under Article 8 paragraph (4) of Bankruptcy as a legal political in order to have bankruptcy by a rapid time frame (Putriyanti, Defiana, E. & Wijayanta, T., 2010).

Bankruptcy proceedings reformation contained in Article 69 Bankruptcy Act which appoints a curator who has the duty to maintenance and / or settlement of the bankruptcy estate after the bankruptcy decision. The curator must be professional with specialized expertise in performing the maintenance and / or settlement of the bankruptcy estate and is registered in Indonesia Ministry of Justice as a curator. Special expertise requirements related to the risks faced in performing their duties, where curator responsible for errors or omissions in performing they tasks that cause harm to bankruptcy property. The curator appointed by the judges of the Commercial Court through bankruptcy verdict and took charge since the date of verdict filed. There are 2 (two) tasks assigned by the commercial court judges to the curator. First, obtaining a bankruptcy estate by way of security for the bankruptcy estate (particularly the bankruptcy estate that can easily be transferred / hidden by the bankrupt debtor such as jewelry, money and other movable goods), data collection and assessment of the bankruptcy estate and the preparation of the list of accounts (including names and places stay of creditors and other types of receivables are comprised of a preferred creditor, the secured creditor and unsecured creditor) (Sularto, 2012). Second, the bankruptcy estate settlement task is to dilute or sell the bankruptcy estate for the repayment of debts to creditors. The bankruptcy estate sales by auction or sales conducted under the approval of the Supervisory Judge hands. After the bankruptcy estate for sale, then divide curator bankruptcy estate in

accordance with the list of accounts with regard to the value of the bankruptcy estate, the amount and type of creditors, bankruptcy costs and benefits services curator.

Bankruptcy process should not end with the settlement of the bankruptcy estate. Bankruptcy Act stated that bankruptcy could end by 4 (four) ways. First, the achievement of peace between the creditor to the debtor bankrupt by paying attention to the prospect of good business debtor bankrupt and unable to repay the debt, the debt settlement creditors do not outweigh peace and peace terms more favorable than the creditor and the debtor does not peace. Secondly, the revocation decision on the declaration of bankruptcy by the judges of the Commercial Court in the case of the bankruptcy estate is not sufficient to pay the cost of bankruptcy (Sjahdeini, 2010). Third, bankruptcy settlement. Fourth, the cancellation of the bankruptcy decision on appeal or judicial review that was published in the Official Gazette of the Republic of Indonesia at least two (2) daily newspapers with national and local scale circulation in the domicile of the debtor. Curator who has carried out his duties to the bankruptcy ends curator entitled to compensation for services regulated by the Regulation of the Minister of Justice of the Republic of Indonesia No.. M.09-HT.05.10 1998, then repealed by Regulation of the Minister of Law and Human Rights No. 01 Year 2013 on Guidelines Rewards For Receivers and Administrators of the date of January 11th, 2013.

Curator fee set by the judges of the Commercial Court after the achievement of peace, settlement of the bankruptcy estate bankruptcy or revocation decision by the judges of the Commercial Court. It contrast with the bankruptcy ends because bankruptcy decision cancellation on appeal or reconsideration in accordance with Article 17 paragraph (2) of the Bankruptcy Act stating "The panel of judges also overturned bankruptcy fees bankruptcy and receivership fee". The provisions of Article 17 paragraph (2) of the Bankruptcy Act refers to the Supreme Court overturning bankruptcy.

Determination of fee receivership by the Supreme Court as mandated in Article 17 paragraph (2) of the Bankruptcy Act is very difficult to implement for several reasons. First, examine the Supreme Court appeal on the grounds of the judges of the Commercial Court is not authorized or beyond the limits of authority, misapplied or violated the law or fails to meet the requirements set by the laws and regulations that threaten the negligence resulted in the cancellation of the decision. Therefore, the principal case was not examined again by the Supreme Court so that payment for services not inspected by the curator of the Supreme Court. Second, the process of obtaining a settlement of the bankruptcy estate and is still running at the time of appeal or review of an appeal that can't be determined fee curator. Third, application or reconsideration appeal the decision to revoke the bankruptcy declaration made by the Debtor Bankrupt, resulting in the solicitation may not be listed on the service fee and the cost of bankruptcy receivership. Determination of fee that is not requested by the curator Bankrupt Debtor Bankrupt Debtor must exceed demand. On the other hand, the Supreme Court's decision does not set a fee for curator raises uncertainty of curator who have done his duties as a court order that cut commercial bankruptcy.

2. Research Method

This is a descriptive analytical study in which the authors would describe the legal issues related to the determination of the imposition of a service fee by the curator of

the judges of the Commercial Court in the case of cancellation of the bankruptcy decision by the Supreme Court. The approach used is empirical jurisdiction, ie an approach to a decision by way of judicial notice of the terms of (the rules or norms applicable), and the fact that is actually happening on the ground (empirical).

This study uses primary data and secondary data. Primary data were obtained by collecting an appeal or reconsideration decision issued by the Supreme Court through the official website of the Supreme Court. Secondary was gotten from collecting data which related to the regulation of Indonesian bankruptcy, curator fee, and the law of civil court proceedings in a case of Indonesian Law No. 37 of 2004 on Bankruptcy and Suspension of Payment, Regulation of the Minister of Law and Human Rights of the Republic of Indonesia Number 1 Year 2013 on Guidelines for the Management Benefits and Curator, Decree of the Minister of Justice of the Republic of Indonesia No. M.09-HT.05.10 1998 on Guidelines For PES magnitude of Receivers and Administrators and Civil Law Procedure.

Data analysis was done by categorizing Supreme Court ruling that decided the cancellation of the bankruptcy decision by the commercial court. The data were then analyzed for compliance with Article 17 paragraph (2) Bankruptcy Indonesian Law. The next step in analyzing the legal efforts made to obtain a fee curator according to Indonesian Law and the Civil Law Procedure.

3. Discussion

3.1. The Civil Courts Verdict

Lilik Mulyadi stated that the judge's ruling can be divided into two types. First, the decision is not a final decision, the judge handed down the verdict before deciding the principal case that aims to facilitate the continuation of proceedings. In this case, the injunction is only temporary and not the decision of the decision and the case remains unfinished. Decision was not a final decision could be the *preparator* decision that the verdict handed down by the judge to prepare and organize examination of the case, for example, establish that the contested decision had not been cut back along with the convention lawsuit; decision of the interlocutor is the decision handed down by the judge proof commands and can affect the principal case, for example, contains a command decision to hear the expert testimony, the verdict on the burden of proof; provisionil verdict was a decision that sets a temporary measure for the benefit of one of the litigants; and incidental decision is the imposition of judgment in relation to the incident, such as the judge's decision to grant the request of either party to call witnesses when the trial took place. Second, the final decision was sentenced with respect to the merits of the case and ends the case on some level. In essence, the final decision can be divided into decision *declaratoir* verdict was a decision handed down by the judge to explain the nature of that enactment of a state law or determine whether or not a situation that otherwise the plaintiff / applicant; constitutive decision is a judge's ruling that establishes a new state law or state law abolished; *condemnatoir* verdict was a judge's ruling that contains condemnation of either party to meet achievement; contradictor decision was a decision handed down by the judge in the case never came to the defendant at the trial even though he was not a member of resistance; *verstek* verdict was a decision handed down in the case of the respondent judge did not attend the hearing despite deserves to be called the facing (Mulyadi, L., 2010).

Decision is the decision of the bankruptcy petition *constitutive* verdict is a judge's ruling that establishes that the defendant be in a state of bankruptcy new law is a state of bankruptcy. In accordance with Article 8, paragraph (5) of the Bankruptcy Act, the judges of the Commercial Court shall decide upon the bankruptcy petition no later than 60 days after the petition is filed. In short period of time causes the judge was forced to be active in the process of proving the bankruptcy petition, for example by limiting the parties' willingness to spend long time for the process responsible for answering and directing the parties to focus on the process of evidence (Wijayanta, T., Aristya, SDF, Basuki, K., Herliana, Halili, H., Sutanato & Supartinah, 2010).

Examining the appeal and judicial review, the Supreme Court in charge of examining *judex fictie* / Central Jakarta Commercial Court if there is an error in the application of the law of Article 17 paragraph (2) and (3) the Bankruptcy Act states that the judges should overturn bankruptcy fees bankruptcy and receivership fee, and then the Supreme Court not only check *judex fictie* but also need to know the maintenance process and settlement of the bankruptcy estate so as to determine the costs and benefits of curator bankruptcy services. It gives rise to difficulties in practice given the Supreme Court does not follow the bankruptcy estate management and settlement conducted by the curator.

In the bankruptcy proceedings in the Commercial Court, the judges who examine and adjudicate the bankruptcy case are not similar to the active judges of the General Court handles civil cases, meaning that the judges of the Commercial Court in dealing with bankruptcy cases from receipt to file with the verdict to be active bankruptcy process because the grace period should pay attention to events that have determined the proceedings for 30 days, with regard to the principle of balance and the evidence that is both simple to achieve the principle of legal certainty, the benefits and appropriateness (Story, 2005).

3.2. Execution Fee Determination Receivers in Bankruptcy Canceled Supreme Court Decision Not In accordance with Article 17, Paragraph (2) of Bankruptcy Act

Bankruptcy proceedings in the first level, management and settlement of the bankruptcy estate and the bankruptcy petition in the Supreme Court and judicial review set forth in the Bankruptcy Act. Article 8, paragraph (5) Bankruptcy Act said states commercial court ordered bankruptcy to decide no later than 60 (sixty) days after the bankruptcy petition is filed. The provisions of Article 13 paragraph (3) of the Bankruptcy Act ordered the Supreme Court to decide an appeal no later than 60 days after the appeal is received by the Supreme Court.

In accordance with Article 16 paragraph (1) of Bankruptcy Act, Curator shall perform their duties to take care of and clean up the bankruptcy estate even though subject to review bankruptcy decision. Curator actions undertaken by the Bankruptcy Act considered valid although in later Supreme Court issued a ruling that overturned the bankruptcy. The curator task can be divided into 2 (two) phases: management and settlement stage where the management of the tasks in coordination with the supervisory judge curators, directors and creditors and other parties involved with bankruptcy (Kurniawan, 2012). Things that do curators to carry out these duties

starting from the announcement of the bankruptcy judge's decision in the Official Gazette and newspapers; saving bankruptcy estate; inventory of the bankruptcy estate; arranging list of debts and receivables bankruptcy estate; continued efforts are declared bankrupt Debtor (with the consent of the creditor committee); give some money to the debtor bankrupt living with his family; keep all money, jewelry, securities and other securities; lend cash that is not required for the maintenance work; make peace or to resolve the matter well; and provide copies of the letters to the creditors at the expense of creditors concerned.

When Bankruptcy Act was drafted, curator fee in carrying out the duties and responsibilities for administration of the bankruptcy estate and the settlement set forth in Decree of the Minister of Justice of the Republic of Indonesia No. M.09-1998 HT.05.10 of magnitude Fee For Receivers and Administrators. Guidelines curator fee stipulated in the Decree of the Minister of Justice has been revoked by Regulation of the Minister of Law and Human Rights No. 01 Year 2013 on Guidelines for Remuneration for the Board of Curators and to change the large number curator fee as follows:

Bankruptcy End	Debtor's Asset	Curator Fee
Reconciliation	Asset < Rp. 50 M	5%
	Next Rp 50 M - 250 M	3%
	Next Rp. 250 M- 500 M	2%
	Above Rp. 500 M	1%
Settlement	Asset < Rp. 50 M	8%
	Next Rp 50 M - 250 M	6%
	Next Rp. 250 M- 500 M	4%
	Above Rp. 500 M	2%
Bankruptcy cancelation by Supreme Court	unregulated	unregulated

Table 1. Curator Fee based on Minister of Law and Human Rights regulation No. 01 of 2013

Article 2 paragraph (1) item c Minister of Law and Human Rights Regulation No. 01 of 2013 also change the loading fee previously charged to the receiver where the debtor into bankruptcy to the applicant. Imposition curator fee to the Minister of Justice and Human Rights No. 01 of 2013 is clearly contrary to Article 17 paragraph (2) in conjunction with subsection (3) Bankruptcy Act Law which states that the fee can be charged to the applicant curator or jointly between the applicant and debtors.

Article 17 Paragraph (2) Bankruptcy Act stated that the Supreme Court is a party that sets the cost of bankruptcy and receivership fee in the event of bankruptcy overturned on appeal or reconsideration. According to curator Andrey Sitanggang that it is very difficult to implement given the Supreme Court does not know how the amount of costs incurred during the process of obtaining a curator and property settlement debtors. Another factor that led to Article 17 paragraph (2) Bankruptcy Act is curator petition to the commercial court judges to set a fee curator.

One curator fee determination that does not comply with Article 17 paragraph (2) of the Determination No. 12/Pailit/2009/PN.Niaga.Smg Jo. No.. 897K/Pdt.Sus/2009 dated August 30, 2010 related to the bankruptcy of PT. Lidi Manunggal Perkasa ("LMP Limited"). Semarang Commercial Court decision through No. 12/Pailit/2009/PN.Niaga.Smg stating LMP Limited bankrupt and appoints Tutut Rokhayatun and Andrian Kusumawardana as Curators. Follow the decision of the curator immediately carry out his duties as mandated by Bankruptcy Act. The verdict, LMP Limited appealed to the Supreme Court case No. 897K/Pdt.Sus/2009 and on May 3, 2010 the Supreme Court gave judgment in cassation that states as follows: To grant the Applicant's appeal of Cassation: LMP Limited; Commerce's decision to cancel the Semarang Commercial Court No. 12/PAILIT/2009/PN.NIAGA.SMG; Declare the Semarang Commercial Court was not authorized to try the case; Punish the Respondent Cassation to pay court costs in all levels of the judiciary, which in this appeal is Rp 5.000.000. The verdict does not meet the formal elements of the specified Article 17 paragraph (2) of the Bankruptcy Act where the judges who overturned the verdict should be set the cost of bankruptcy and receivership fee. In practice, the decision of the Supreme Court followed by a curator with the proposed fee to the judges' curator Bankruptcy Case through Supervisory Judge. Furthermore, the commercial court judges determinate No. 12/Pailit/2009/PN.Niaga.Smg *jo*. No.897K/Pdt.Sus/2009 on Bankruptcy Costs and Benefits Services Curator.

Determination of fee curator that is not in accordance with Article 17 paragraph (2) of the Bankruptcy can also be seen from the bankruptcy of PT. Telekomunikasi Indonesia (Telkomsel). Telkomsel declared bankrupt by the Jakarta Pusat Commercial Court No. 48/PAILIT/2012/PN.Niaga.Jkt.Pst that said (1) grant the petition statement Bankrupt Applicant: PT. Prima Jaya Informatika ("PJI Limited"), in its entirety; (2) Respondent Declared Bankrupt: Telkomsel bankrupt; (3) To appoint and designate Judge Commerce in Central Jakarta Commercial Court as Supervisory Judge in the Bankruptcy Respondent bankruptcy process; (4) To appoint and appoint Br. Ferry Samad S. as Receiver in Bankruptcy Respondent the bankruptcy process; (5) Establish that Fee will be determined later after the Curator finished their duties; (6) To punish the Respondent Bankrupt to pay court costs. The verdict followed by a curator to carry out their duties as mandated by Bankruptcy Act. On the other hand, Telkomsel filed an appeal to the Supreme Court on the application in which the Supreme Court decision No. 704 K/Pdt.Sus/2012 with the following verdict: Judging. Applicant granted the appeal of Telkomsel cassation; Cancel the decision of the Central Jakarta Commercial Court Number: 48/PAILIT/2012/PN.NIAGA.JKT.PST. Refuse Bankruptcy petition in its entirety. The verdict does not meet the decision cancellation formalities bankruptcy under Article 17 paragraph (2) of Bankruptcy Act where the judges who overturned the verdict should be set the cost of bankruptcy and receivership fee. In practice, the decision of the Supreme Court followed by a curator with the proposed fee to the judges' curator Bankruptcy Case. Furthermore, the panel of judges with the Bankruptcy Case Number 48/PAILIT/2012/PN.Niaga.Jkt.Pst *jo* dispense of Determination No. 704 dated January 31, 2013 K/Pdt.Sus/2012 on Bankruptcy Costs and Benefits Services said urator with the following (1) granted the request of the Telkomsel Curator Team for most; (2) Establish Fee bankruptcy Curator PT. Telkomsel is Rp 293,616,000,000 and charged to the Applicant (PJI Limited) and Debtor (Telkomsel) each half part; (3) Establish a charge of bankruptcy in the bankruptcy process Telkomsel of Rp. 240.500.000 and charged to the Applicant

(PJI Limited) and Debtor (Telkomsel) each half is Rp. 120. 250,000; (4) This determination is valid until completed.

In principle, the procedural law applicable to the Commercial Court is the law of civil procedure applicable in general unless otherwise stipulated in the Law on the Bankruptcy Act, as stipulated in article 299 of Bankruptcy Act which states "Except as otherwise provided in this Act the law applicable event is the Civil Procedure Code". The provision is intended when the law does not regulate by Bankruptcy Act on a matter concerning certain events of bankruptcy filing and examination of the case in and by the courts, then that should be referred is HIR and the provisions of other laws applicable in the Civil Procedure Code.

Execution fee-setting receiver in bankruptcy has been annulled by the Supreme Court under Article 17 paragraph (2) in conjunction with subsection (4) of Bankruptcy Act stating that the panel of judges also overturned bankruptcy fees and compensation for services where implementation Curator bankruptcy costs and benefits payment services based on the determination of the execution Curator of President of the Court issued the request of the Receiver. The provisions of Article 17 paragraph (2) in conjunction with subsection (4) of the Bankruptcy Act explicitly asserted that the curator for services performed by the determination of execution issued by the Chairman of the Court at the request of the Receiver to execute curator fee determined by the Supreme Court in the decision to cancel bankruptcy decision. Basic President of the Court issued an order for execution fee canceled curator in bankruptcy is not a decision of the Supreme Court and the judges of the Commercial Court Determination.

3.3. Remedies Against Fee Determination Receivers in Bankruptcy Canceled Supreme Court Decision Not In accordance with Article 17 paragraph (2) Bankruptcy Act

The provisions of Article 299 of Bankruptcy Act that the procedural law applicable in the case of bankruptcy refers to the civil law, except those things specifically regulated. In accordance with Article 1868 of the Civil Code states that "An authentic deed is a deed made in the form prescribed by law, by or in the presence of public servants to the ruling was made in the deed." Article 1868 of the Civil Code indicates that the determination of compensation for services must be made in accordance with the curator of the law in order to form an authentic act by which the competent authorities in accordance with Article 17 paragraph (2) of the Bankruptcy Act the authority to determine compensation for services in the event of bankruptcy receivership is canceled Supreme Court. The practice is common that the establishment of the Commercial Court issued a curator fee in the event of bankruptcy annulled by the Supreme Court. This of course is very detrimental to the service fee is charged to cover the curator. Therefore, those who feel aggrieved over such determination may take several attempts choice of law. The first option by filing a regular civil suit. In this case the party who feels aggrieved applicant to act as plaintiff and as defendant pulled. In the lawsuit using a starting point the proposition that the legal relationship that exists between the plaintiffs on the issue of self-petitioner in the petition filed. In this case, the legal relationship between the debtor and creditor is the curator (as a determination of the applicant).

The second option, file a Request for Cancellation of Determination to the Supreme Court by using the Supreme Court Determination. 5 Pen/Sep/1975 as precedent. This case stems from the issuance of Determination Central Jakarta District Court. 274/1972 are to (1) declare valid the GMS; (2) To declare that no binding agreement made Forest Products Group Corp.. Ltd.. of such designation, those who feel harmed cancellation request to the Supreme Court. Follow the Supreme Court's determination of the Supreme Court issued a Determination. 5 Pen/Sep/1975 which granted the request to cancel the Central Jakarta District Court Decision No.. 274/1972 with consideration of (1) is *declaratoir statement* about the legitimacy of the AGM and the board of management and the agreement does not bind through voluntary lawsuit against the principle of processual; (2) In the processual, determination voluntair PN imposed in this case should be based on a lawsuit contentiosa; and (3) Jurisdiction voluntary only valid if it is prescribed by law.

Third option, filed a judicial review remedies can also be taken to correct and straighten out the mistake as the implementation of *ius contra legem* (Gunarto, 2009). Request of observation Back can use the Review Decision No.1 PK/Ag/1990 dated January 22, 1991 as a precedent. The case stems from Heirs Determination and distribution of the estate issued by the religious court by petition Pandeglang heirs. Against such determination, other heirs filed a judicial review to the Supreme Court where the Supreme Court through Decision No.1 PK/Ag/1990 dated January 22nd, 1991 confirms (1) lawsuit voluntary only acceptable to the court if there is a provision specifically governing law; (2) In the case of heirs and distribution of the estate has no legal basis for voluntary examined. Similarly, the examination request fee curator conducted by the Commercial Court in the case of bankruptcy annulled by the Supreme Court.

Conclusion

Determination curator fee in the event of bankruptcy at the end due to the cancellation of Appeal or judicial review has clearly regulated in Article 17 paragraph (2) of The Bankruptcy Act where the judges canceled bankruptcy receivership fee. In practice the Supreme Court's decision which is subject to Article 17 paragraph (2) Bankruptcy Act. Decisions that do not include fees curators encourage curators to apply for a determination of the fee to the curator of the judges of the Commercial Court (first level). However, the determination of compensation for curator services ended in bankruptcy annulled by the Supreme Court as issued by the Commercial Court cannot be executed because it has no legal basis and is contrary to Article 17 paragraph (2) of the Bankruptcy Act. To protect its rights, remedies curator have the option either (1) a regular civil suit; (2) the determination of the cancellation request to the Supreme Court and (3) submit reconsideration remedies.

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***Developing Staff Schedules under the Constraint of
Constant Total Staff Quantity in a Gas Station***

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Abstract

The present employee scheduling of the sample 24 hours gas station has only 2 main shifts for conforms the cash remittance cycle which is controlled by head office. The two working schedules are between 5 a.m. to 5 pm. and 5 p.m. to 5 a.m. that don't match the customer arrival time which overcrowds in 7-10 a.m. and 4-7 p.m.

This research aims to solve the labor scheduling under the constraint of constant total staff quantity to minimize the labor cost and increase the service level because the executive doesn't want to recruit or discharge any staff. The methodology consists of studying the gas station work procedure, collecting service time in each activity and customer arrival time in each hour. The Integer programming models were developed under the constraint of constant total staff quantity and minimum required staff in each hour. These models have 504 variables because the working shifts can start every hour, and the rest periods and overtime are assigned in every tour. The gas station simulation model were created and run 1,000 replications to compare the customer waiting time and staff utilization between the former and new staff schedules.

The study discovered that the new schedules reduce 23.48% of labor cost, 54.19% of customer waiting time and increase staff utilization 17.89%.

Keywords: Employee scheduling; Integer programming; Gas station

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Introduction

After Thai government approved to increase minimum daily wage in all provinces on 2013, significantly increases expenses for labor-intensive industries such as textiles, garments and services. The gas station business is affected from this issue because offer the full services. The executive of a sample gas station wish to reduce labor cost and increase service level.

The case study is a 24/7 gas station and have 9 staff. The executive want to improve staff scheduling to match the customer arrival and remain the total staff without recruit or discharge any staff. The current staff schedule has only 2 shifts a day for matching the cash remittance cycle that controlled by head office. The first shift starts at 5 a.m. and out at 5 p.m. and the second shift is between 5 p.m. and 5 a.m. All shifts have 11 working hours (8 normal working hours and 3 overtime working hours) and 1 braking hour. All shifts require 1 cashier and every staff has 1 day off in every 2 weeks.

The company have to follow Thailand Labor Protection Act. There are some sections that relevance this paper, for example

- Normal Working Time must not exceeding 48 hours a week.
- A rest of not less than one hour a day after working five hours.
- A weekly holiday must not be less than one day per week.
- Overtime pay at a rate not less than 1.5 times of the hourly wage rate on working day and 3 times on holiday.
- Holiday pay not less than 2 times for employee doesn't receive wage on holiday.

This paper aims to solve the manpower problem with integer programming models were developed under the constraint of constant total staff quantity and minimum required staff in each hour and test the effects of new schedule models with simulation model.

Model development

The first step of this paper is hourly wage calculation for benchmark between the as is model and to be model. The current hourly wage calculation is shown below

- 1 normal working hour = 1 hourly wage (h.w.)
- 1 overtime working hour = 1.5 h.w.
- 1 holiday working hour = 2 h.w.
- 1 holiday overtime working hour = 3 h.w.
 - 8 normal + 3 overtime working hour = 12.5 h.w.
 - 8 holiday + 3 overtime working hour = 25 h.w

From this calculation method, the current working schedule is 788 hourly wage/week as shown on the figure 1

Staff	Week 1							Week 2						
	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su
1	off	12.5	12.5	12.5	12.5	12.5	12.5	25	12.5	12.5	12.5	12.5	12.5	12.5
2	25	12.5	12.5	12.5	12.5	12.5	12.5	Off	12.5	12.5	12.5	12.5	12.5	12.5
3	12.5	off	12.5	12.5	12.5	12.5	12.5	12.5	25	12.5	12.5	12.5	12.5	12.5
4	12.5	25	12.5	12.5	12.5	12.5	12.5	12.5	off	12.5	12.5	12.5	12.5	12.5
5	12.5	12.5	off	12.5	12.5	12.5	12.5	12.5	12.5	25	12.5	12.5	12.5	12.5
6	12.5	12.5	25	12.5	12.5	12.5	12.5	12.5	12.5	off	12.5	12.5	12.5	12.5
7	12.5	12.5	12.5	off	12.5	12.5	12.5	12.5	12.5	12.5	25	12.5	12.5	12.5
8	12.5	12.5	12.5	25	12.5	12.5	12.5	12.5	12.5	12.5	off	12.5	12.5	12.5
9	12.5	12.5	12.5	12.5	off	12.5	12.5	12.5	12.5	12.5	12.5	25	12.5	12.5

Figure 1: The current hourly wage

Second, the customer arrival rate in each hour is observed. The 30 days customer arrival number observation finds the peak hours that between 7-10 a.m. and 4-7 p.m., as shown on figure 2.

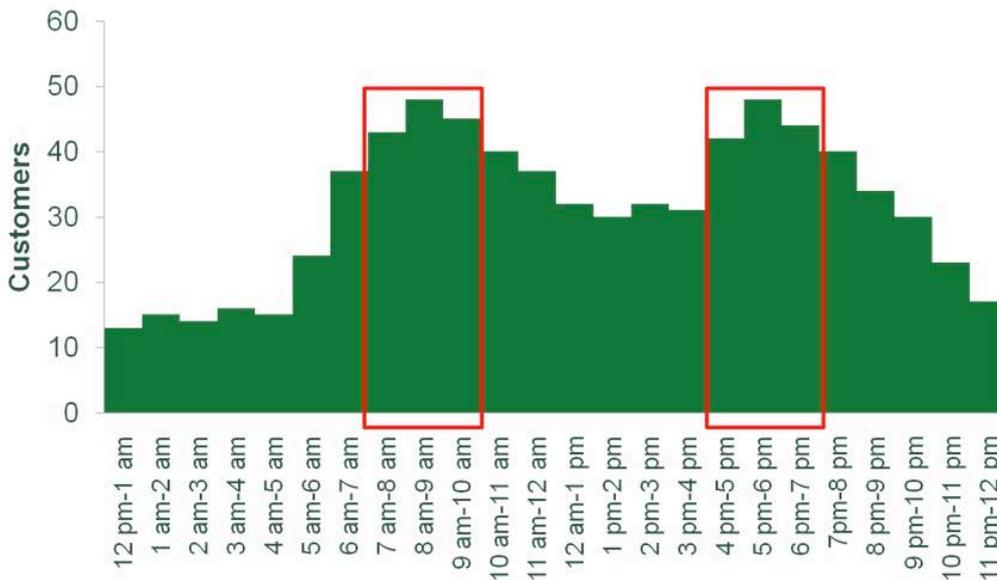


Figure 2: Average 30 days customer arrival rate

Third, the minimum staff in each hour are set by management. The executive requires minimum 3 staff and 4 staff in peak hours during 7-10 a.m. and 4-7 p.m. to match customer arrival rate. The minimum daily staff in current working schedule is solved with integer programming. The solution for minimum staff in 1 day is 11 staff that isn't match the current total 9 staff. So, the new schedule rule is set with this new conditions

- Tour can start every hour
 - 12 pm - 9 am ... 11 pm – 8 am
 - 1 day has 24 main tours
- 7 working hour patterns

- Every tour can work overtime 0 to 6 hours
- 3 breaking hour patterns
 - Every tour can break 1 hour after working 3 or 4 or 5 hours

From above condition, the possible working tour in one day is 504 tours.

Next, the new integer programming is developed to solve the minimum hourly wage in a week and every staff have 1 day off in a week. The equation is shown below.

The objective function:

$$Min Z = \sum_{b=1}^3 \sum_{h=1}^7 \sum_{t=1}^{24} \sum_{d=1}^7 \sum_{s=1}^9 x_{sdthb}$$

Subject to

- x = Number of hourly wage
- b = 1,2,3 : Set of braking hour patterns
- h = 1,...7 : Set of working hour patterns
- t = 1,...24 : Set of starting hour
- d = 1,...7 : Set of working day
- s = 1,...9 : Set of staff

Under the constraints

- Staff works 6 day in a week

$$\sum x_{1dthb} = \sum x_{2dthb} = \sum x_{3dthb} = \sum x_{4dthb} = \sum x_{5dthb} = \sum x_{6dthb} = \sum x_{7dthb} = \sum x_{7dthb} = 1$$

Subject to

$$x_{1dthb} = 1$$

- Minimum staff in each hour

$$\sum x_{1dthb} \geq 3 ; t = 1, \dots 7, 10, \dots 16, 20, \dots 24$$

$$\geq 4 ; t = 8, 9, 10, 17, 18, 19$$

Subject to

$$x_{sdthb} = 1$$

- 1 cashier works between 5 a.m.-5 p.m.

$$\sum x_{sd6,4b} \geq 1$$

Subject to

$$x_{sdtht} = 1$$

- 1 cashier works between 5 p.m.-5a.m.

$$\sum x_{sd18,4b} \geq 1$$

Subject to

$$x_{sdtht} = 1$$

From new integer programming model, the minimum hourly wage in a week is 603 h.w. and has 3 schedule patterns as shown on figure 3. The hourly wage for 7 staff in a day is 89, 8 staff is 85 and 9 staff is 81.

Day /Pattern	D1	D2	D3	D4	D5	D6	D7	H.W.
P1	7	7	7	7	8	9	9	603
P2	7	7	7	8	8	8	9	603
P3	7	7	8	8	8	8	8	603

Figure 3: Minimum staff in new schedule

Last, the gas station working process and service time in each process are observed. The process and working distribution time are shown as figure 4.

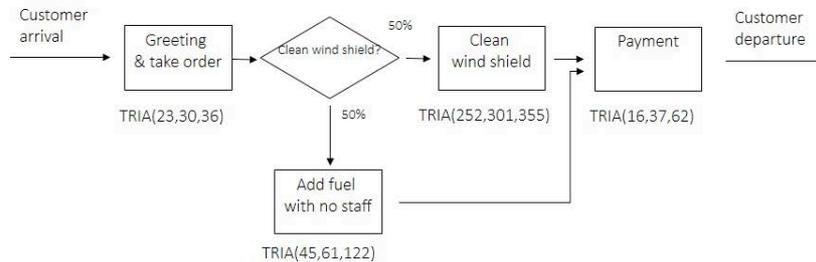


Figure 4: Gas station working process

The gas station working process simulation models are created to compare the current schedule model and new schedule model. The simulation models are run 1,000 replications for minimize half width and accuracy. The result of models show that customer total time, customer waiting time and labor cost of new schedule is lower than current model as shown in figure 5

Model	Customer Waiting Time (Minute)	Customer Total Time (Minute)	Labor Cost (h.w.)	Staff utilization
Current	3.21	7.50	788	49.71%
New	1.47	5.76	603	58.6%
Chg.%	-54.2%	-23.2%	-23.5%	17.9%

Figure 5: Staff scheduling models comparison

Summary, conclusions, and implementation issues

This research aims to reduce labor cost in a 24 hours gas station. Increasing working tours can reduce labor cost because the schedule can set to match the customer arrival rate. But too many tour is difficult to scheduling with manual method. Moreover, staff who work more than 8 hours may work ineffectively so supervisor should to arrange breaking time properly. The staff who start and end their job between 11 p.m.-5 a.m. may affect their commuting. The executive should realize this issue. If the station installs security devices, the staff schedule can reduces staff between 11 p.m.-5 a.m. from 3 to 2 staff.

The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by two large, overlapping circular arcs. The outer arc is a light red color, and the inner arc is a light blue color, matching the text. The arcs are thick and have a slightly irregular, hand-drawn appearance.

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Accounting Standard for SMEs in Japan

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Abstract

The first accounting standard for SMEs in Japan was established in 1949. This is called “Book Keeping Guidance for SMEs”. It was established soon after World War II at the request of the Shoup Mission of the US. Since that time, an accounting standard for SMEs, appropriate for current situations has not been established. After the bursting of the bubble economy in Japan in the early 1990’s, SMEs could no longer borrow funds from financial institutions on real-estate mortgages or collateral. Financial institutions began to focus on the profitability of SMEs, and an appropriate accounting standard became necessary.

For these reasons, “The Guideline of Accounting for SMEs” was published on August 1, 2005. However, this Guideline is not used as widely as was originally expected. Because the idea of single standard narrows the range of choice for accounting treatments, it is a burden for many SMEs to make full use of “The Guideline”. Therefore, “The Basic Guidance of Accounting for SMEs” was published by the Small and Medium Enterprise Agency and Financial Services Agency on February 1, 2012. Accounting treatments are simplified more in “The Basic Guidance” than in “The Guideline”. However, the current situation where two accounting standards exist together brings new confusion to accounting practices in Japan.

In this paper, the reason for the co-existence of two accounting standards, their characteristics, and the future trends in accounting standards for SMEs in Japan are discussed.

Keywords: The Guideline of Accounting for SMEs, The Basic Guidance of Accounting for SMEs, Scoring, Financial inspections manual, CRD data

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1 Introduction

The first accounting standard for SMEs in Japan was the Bookkeeping Guidance for SMEs introduced on December 26, 1949ⁱ.

Thereafter, among the several accounting standards, including those based on business law (Companies Act)ⁱⁱ, the Securities and Exchange Act (currently known as Financial Instruments and Exchange Act) and the tax law accounting focused on the definite-settlement-of-accounts principle-based tax law within the framework of the business law (currently known as the Companies Act).

1.1 Necessity of accounting standard for SMEs

After the bubble economy in Japan burst in the early 1990's, SMEs could not borrow more funds from financial institutions on real estate mortgages or collateral. Financial institutions began to focus on the profitability of SMEs, which means that banks started to use financial statements for SMEs. Thus, an appropriate accounting standard became necessaryⁱⁱⁱ.

Recently, there has been a strong tendency among financial institutions to lend funds to SMEs not through real estate mortgages, but based on their profitability. For SMEs to gain the trust of and borrow funds from financial institutions smoothly, and for the management of SMEs to understand the financial condition of their own firms, an appropriate accounting standard is necessary.

The reason for the necessity of presenting financial statements is to provide current and future profitability.

1.2 Background of the establishment of Japan's accounting standard for SMEs

For this reason, 3 major agencies established different accounting standards. On June 28, 2002, the Small and Medium Enterprise Agency set up "The research Group on Accounting standard for SMEs" and published "The Report about The Accounting standard for SMEs". On Dec. 19, 2002, the Japan Federation of Certified Tax Accountant's Associations published "The Research Report of Accounting standard for SMEs". On June, 2, 2003, the Japanese Institute of Certified Public Accountants published "The Research Report of Accounting Concepts for SMEs".

The presence of three different accounting standards led to confusion among SMEs regarding appropriate accounting practices. Consequently, these three public organizations resolved the differences in accounting practices among the three standards and the Guideline of Accounting for SMEs was published in August 2005^{iv}. Then, the three accounting standards needed to be unified.

1.3 Current situation about the adoption of the Guideline of Accounting for SMEs

The Guideline of Accounting for SMEs was not used as widely as was originally expected^v. Awareness in SMEs remains at the same level and did not increase for five years from the publication.

The adoption rate of the guideline has also not improved, as the rate of firms “making financial documents completely based on the guideline of Accounting for SMEs” was below 20%. Only the usage rate of financial support measures like allowances by Federation of Credit Guarantee Corporations has increased. It was revealed that tax accountants and certified public accountants did not recommend the guideline to their clients and many SMEs were not even informed about the guideline itself by tax accountants.

1.4 Reasons for the low adoption rate of the Guideline of Accounting for SMEs^{vi}

There could be two types of reasons for the low adoption rate of the Guideline of Accounting for SMEs, “reasons related to the attributes of SMEs” and “reasons related to accounting standards”

“The reasons related to the attributes of SMEs” could be things like, “limited ties to financial institutes, the unity of ownership and management”, the lack of knowledge about accounting and “the low number of accountants”.

“The reasons related to accounting standards” could be things such as, “separation from tax accounting”, “narrow range of options for accounting processing”, and “cost of changing of the accounting standards”.

1.5 Development of the Basic Guidance of Accounting for SMEs

Responding to the International Financial Reporting Standards (IFRS) has become a problem in SMEs. The Guideline of Accounting for SMEs was at least influenced by the IFRS and it was difficult for SMEs to respond to the measurement of fair value, comprehensive income, etc. Stipulated in IFRS. Thus, arose the need for an the accounting standard which reflects the accounting practice in SMEs^{vii}.

Project history of the accounting standard for SMEs in Japan is discussed in Figure 1.

Figure 1: The background to the development of the accounting standard for SMEs in Japan.

March,2002~ June,2002	The Study Group of Accounting Standards for SMEs was established by the Small and Medium Enterprise Agency (SMEA) . The study groups had 7 meetings. (March 11, 2002, March 29, 2002, April 22, 2002, May 10, 2002, May 22, 2002, June 7, 2002, June 21, 2002.)
June 28, 2002	Press Releases on “The Report about The Accounting standard for SMEs” were published by SMEA.
December19, 2002	“The Research Report of Accounting standard for SMEs” was published by Japanese Federation of Certified Tax Accountant's Associations (JFCTAA).
June 2, 2003	“The Research Report of Accounting Concepts for SMEs” was published by the Japanese Institute of Certified Public Accountants (JICPA).

July, 2005	The Company Act was enacted.
August1, 2005	“The Guideline of Accounting for SMEs” was published by JFCTAA, JICPA, the Japanese Chamber of Commerce and Industry (JCCI) and Accounting Standards Board of Japan (ASBJ).
February 1, 2012	“The Basic Guidance of Accounting for SMEs” was published by SMEA and Financial Services Agency (FSA).

Source: SMEA (2002), *The Study Group Report ,The Accounting standard for SMEs*. SMEA (2002), *The Summary of The Accounting standard for SMEs*. SMEA and FSA (2012), *The comment letter of “The Basic Guidance of SMEs”*. SMEA (2002), *The Report about The Accounting standard for SMEs*. JFCTAA (2002), *The Research Report of Accounting standard for SMEs*. JICPA (2003), *The Research Report of Accounting Concepts for SMEs*. SMEA and FSA (2012), *The Basic Guidance of Accounting for SMEs*. Giichi, Yanagisawa (2003), 65-68.

Figure 2: The contents of the report reflected in “The Guideline of Accounting for SMEs”(○ is given to the report reflected.)

The name of report	SMEA	JFCTAA	JICPA
	The Report about The Accounting standard for SMEs	The Research Report of Accounting standard for SMEs	The Research Report of Accounting Concepts for SMEs
Description of SMEs (small and medium-sized enterprises)	(Small Companies on the business law)	○ (Small and medium-sized enterprises)	○ (Small and medium-sized enterprises)
The policy of accounting-standards setting (Single standard)	○ (Single standard)	(Double standard)	○ (Single standard)
Financial Instruments (Arbitrary application of an amortized cost method)	○	○	
loan losses (Recognize when recovery non-ability becomes clear)		○	(○)
allowance for doubtful accounts (Arbitrary application of treatment based on the Securities and Exchange Act)		○	(○)
Valuation of securities (Application of treatment based on the Securities and Exchange Act)		○	○
Impairment loss of securities (Arbitrary application of treatment based on Tax Law)		○	○
Inventory (acquisition cost)		○	

Inventory (Arbitrary application of last cost method)		○	(○)
Depreciation of fixed assets (Arbitrary application of treatment based on Tax Law)		○	(○)
Software (Arbitrary application of treatment based on Tax Law)		○	
Retirement benefit (Arbitrary application of simplified treatment)	(○)	○	
Deferred tax asset or deferred tax liability (Arbitrary application of omitted treatment when it has no importance)		○	

Source: SMEA(2002),*The Report about The Accounting standard for SMEs*. JFCTAA (2002),*The Research Report of Accounting standard for SMEs*. JICPA (2003),*The Research Report of Accounting Concepts for SME*. JFCTAA, JICPA, JCCI and ASBJ (2005),*The Guideline of Accounting for SMEs*.

Each of the three different accounting standards for SMEs has different accounting treatments.○means that accounting treatments are applied by the guideline. The guideline tends to apply the JFCTAA's accounting standard based on tax law.

There was strong demand for an accounting standard which reflects the accounting needs of SMEs. On Feb 1, 2012, "The Basic Guidance on Accounting for SMEs" was published by SMEA and FSA^{viii}.

2 Usage of the accounting standards for SMEs and actual financing in SMEs

In theory, it is thought that both the Guideline of Accounting Standard for SMEs and the Basic Guidance of Accounting for SMEs are used and these two guidelines co-exist. The aims of the publication of both guidelines are to "help managers to understand the financial health of their firms, make the financial health of their firms clear for the financial institutions and allow SMEs to get financed smoothly" and "set out the financial documents to the financial institutions such as banks, make them understand the future profitability and the health of management and get financed".

In order to clarify how the accounting standard for SMEs is actually used and how it was utilized in the investment decisions, hearing surveys with tax accountants, financial institutions, and Federation of Credit Guarantee Corporations were conducted.

2.1 Hearing surveys

Hearing surveys were conducted with four tax accountants, two financial institutions, and two members of Federation of Credit Guarantee Corporations. From the surveys, it was found that these points below were considered to be important in the financing to SMEs.

- 1) Financial inspections manual, additional volume [financing to SMEs]
- 2) Scoring

- 3) Whether there are assurances from Federation of Credit Guarantee Corporations or not.
- 4) Management plans, and the personality of managers

Thus, we will discuss how the Basic Guidance of Accounting for SMEs is utilized in regard to these points.

2.2 Financial inspections manual, additional volume [financing to SMEs]^{ix}

Financing is decided based on the “Financial inspections manual, additional volume [financing to SMEs]”. In FSA audits, checks are carried out as to whether the financing is based firmly on the manual.

The “Financial inspections manual”, published in April, 1999, was for major firms, and the quantitative analysis based on this manual resulted in a reluctance to provide new loans and efforts to cut back on outstanding loans against SMEs. Thus, the manual for SMEs,” Financial inspections manual, additional volume [financing to SMEs]”, was published in June, 2002. The manual contains a quantitative analysis which reflects the special contexts of SMEs.

The future profitability of SMEs and the amount of management’s personal assets for security are checked in the financial inspections manual and if there is enough security, financing is conducted. Thus, the Basic Guidance of Accounting for SMEs is considered to be effective in analyzing future profitability.

2.3 Scoring by banks

Financial institutions check the ability of debt payment (the amount of security) in the financing to SMEs. This is because if the financial institutions cannot collect their loans, they will be responsible for it. Banks check the quantitative matters (capital-to-asset ratio, current ratio, and cash flow) and the qualitative matters (the quality and morals of management). To evaluate these matters, financial institutions give their original scorings.

Financial institutions make decisions about financing with marked-to-market information, scorings, and the properties of the SME (the quality of the management, the number of employees, the existence of a successor, personal assets, and the detail of fixed property tax).

If SMEs make financial statements based on the Basic Guidance of Accounting for SMEs, they might be able to reduce corrections and the statements might be effective in evaluating the quality of the management (the properties of the SME).

2.4 Assurances from Federation of Credit Guarantee Corporations

Whether an assurance from a Federation of Credit Guarantee Corporations exists or not is important for financial institutions in deciding on financing. It has a major impact on financing examinations.

Federation of Credit Guarantee Corporations also gives scorings and makes decisions as to whether to give an assurance or not. In the scoring by a Federation of Credit Guarantee Corporations, the score was obtained from the comparison with the average

score from the CRD (Credit Risk Database) data of the firms comparable with the target firm in the target business or the size. Federation of Credit Guarantee Corporations does not take the marked-to market into consideration, but considers the properties of SMEs. They make the decision for the assurance from information about scores based on CRD data, the properties of SMEs, and the financial statements. A financial statement based on the Basic Guidance of Accounting for SMEs is one of the standards for the evaluation in this scoring.

3 Conclusion

From the hearing survey with tax accountants, it was found that the applying the Guideline of Accounting for SMEs was difficult for SMEs and the Guideline of Accounting for SMEs was not used as widely as was originally expected.

It was found that there is a strong tendency to adopt only the Basic Guidance of Accounting of SMEs because the discount for the firms adopting the Basic Guidance of Accounting of SMEs was introduced by Federation of Credit Guarantee Corporations.

The values of the Basic Guidance of Accounting of SMEs were found to be as follows: 1) if a firm adopts the Basic Guidance of Accounting of SMEs, major corrections might be reduced and the quality of the management might be evaluated in the “scoring by financial institutions”, 2) not only the management’s ability with security but the profitability of the firm were evaluated according to the “financial inspection manual” and it is possible that in evaluating the profitability the financial statements which adopt the Basic Guidance of Accounting of SMEs were utilized, 3) in the “assurance by Federation of Credit Guarantee Corporations” the score awarded from CRD data and the accounting statement which adopts the Basic Guidance of Accounting for SMEs were regarded as important.

At first, I was doubtful about the necessity of the Basic Guidance of Accounting for SMEs because I heard that the financial institutions evaluate the marked-to-market and use modified financial statements. However, it was found that in reality the financial statements based on the Basic Guidance of Accounting for SMEs were utilized to evaluate not only quantitative matters but also qualitative matters, such as evaluating scores, personality of the management, management, and profitability.

Scoring was originally invented in order to prevent financing being assessed only by security, a reluctance to provide new loans and the efforts to cut back on outstanding loans by financial institutions.

It is, however, difficult to make a fair decision about financing to SMEs only with the scores relating to quantitative matters. It is rather considered to result in a reluctance to provide new loans and the efforts to cut back on outstanding loans.

Making decisions for financing by considering both qualitative matters like the quality of the management and quantitative matters using financial statements based on the Basic Guidance of Accounting for SMEs, will be a key factor in providing fair financing to SMEs. Further approaches (especially financial ones) might be necessary in order to expand the usage of the Basic Guidance of Accounting for SMEs.

- ⁱ The project history, needs, and characteristics of Bookkeeping Guidance of Accounting for SMEs and the blue return system were described in Financial Economy Public Relations (newspaper) No. 175 published on February 20, 1950.
- ⁱⁱ In this paper, business law and Company Law are used interchangeably according to the time period under consideration.
- ⁱⁱⁱ SMEA, *Study Group Report on Accounting Standards for SMEs*, June 2002, 4-13.
- ^{iv} ASBJ, JCCI, JFCTAA, and JICPA, *Press Release, Establishment of the Exploratory Committee towards the Integration of Accounting Standards for SMEs*, March 23, 2005.
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***The Conceptual Relationship between
Work Values Ethics, Innovation and Leadership***

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Abstract

Several researchers have revealed a huge impact of national cultures and their implications on management such as leadership styles. Few studies, however, have explored the relationships between work values at the individual level and its link to leadership behaviour and workplace innovation. The current paper aims to present a conceptual framework that represents the relationship between work values ethics, workplace innovation and leadership. It is expected that the conceptual relationships would be tested in a further stage of the study. The testing of the conceptual relationships will assist researchers to gain a better understanding of the relationships of these key organisational variables.

Keywords: Leadership, Workplace innovation, Work values ethic

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Introduction

It has been revealed that national culture is one of factors that could have a huge impact on the way managers lead their subordinates and therefore requires managers to adopt or adjust their style of leadership. For example, Australians and Thais are identified as having different cultural backgrounds (Hofstede, 1984) which influence their leadership styles. Australian leaders tend to be participative, direct and willing to take more risk than their Thai counterparts (see Muenjohn et al 2012). However, few studies have explored the relationships between values at the individual level and links to leadership behaviour. In particular, using leadership as a moderating factor on the relationships between work values ethic and workplace innovation.

Design Leadership is a new emerging concept of leadership. Design leadership can be defined simply as the ‘...means both to design and to lead - to lead design and to lead business by design’ (Design Management Institute, 2006, p.2) and is also described as a form of leadership that creates and sustains innovative design solutions (Turner and Topalian, 2002). While the quality of design leadership is believed to contribute to the success or failure of designed and innovative outcomes, the notion of design leadership is still highly ambiguous.

The current paper aims to investigate the relationship between work value ethic, leadership and workplace innovation in Thai and Vietnamese SMEs. The findings will not only contribute to the body of knowledge in the field of leadership and innovation but will also provide empirical evidence and will advance our understanding of the impact of work values on leadership behaviour and workplace innovation.

Literature Review

Work value ethic (WVE) is defined as a constellation of work related values and attitude (Miller, Woehr & Hudspeth 2002). Meriac et al. (2010) further explain that WVE is an individual construct which is characterized by “a set of beliefs and attitudes reflecting the fundamental value of work” (Meriac et al. 2010). Miller et al. (2002) developed the Multidimensional Work Ethic Profile (MWEP) which includes six dimensions: hard work, self-reliance, morality/ethics, delay of gratification centrality of work dimensions, leisure, and wasted time. Hard work refers to the increased level of effort is the key to effective task accomplishment. Self-reliance refers to a drive toward independence in task accomplishment.

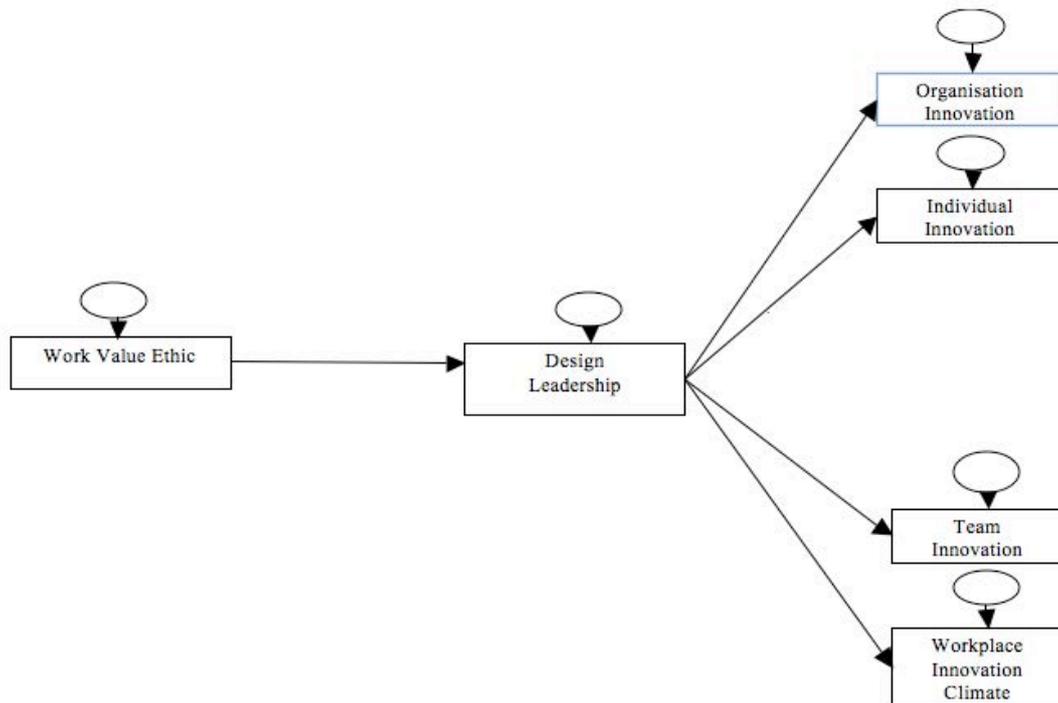
To nurture the innovation in workplace and improve the team performance, design leadership has been drawing increasingly attention by researchers and practitioners in industries in these two decades (Hoozée & Bruggeman 2010; Lee & Cassidy 2007; Muenjohn, Armstrong & Hoare 2013). However, there is no clear definition for the term. Design Management Institute (2006) mention that the importance of leadership in design functions, however, how leadership style influence the performance of design team was not clearly defined (Muenjohn, Armstrong & Hoare 2013). Further, how leadership nurture the innovation in workplace and improve the performance of design team were not rigorously investigated (Bruce & Bessant 2002; Cooper & Press 1995).

Workplace innovation is defined as the implementation of new and combined interventions in the fields of work organisation, human resource management and supportive technologies (Pot 2011). The diffusion of innovative workplace practices has been found to help organization to develop capabilities and improve performance (Damanpour, Walker & Avellaneda 2009). According to the research conducted by the Economic Institute for SMEs in Netherlands, workplace development projects can help company to achieve higher productivity and financial results compared with those who do not implement (Pot 2011). Majority of SMEs have some constraints such as lack of finance, resources, and skilled labours, workplace innovation become even more important for SMEs to achieve competitive advantage.

Conceptual Framework

A number of studies (Koonmee et al. 2010; Li & Madsen 2010; McMurray & Scott 2012) have identified WVE is one of key indicators to improve relationships with employees and increase commitment of productivities of organizations. Several studies (e.g., (Hunt, Wood & Chonko 1989; Jose & MS 1999; Singhapakdi & Vitell 2007; Valentine & Fleischman 2008) have found that positive relationship between WVE and quality of work life, job satisfaction, organizational commitment and team spirit. A number of studies (e.g., (Butcher 1987; Hitt 1990; Klenke 2005) confirm that ethics and effective leadership are positively related. Hitt (1990) suggests that ethical conduct and leadership are cause and effect relationship. Klenke (2005) supports that work values including protestant work ethic and work involvement are multi-level multi-domain antecedents of leader behaviour.

The link between leadership and innovation has being increasingly drawn attention in current research (García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez 2012; Gumusluoglu & Ilsev 2009; Humphreys, McAdam & Ickey 2005; Makri & Scandura 2010). However, regarding the relationships between design leadership and workplace innovation, limited research was conducted in this area (McMurray et al. 2012). Majority of studies (e.g. (Aragón-Correa, García-Morales & Cerdón-Pozo 2007; Gumusluoglu & Ilsev 2009; Kissi, Dainty & Tuuli 2013) investigate the positive effects of transformational leadership on innovation and organizational performance.

Figure 1: Research Framework

Conclusion

The framework and propositions proposed in the current paper should provide researchers with some understanding of the role of the three key variables and their relationships. However, the relationships are needed be tested and confirmed. It would also be interesting to develop hypotheses based on the propositions and explore the results of testing the hypotheses.

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The logo for the International Association of Business Schools (iafor) is centered on the page. It features the word "iafor" in a light blue, lowercase, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs: a light blue one in the foreground and a light red one behind it, creating a sense of depth and movement.

Re-thinking on Public International Law

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The Asian Conference on Business & Public Policy 2014
Official Conference Proceedings



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Introduction

The Research Topic

Today, human beings, global environment and natural resources are suffering from the extended and endless national, regional and global conflicts, wars, political violence, terror attacks and natural disasters. Unreasonable political violence, regional wars, ethnic conflicts and other causes of social unrest were behind the deteriorated international economy and the underdevelopment of more than one hundred and sixty (160) countries. Political leaders, States, organizations, local communities and individuals are fairly behind such deteriorating conditions of the welfare of human beings, in spite of international laws adopted by the international community.

This paper attempts to highlight the man-made hazardous threats facing mankind, while the existence of international legal system and the efforts made to develop rules of public international law accepted and ratified by almost all members of the United Nations. This paper suggests re-thinking on public international law, looking to more effective implementation.

The Issues Addressed by the Research

During the last three or four decades public international law was given due care and attention. Vital contributions were made by scholars, enhancing the improvement of the public international law and its role in realization of global peace and security. Such contributions were behind the improvement of human rights laws and the international humanitarian laws. However, in practice no positive results were visible, due to poor implementation of such laws. Today, in many parts of the world, human rights and humanitarian laws are not observed. Human beings, including children and women are suffering obviously. The existence and validity of international law is under critical challenge. The collective security measures have lost credibility and respect. Such issues are the focus of this research.

Purposes of the Research

The main purposes of this research may be summarized as follows:

- It highlights the contemporary sufferings of mankind, due to civil conflicts violence and wars.
- It focuses on human losses and economic damages caused by natural disasters and the need for turning efforts towards facing such disasters rather than adding more suffering by man-made disasters.
- It emphasise giving public international law more attention and new image as means of fair governance
- It calls for the adoption of practical and effective means for implementation of the public international rules, namely in the area of human rights and humanitarian laws.
- It stresses the need for more involvement by international community (i.e. collective security mechanisms) in the governance of the state under bad governments.

Research Methodology

Historical analyses and descriptive methodology will be utilized to achieve the objectives of this research. Innumerable books, researches, and controversial writings will be introduced and critically examined. International treaties and conventions, agreements and joint declarations among the states will be examined and documented. In deed the current situation of human suffering and the global hot spots will first be defined and highlighted. Thorough analyses and evidence-based conclusions will lead to qualified results and recommendations.

The research consists of this introduction and two chapters:

Chapter One will highlight the hot spots on the world map, drawing attention to the continuing losses and suffering of mankind.

Chapter Two will discuss the issues related to public international law in theory and practice, to examine possible means of effective implementation of international Law. The research may be concluded by practical suggestions for the future of the public international law, in the context of re-thinking on the public international law.

Review of Literature

Initial literature search has disclosed (788) books and articles. More than (700) references were selected and examined for the purposes of this research. The examined readings emphasized importance of the public international law as a basic tool in maintaining human rights, combating violence, realizing justice and protecting victims. Joel Trachtman suggested concept of global government through effective international law to maintain peace and welfare of the human beings. Christine Evans has considered reparation of the victims of conflicts as a basic principle of human rights that should be adopted by the public international law. Lukas Meyer was of opinion that protection of legitimacy and justice through effective international law with powerful enforcement authority should be the right path to global peace and stability.

Innumerable references have discussed the threats of violence and political conflicts as new challenges of world order, bringing leading scholars together to explore issues related to validity and efficiency of public international law.

Chapter One

Global Hot Spots and Human Suffering

Global hot spot and human suffering may be divided into two types:

Hot spots and suffering caused by the natural disasters and,

Hot spots and suffering caused by Man.

The abovementioned two types of threats may be discussed in two sub-chapters as follows:

1.1. Natural disasters-related hot spot and human suffering

It may be very difficult to draw a worldwide map for the continuous occurrences of unpredictable natural disasters. It is not easy to assess the impact of disasters on each

nation, due to the tolerance and capability of each country in facing disasters. However, it is essential for the objectives of this research, to outline a reasonable world map for the contemporary situation of natural disasters, based on the available open sources, with the intention of drawing attention to the real sufferings of mankind.

The annual statistical review, issued by Centre for Research on Epidemiology of Disasters for 2012 has revealed that three hundred and fifty-seven (357) natural disasters were registered worldwide. Although it was less than the average observed disasters of three hundred ninety four (394) during 2002- 2011, however, natural disasters have killed a total of nine thousand, six hundred and fifty five (9655) persons and left one hundred twenty four and a half million (124.5) victims. In the same year, economic damages caused by natural disasters were estimated to be \$157 billion US. The abovementioned report showed that the average economic damages of disasters during 2002-2011 were \$143 billion US.

On the other hand, the United Nations Food and Agriculture Organization estimated that 870 million people of the 7.1 billion in the world (12.5%) are suffering undernourishment during 2002-2012. In the developing countries, (15%) of the population are suffering from undernourishment. Children are the most visible victims of undernourishment and poor nutrition causing the deaths of 5 million every year. According to the abovementioned FAO report, 552 million in Asia, 223 million in Sub-Sahara Africa and 47 million in Latin America do not have enough to eat, in addition to 1.7 million lacking access to clean water and 22,000 children die each day due to conditions of poverty.

A detailed report issued by the United Nations Office for Disaster Risk Reduction has revealed that during 2000-2012, 1.2 million persons were killed, 2.9 billion affected ,in addition to other damages costing 1.7 trillion USD.

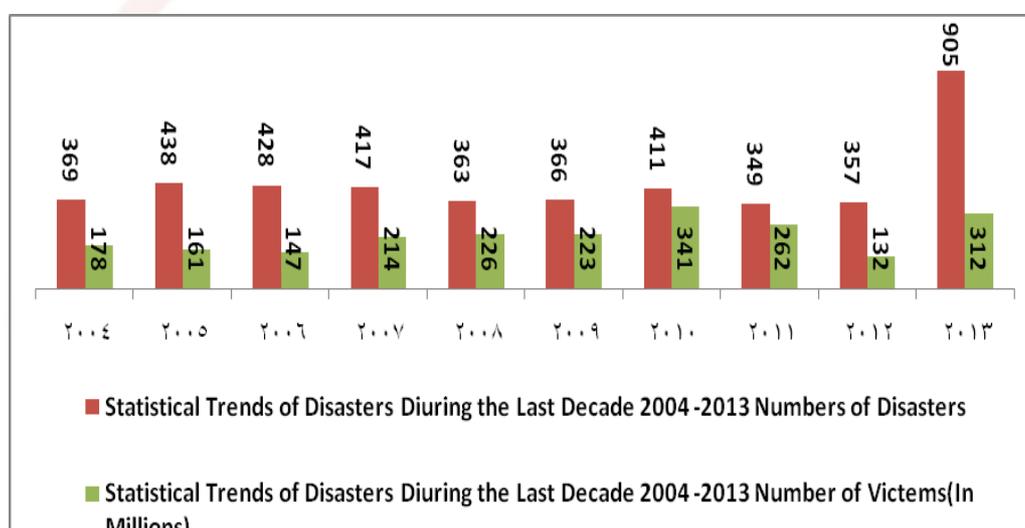
According to Asian Disaster Preparedness Centre, December 2004 earthquake and tsunami has caused death of 230,000 persons in 14 Asian countries

In March 2011, Tohoku earth quake and tsunami, as one of the major natural disasters, has left 28,000 persons dead or missing, a financial loss of approximately 39 billion USD, 1.) million buildings damaged as well as worsening environmental situation in that part of the world.

UNDP report published in 2014 has revealed that there are 2.2 billion person living in poverty, including 1.2 billion living in extreme poverty. According to UNDP, in the developing countries one in five persons live on less than (1.25) USD per day, accelerating crime rates, violence, drug addiction and suicide incidents.

Statistical Trends of Disasters During the Last Decade 2004 -2013		
Years	Numbers of Disasters	Number of Victims(In Millions)
2004	369	178
2005	438	161
2006	428	147
2007	417	214
2008	363	226
2009	366	223
2010	411	341
2011	349	262
2012	357	132
2013	905	312

*Source: Center for Research on Epidemiology of Disasters

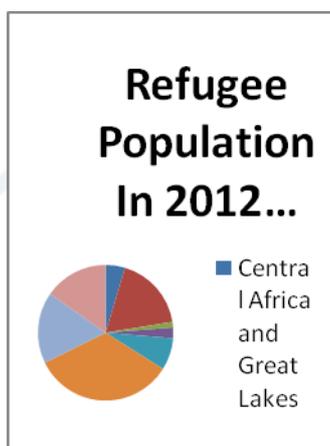


1.2 Human-Made Hot Spots and Suffering

Hot spots and human sufferings caused by human beings are generated by governments, individuals, minority groups, religious groups or other political activists, forcing citizens to flee their homes. Since the Second World War, there have been hundreds of intra-state conflicts. From 1950-2007, there was an average of 148,000 global battlefield deaths per year, and from 2008-2012 the average was 280,000. The total terror attacks and internal conflicts in 2013 have caused death of more than two million, in addition to those who were killed due to crime, natural disasters, hunger and draught.

According to the figures released by the Geneva-based Internal Displacement Monitoring Centre in 2014, there were 28.8 million persons internally displaced. These 28.8 million internally displaced individuals were forcibly displaced by conflicts, generalized violence and human rights violations. The region with the largest number of displaced people was Sub-Saharan Africa, with 10.4 million. Such types of internal conflicts have also forced more than 10 million to take refuge in other countries. The following table shows refugee population:

Regugee Population In 2012	
Regions	Total of refugees in refugee - like situations
Central Africa and Great Lakes	479300
East & Horn of Africa	1866700
Southern Africa	143700
West Africa	267800
Americas	806500
Asia and Pacific	3525500
Europe	1797600
Meddle East & North Africa	1593800
Total	10480900



According to USA Council on Foreign Relations report issued in 2012, there were 30 plausible conflicts and security hot spots throughout the world. Such hot spots were classified into three tiers according to their priorities. Guided by the abovementioned report, I would like to highlight the hot spots, emphasizing spots where more deaths and human suffering is wide spreading classified as follows:

1. Hot spots
 - North Korean nuclear crisis
 - Iranian nuclear crisis
 - Indo-Pakistan crisis
 - North South Korean conflicts
 - Conflicts between Russia and Ukraine
 - China Japan conflicts
 - Japanese Russia conflicts

2. Critical spots
 - Political instability and armed violence in Arab countries
 - Civil and armed violence in Syria
 - Civil and armed violence in Yemen
 - Civil and armed violence in Sudan
 - Extended civil wars in Somalia
 - Sectarian killings in Iraq
 - Sectarian violence in Nigeria
 - Territorial conflicts in many parts of the world
 - The eternal Palestine-Israel conflict

Political instability in several African countries, causing deaths among civilians and starvation of children.

Disasters and conflicts in Africa

In fact, drawing attention to the situation of disasters and conflicts in Africa may be the main purpose of this study. African countries are particularly vulnerable, because of the frequent occurrence of disasters with great intensity and because the majority of Africans live in a delicate balance between survival and poverty as well as bad governance and failed states. Draught, desertification, cyclones, fires, floods and epidemics are among common African natural disasters. In 1998, draught, as a one of the major African natural disasters, had affected 3 million people in Nigeria and 8 million in Sudan. Thereafter, draught and desertification continued to affect millions of people, animals and environment Zimbabwe, Zambia, Ethiopia, Chad and Somalia, causing loss of crops, hunger, deaths and forced migration and displacement.

A disaster profile published by the United Nations Office for Disaster Risk Reduction in Africa reveals has the following data:

Number of events	1699
Number of people killed	708712
Average killed per year	24438
Number of people affected	319,465,876
Economic damage-USD	24,141,032,000)

Armed conflicts are major threats of peace, security and social development deeply rooted in African history. Ethnic completion for control of the states, border disputes, warfare arising from state degeneration or state collapse and fundamentalist religious opposition to secular authorities and natural resources remain as causes of conflicts in Africa since 1950s. African countries involved in long-term armed conflicts include; Algeria, Sudan, Central African Republic, Democratic Republic of Congo, Niger, Nigeria, Sierra Leon, Somalia, Ethiopia, Uganda, Rwanda, Eritrea, Egypt, South Sudan and Libya. During the last decade not less than \$300 billion were spent in African armed conflicts (Libyan conflict expenses are not included). Such is the price that Africa is paying; it might have covered the costs of food, health facilities, education, epidemic causes.

Today, the major inter-state armed African conflicts are continuing in Somalia, Sudan, South Sudan, Uganda, Nigeria, Egypt and Libya. What is shameful is that international community is not giving the least attention to the African natural disasters and conflicts. Millions of deaths, millions of women and children who are fleeing their homes or are internally displaced and the deteriorating environment of that part of the world has never been considered by the international community as a serious humanitarian issue.

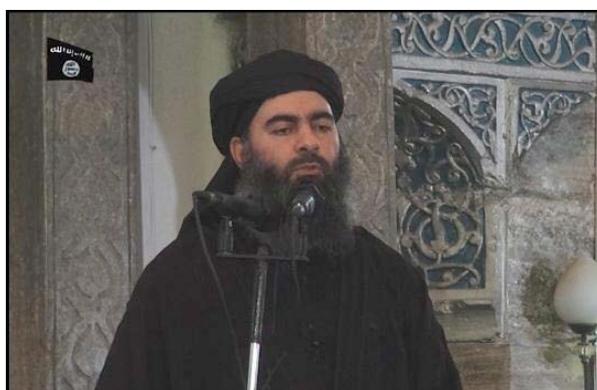
The most recent armed conflict is the notorious and inhumane fighting and killings in Syria and Iraq by Islamic groups sponsored by unknown world powers, giving the birth of so-called Islamic State A report on Syria published by UN Human Rights Office in August 2014, has disclosed that, data specialists have identified 191,369 people out of 318,910 who were killed between March 2011 and end of April 2014.

MS. Navi Pillay, the UN High Commissioner for Human Rights, warning of conflict prevention and condemning the role of the international community, has written in her report:

“The killers, destroyers and tortures in Syria have empowered and emboldened by the international paralysis”







Chapter Two

Re-Thinking Public International Law

This research focuses on all types of natural disasters and human-made disasters; including earthquakes, floods, storms, famines and droughts as well as situations causing mass displacement of people such as civil strife and inter-state armed conflicts. Considering such situations as a major threat for the human welfare, this research attempts to utilize the principles of public international law in facing natural disasters and other causes of human suffering, through re-thinking and developing new principles for public international law. What are the basic principles of the international law and how far they are effective in facing contemporary global problems? How can we utilize international law in stopping the human-made disasters; such as terror attacks, political conflicts and armed fighting within states, within same ethnics and within the same religious groups? What are the possible means for turning the efforts and financial costs of human-made disasters to minimize sufferings of the natural disasters; including earthquakes, tsunami, flooding, draught, hunger, diseases and other causes of deteriorating global environment?

2.1 Definition of International Law

There are many definitions for international law formulated in the context of different philosophical perspective; e.g. positivist, naturalist, feminist, sociological and ethical

theories. The Permanent Court of International justice has provided the following definition:

“International law governs relations between independent states. The rule of law binding upon states therefore emanate from their own will as expressed in conventions or by usage generally accepted as expressing principles of law established in order to regulate the relations between these co-existing independent communities or with a view to the achievement of common aims”

Another definition formulated by Professor Shearer states that:

“International law is a body of law which is composed for its greater part of the principles and rules of conduct which states feel themselves bound to observe, and therefore, do commonly observe in their relations with each other, and which includes:

The rule of law relating to the functioning of international institutions or organizations, their relations with each other, and their relations with states and individuals; and

Certain rules of law relating to individuals and non-state entities are the concern of the international community.”

The Restatement (Third) of Foreign Relations Law of the United States of America provides the following definition:

“International law consists of rules and principles of general application dealing with the conduct of states and of international organizations and with their relations inter se, as well as with some of their relations with persons, whether natural or juridical.”

The above definitions describe the actual practices and contemporary applications of international law. However, it is obvious that the general aspects of the international law are not addressing the major peace and security problems of today, which are generated by individuals and insurgent groups, whether intra-state or transnational. With the current principles and enforcement mechanisms, International law is not deeply concerned with the contemporary problems of humanity and we may say it is no longer capable in facing the threats of international terrorism, political violence, armed conflicts, human rights violations and other patterns of crimes against humanity. Although most of such threats are intra-state events, however, they are of great impact on global peace and security. So called the Islamic State of Iraq and Sham (DAISH) is an example of challenges facing international law. In July 2014, Islamic State of Iraq and Sham (DAISH) founded in 2010 by Abu Baker Albaghdadi has re-named itself as the Islamic State, declaring its proposed territories extended from Asia through the Middle East to Spain and West Africa. The Islamic State (former Islamic State of Iraq and Sham) is fairly progressing within the territories of failed states to realize its objectives under a silent international law.

2.2 The History of International Law

It is not easy to mention a definite date or era in history which marks the birth of international law. International law presumably began in an early history, when the organized communities came into contact with each other to regulate their relations. The first recorded treaties in history were adopted around 2100 BCE between rulers

of ancient Eastern Mediterranean States , based on the principle of *pacta sunt servanda* (agreement must be kept) and the principle of good faith.

Ancient Greece (1100-146 BCE) has contributed in developing of the international law, facilitating their common cultural principles including:

- war should be avoided;
- war if necessary should commence only by a declaration;
- Heralds should not be harmed
- war prisoners not be killed

Ancient Rome provided international law with the doctrine of the universal law of nature known as natural law, which was regarded as the foundation of human rights.

The period from 1648, (Peace Treaty of Westphalia) to 1815 (Congress of Vienna) is considered as the birth period of the classical international law. From 1815 to the outbreak of the First World War, international law was based on the principles of sovereignty, balance of power, legitimacy, and equality. The League of Nations established in 1919 was the first global intergovernmental organization vested with maintaining universal peace and security utilizing international law principles, however, it failed to achieve its main objectives. In 1945, following the Second World War and creation of the United Nations new approach of international law was adopted. The purposes of the United Nations are:

to maintain international peace and security;

- to achieve international cooperation in solving economical, social, cultural and humanitarian problems as well as encouraging respect of human rights and fundamental freedoms for all without distinction as to to develop friendly relations among nations;
- race, sex, language or religion(see chapter 11 of the UN Charter); and
- to harmonize the activities of the member states in attaining the above common aims.

In 1991, by the end of the Cold War and the collapse of the Soviet Union, a new era has commenced for international law, under the leadership of the United States of America (we may call it American Era).

Thoroughly examining and with due understanding of the above brief history of international law, its principles and enforcement mechanisms , and in the light of the contemporary situation of the universal peace and security , we may conclude to the following observations:

International law governs the relations between independent states and regulates the relations between these co-existing independent communities, with a view to the achievement of their common aims. In other words, International law is a body of law which is composed of principles and rules of conduct which states feel themselves bound to observe, including the rule of law relating to the functioning of international institutions or organizations, their relations with each other, and their relations with states and individuals. However, according to this definition, individuals and organized groups of terrorism or so called freedom fighters, revolutionary groups and insurgent minorities are not the concern of the international law. Today we are in front of new forms of unrecognized states established by groups of people from

different nationalities, such as state of Somalia, Islamic State of Iraq and Sham and other Islamic Emirates in other parts of the world.

International law consists of rules and principles of general application, dealing with the conduct of states and of international organizations and with their relations, such as sovereignty, balance of power, co-operation, co-existence and minimizing conflicts, however, non-state entities and armed groups of fighters do not believe or respect such rules and principles adopted by the international law. It may not be wise enough to depend on principles, rules and ethics of 19th. Century to govern the new world of 21st. Century with its rapidly changing environment.

In the light of the brief history of international law, there is enough evidence to say that the original principles of the international law are not observed and international law ethics are not respected. Wars are not avoided; undeclared wars are breaking out in many parts of the world, Heralds are harmed, war prisoners as well as civilians and children are killed and slaughtered in wars of today.

The brief history of the international law reveals that the ancient cultures as Ancient Greece, Ancient Rome, the Middle Ages, before the 1st. World War Era, Nations League Era, United Nations Era) have fairly contributed in the development of the international law according to the urgent needs of each era. Now, we are in a new era with unique characteristics and new global needs to maintain peace, security and welfare of the human being. It is urgent that the new world leaders, including politicians, scholars, philosophers and jurists should re-think on the traditional rules and enforcement mechanisms of the international law. They are asked to develop innovative theories, rules, ethics and valid mechanisms for enforcement of international law principles that serves the need of human being of today.

Second World War was evidence for the failure of international law rules and enforcement mechanisms of that era, and probably failure of contemporary international law rules and mechanisms may lead to an outbreak of Third World War, or any other types of undeclared extended wars killing civilians and committing crimes against humanity.

The developed international law principles should focus combating civil wars, intra-state conflicts, causes of political violence, activities of insurgent groups, failed states and terrorism with its all forms.

How can we stop the fighting within states and within same ethnics and same religions should be the concern of international law. Compelling countries to preventing armed conflicts, alleviating the risks and effects of disasters and building resilience to conflicts, and disasters should be at the heart of international law objectives.

Solving economical, social, cultural and humanitarian problems as well as encouraging respect of human rights and fundamental freedoms and humanitarian causes for all without distinction as to race, sex, language or religion should be formulated and enforced by the international law.

The argument against existence of international law as a law, and that it does not have any legislature, judiciary or enforcement body, should be solved.

Realization and Re-Thinking International Law

Looking to the wide range of hot spots and the continuously increasing human losses and suffering, it is essential to examine the efficiency of the related rules of public international law and its capability in minimizing human-made causes of all types of civilians' deaths. Contemporary public international law has organized several key issues, such as:

- recognition of States;
- State responsibility;
- protection of human rights;
- self-determination of people;
- peaceful settlement of disputes between States;
- use of force;
- collective security;
- principles of international humanitarian law;
- combating international terrorism; and
- women and child protection.

However, in practice we cannot see any effective role for the public international law, and that may be due to its poor means of implementation, lack of credible willingness among the major powers and the commercial interests of illegal arms dealers.

By re-thinking on public international law, we mean looking for innovative means and mechanisms of public international law implementation.

Failure of public international law, in this context may suggest failure of the contemporary generation and its global leadership. Today, human being is in need of creative and influential global leaders, scholars, jurists and decision makers who understand the sufferings of the mankind and losses caused by deteriorating global environment and threats of natural disasters that are beyond their powers. Small groups of out-laws and several individuals who by absconding justice in their homelands are threatening and global super powers by their inhumane killings and other disgusting and provocative activities. It is urgent for super powers to take their historical responsibilities for the sake of mankind. There is need to do more in minimizing other causes of human-made deaths.

The world is moving from its traditional structure of isolated states into a uniform, integrated and cooperative structure. In all aspects of life, innumerable rapid changes have taken place and more changes are expected. New and advanced high technology of information and communication has created new ways of thinking for contemporary generations. The need for freedom, rights, equality, justice, welfare, self governance and participation in decision making are among priorities of the contemporary generations. Therefore, radical changes in the theory and principles of public international law may be urgent.

The implementation of new machineries are urgent for public international law to make it more effective in governing states and political factions, ideological fighters and ethnic groups as well as administration of justice and fairness. The collective security system should be re-designed to produce effective measures to control arms dealers, suppress bad governments, combat military terrorism and insurgencies as well as putting troubled countries and failed states under trusteeship.

Machineries for Legislation and Enforcement of Public International Law

International law may be divided into public international law and private international law. Public international law, focus of this research covers the multilateral treaties, rules, laws and customs that govern and monitor the conducts and dealings between nations and other entities having international personality. Public international law encompasses treaties, international customs, general principles of international law, judicial decisions, writings of publicists, equity, legal precedents of International Court of Justice, secondary law of international governmental organizations, declarations and resolutions of the General Assembly of the United Nations and more. Such vague and innumerable sources of public international law may be among the causes behind the inefficiency and poor performance of public international law and its mechanisms. Another obstacle that might minimize the efficiency of public international law is that it has no unique governing or enforcing body. Its enforcement is largely voluntary endeavour, because, the power of enforcement exists only when the parties consent to abide by an agreement.

Treaty-making process

Treaties are the most important source and basic element of public international law. There are several stages known in the process of conclusion of a treaty. The treaty-making process is very long. It starts with complicated negotiations between authorized representatives of states and followed by; adoption of the text of treaty, authentication of treaty, consent of the states to be bound which may be through signing, exchange of instruments, ratifying, accepting, approving, or acceding to it. Thereafter, entry of a treaty into force requires depositing, registration and publication. After such long process of treaty-making, which may take several years, conclusion of the treaty may come out with reservations which may produce a very soft law and mild rules which are not capable to solve hard problems of universal peace and security.

Enforcement of public international law

Following its long process of making, the rules of public international law may face complicated difficulties in enforcement, due to the politically oriented machineries of the international governmental organizations vested with the enforcement of international law. According to Articles 10, 11, 14, and 24 of the UN Charter, fundamentally, the United Nations Security Council and the United Nations General Assembly are vested with maintenance of international peace and security. The UN Charter confers the main responsibility for the maintenance of international peace and security on UNSC.

The United Nations General Assembly may discuss any dispute or crises related to international peace and security and may make recommendations related to them to the state or states or to the Security Council or both. Although such recommendations are not obligatory to the concerned parties, the United Nations General Assembly is precluded from making any recommendation in disputes or situations in respect of which the Security Council is exercising its functions assigned by the UN Charter, In addition to the United Nations General Assembly and the Security Council, Articles 52 and 53 of the UN Charter has provided a limited role for regional arrangements and agencies in the maintenance of international peace and security.

In order to discharge its responsibilities, UNSC enjoys broad powers under Chapter 6 and 7 of UN Charter. Such may be summarized as follows:

- Under Article 40 UNSC may order provisional measures to ensure that a conflict does not escalate;
- Under Article 39 UNSC determines whether the situation under consideration constitute a threat to the peace or act of aggression.

If the UNSC determines that the situation in issue constitutes a threat for peace or aggression, it decides measures should be used to restore peace. According to Article 41, UNSC may decide diplomatic, economic or other sanctions, and if measures taken under Article 41 fail, it may impose military sanctions by virtue of Article 42 of the UN Charter.

Observations on the legislative and enforcement machineries

The UN Charter, Article 1(3) states that one of the purposes of the UN is to provide comprehensive human rights protection to all individuals. Article (55) states that the UN shall promote human rights without distinction as to race, sex, language or religion. Comprehensive human rights are formulated with many international treaties, conventions and protocols, covering almost all needs of human needs of today. However, the enforcement machineries adopted by the UN are not effective. In 2006, the UN Commission on Human Rights was abolished as a result of growing dissatisfaction with the commissions' effectiveness and its politically motivated choices when dealing with the violations of human rights. It was replaced by the UN Council of Human Rights (UNCHR), made up of 42 members elected by UNGA.

The UN system for the enforcement of human rights is very weak for the following reasons:

- it is not mandatory , because states may not submit themselves to any external scrutiny;
- there is no credible and fair body to monitor and report human right violations worldwide;
- there is no judiciary mechanism to deal with the violations;
- there are no effective sanctions for violators;
- the principle of non-interference in domestic matters; and
- prevalence of political interests of the super powers

Misunderstandings of the broad concepts of human rights.

A wide gap between the requirements of the human rights in the developing countries and those in the developed countries. Human rights needed in developed countries is humanitarian (need to survive and not to be killed or die with hunger), while human rights needed for the developed nations is comparatively a matter of luxury.

On the other hand, international community has formulated principles for the international humanitarian law, known as Hague and Geneva law, which were adopted by protocol 1 and protocol 2 in 1977.

Conclusions

Contemporary human peace and security is rapidly deteriorating, due to natural disasters and human-made disasters. Mankind is facing many challenges to survive. United Nations Office for Disaster Risk Reduction showing that 1.2 million persons were killed by natural disasters, 2.9 billion affected, in addition to other damages costing 1.7 trillion USD, during 2000-2012, is a real cause of fear. Nuclear crisis in Iran, North Korea as well as armed conflicts in Asia, Europe, Middle East and Africa are causes of global unrest.

In Africa, as the focus of this research, there is enough evidence that millions of people are internally displaced; citizens were forcibly displaced by armed conflicts, generalized violence and human rights violations. In addition to natural disasters, armed conflicts are major threats of peace, security and social development. African countries involved in long-term armed conflicts include; Algeria, Sudan, Central African Republic, Democratic Republic of Congo, Niger, Nigeria, Sierra Leon, Somalia, Ethiopia, Uganda, Rwanda, Eritrea, Egypt, South Sudan and Libya. During the last decade not less than UAD (300) billion were spent in African armed conflicts (Libyan conflict expenses are not included), while millions of Africans are suffering from hunger and malnutrition. Still, in addition to such worsening situation, newly borne armed conflicts are on the way. So called the Islamic State of Iraq and Sham (DAISH), Islamic Khilafa and Boko-haram in Nigeria, Alnusra in Syria and Libya, progressing within the territories of failed states to realize its objectives under a silent international law, are examples of challenges facing international community.

Now, we are in a new era with unique characteristics and new global needs to maintain peace, security and welfare of the human being. International law rules and enforcement mechanisms of the 19th century may not be able to treat contemporary peace and security problems. Solving economical, social, cultural and humanitarian problems as well as encouraging respect of human rights and fundamental freedoms for all without distinction as to race, sex, language or religion, as stated in chapter 11 of the UN Charter, may never be achieved through the machineries adopted by the UN of today. It is urgent that the new world leaders, including politicians, scholars, philosophers and jurists should re-think on the traditional rules and enforcement mechanisms of the international law. They are asked to develop innovative theories, rules, ethics and valid mechanisms for enforcement of international law principles that serves the need of human being of today. How can we stop the fighting within states and within same ethnics and same religions should be the concern of international law. Compelling countries to preventing armed conflicts, alleviating the risks and

effects of disasters, building resilience to conflicts and disasters should be at the heart of international law objectives.

International law principles should focus on combating civil wars, intra-state conflicts, causes of political violence, activities of insurgent groups, all forms of terrorism as well as reforming failed states. It is worthy to mention here, that the publicity given to the meaningless term terrorism and the worst use of this term by the politicians was behind the gnawing threats and activities of terroristic groups. It is shameful to say the international community; including super powers are terrified by such small groups of homeless fighters.

Recommendations:

- The UN Charter Of 1948, should be amended to meet the contemporary global needs of peace and security.
- The Security Council should be more democratic, if we want to spread democratic culture in the world.
- New, fair and neutral mechanisms should be adopted to maintain global peace and security.
- Indignant advisory committee of learned people, thinkers, philosophers, scientists, religious leaders, former pelicans and peace prize holders, to decide on the global peace and security issues.
- Failed countries and bad governments should be under UN Trusteeship.
- Minimizing unreasonable armed conflicts and human-made disasters is urgent, to focus all efforts on facing natural disasters.

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UAE National Newspaper, NO. 14294/ 2014Appendixes

The following photographs may draw attention and remind us with the previous natural disasters and ongoing human-made disasters:







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***The Influence of Organizational Communication on Service Culture
of Thai Airways International***

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The Asian Conference on Business & Public Policy 2014
Official Conference Proceedings

Abstract

To date, effective organization communication with employees has long been recognized as the essential tool for developing and maintaining successful human resource management, especially in the service sector. Furthermore, it is also utilized in aligning, motivating and cultivating employees to be in line with the organization culture. Thus, this research was aimed to investigate the impact of organizational communication on service culture of Thai Airways International. The impact of three types of organizational communication (downward, upward and horizontal communication), communication obstacles and communication climate on service culture in the airline context were examined. This study employed the questionnaires as the means in collecting data with the prospect samples of 383 Thai Airways' front-line service personnel including 249 flight attendants and 134 ground-service personnel. The samples were recruited by purposive sampling and quota sampling by determining the sample proportion according to their job ranks. Regarding the flight attendant group, the research findings supported downward communication, horizontal communication and communication climate as the prerequisites of service culture as hypothesized. In contrary, only horizontal communication and communication climate were found to significantly influence service culture in the ground-service personnel group. Managerial implications were also discussed.

Keywords: Organizational Communication, Communication Obstacles, Communication Climate and Service Culture

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Introduction

Currently, service organizations have dramatically focused on service quality as the major priority to differentiate themselves from their competitors and thus gain sustainable competitive advantages in the global market place (Gounaris, Stathakopoulos and Athanassopoulos, 2003). They strive to develop employees' positive attitudes toward rendering superior service to their customers through the development of service culture within the organizations (Grönroos, 2007). Previous researches acknowledged that service culture had a significant impact on service companies' performance (Ulrich, et.al., 2008). Firms utilize the organizational communication in aligning, motivating and cultivating employees to be in line with the organization's service culture. The effective organizational communication has long been regarded as an indispensable requirement for the business success (Verma, 2013). To date, the effective organization communication with employees has also been recognized as the essential tool for developing and maintaining successful human resource management, especially in the service sector. As a result, service firms need to effectively manage the organizational communication, communication obstacles and communication climate as the antecedents of service culture, in order that they will contribute to the achievement of service excellence (Dwyer, 2005).

Research Objectives

The objectives of this research are as follows:

- to comparatively examine the influence of organizational communication (downward, upward and horizontal communication) on service culture between flight attendant and ground-service personnel groups.
- to comparatively examine the influence of communication obstacles on service culture between flight attendant and ground-service personnel groups.
- to comparatively examine the influence of communication climate on service culture between flight attendant and ground-service personnel groups.

Literature Review and Hypotheses Development

Organizational Communication

In the organizational context, communication practices include downward, horizontal, or upward communication which can be initiated by any stakeholders within the organization (Carrière and Bourque, 2009). The effective communication was found contribute to organization's productivity, performance (Downs and Adrian, 2004), job satisfaction and organizational commitment (Carrière and Bourque, 2009), and job performance (Chen et al., 2006). In addition, effective communication is regarded as a prerequisite for promoting organizational culture (Linke and Zerfass, 2011). Based on the above discussion, the hypotheses are developed as follows:

H₁: Downward communication is positively associated with service culture.

H₂: Upward communication is positively associated with service culture.

H₃: Horizontal communication is positively associated with service culture.

Communication Obstacles and Climate

Earlier researches defined communication climate as the atmosphere in an organization regarding accepted communication behavior (Verma, 2013). Moreover, communication climate is determined by communication flow which in turn is determined by kind of governance. The communication climate can be either supportive or defensive communication climate (Hoof and Ridder, 2004). The supportive climate is nonjudgmental so that it encourages open, constructive, honest and effective interaction. In contrast, defensive climate leads to self-protective interactions and competitive or destructive conflict between individuals. The supportive communication climate facilitates the information flow throughout the organization which in turn encourages the development of service culture. In contrast, the communication obstacles were found to impede information and disrupt the orderly flow of activity (Verma, 2013). In light of the preceding discussion and findings, the hypotheses are proposed as follows:

H₄: Communication obstacle is negatively associated with service culture

H₅: Communication climate is positively associated with service culture.

Research Methodology

Target populations are 8,887 Thai Airways' front-line service personnel and the calculated sample size for this study was 383. Consequently, the prospect samples included 249 flight attendants and 134 ground-service personnel. The samples were recruited by purposive sampling and quota sampling by determining the sample proportion according to their duties as shown in Table 1.

Table 1: Population and Samples

	Population	Proportion (%)	No. of Sample
Flight attendants	5,787	65.12	249
Ground-service personnel	3,100	34.88	134
Total	8,887	100.00	383

Measures

All of the scale items were measured by a 5-point Likert scale (1 = strongly disagree and 5 = strong agree). The final self-administered questionnaires were distributed to respondents to provide their opinion towards the organizational communication, communication obstacles, communication climate and service culture of Thai Airways International.

Scale Internal Consistency

The first draft of the questionnaire was subjected to pretesting with total respondents of 40. The preliminary analysis revealed that the measurement scales of all constructs had acceptable internal consistency, which was evidenced by high Cronbach's alpha ranging from 0.85 - 0.92 which exceeded the threshold value of 0.70 (Nunnally, 1978). Contrary to our expectation, the reliability coefficients of the measurement scale of communication obstacles and communication climate were found to be less than the

threshold value (0.63 and 0.58, respectively). Thus, the measurement scales of these two constructs were modified by minimizing wording ambiguities to elevate the internal consistency of scales. The details of descriptive statistics and reliability coefficients were summarized in Table 2.

Table 2: Descriptive and Reliability Coefficients

Construct	Number of scales	Flight attendant		Ground service personnel		Reliability coefficients
		Means	S.D.	Means	S.D.	
Downward communication	6	3.00	.76	3.10	.78	0.85
Upward communication	6	2.76	.82	2.91	.87	0.92
Horizontal communication	7	2.74	.73	2.74	.78	0.89
Communication obstacles	7	3.35	.45	3.53	.46	0.63
Communication climate	8	3.08	.60	3.17	.69	0.58
Service culture	7	3.23	.62	3.17	.73	0.85

Results

Respondent profile

Total number of valid questionnaires was 383 including 249 flight attendants and 134 ground-service personnel. Regarding the flight attendant group, most of the respondents are male (52.20%) and 25-35 years old (48.20%). The majority of them hold at least a bachelor's degree (74.10%). Most of them have monthly household income level between 1,001-2,000 US\$. (45.00%) with the length of employment of 6-10 years (24.50%).

For the ground-service personnel group, 69.40% of them are female, 43.30% of them are aged 36-45 years old. The majority of them have bachelor degree (83.60%) with monthly household income between 1,001-2,000 US\$. (38.10%) and the length of employment of 6-10 years (29.70%). The details of respondent profile are shown in Table 3.

Table 3: Respondent Profile of Samples

Demographic	Flight attendants (n=249)		Ground-service personnel (n=134)	
	Frequenc y	%	Frequenc y	%
Gender				
- Male	130	52.20	41	30.60
- Female	119	47.80	93	69.40
Age				

Demographic	Flight attendants (n=249)		Ground-service personnel (n=134)	
	Frequenc y	%	Frequenc y	%
- 25-35 Years	120	48.20	39	29.10
- 36-45 Years	67	26.90	58	43.30
- 46-55 Years	53	21.30	34	25.40
- More than 55 Years	9	3.60	3	2.20
Level of Education				
- Less than Bachelor Degree	15	6.00	2	1.50
- Bachelor Degree	187	75.10	112	83.60
- Higher than Bachelor Degree	47	18.90	20	14.90
Monthly Household Income				
- Less than 700 US\$.	2	0.80	23	17.10
- 700-1,000 US\$.	30	12.00	34	25.40
- 1,001-2,000 US\$.	112	45.00	51	38.10
- 2,001-3,000 US\$.	48	19.30	20	14.90
- More than 3,000 US\$.	57	22.90	6	4.50
Length of employment				
- 1-5 years	63	16.40	44	17.70
- 6-10 years	94	24.50	74	29.70
- 11-15 years	50	13.10	31	12.40
- 16-20 years	72	18.80	38	15.30
- 21-25 years	65	17.00	37	14.90
- More than 25 years	39	10.20	25	10.00
Total	249	100	134	100

Hypotheses Testing

The relationships hypothesized in H₁ to H₅ were tested by using multiple regression analysis with service culture as the dependent variable. Hypotheses H₁ predicted a positive relationship between downward communication and service culture. The multiple regression results revealed that downward communication, as hypothesized, was found to significantly influence service culture only in the flight-attendant group ($\beta = .152, p < 0.05$). In contrast, H₁ was not supported in the ground-service personnel group ($\beta = .090, p > 0.05$) due to the statistically insignificant coefficient.

Hypotheses H₂ stated that upward communication was positively associated with service culture. The regression results showed that the beta coefficients of both flight attendant and ground-service personnel groups were statistically insignificant (flight attendant group: $\beta = .025, p > 0.05$, ground-service personnel group: $\beta = .108, p > 0.05$). It should be noted that counter to the author's predictions, the relationships between upward communication and service culture of both groups were statistically insignificant. Hence, no support was found for the hypotheses H₂ in both flight attendant and ground-service personnel groups.

Hypotheses H₃ predicted a positive relationship between horizontal communication and service culture. The results were consistent with this prediction as evidenced by

positive and significant path coefficients towards service culture in the flight-attendant group ($\beta = .212$, $p < 0.01$) and the ground-service personnel group ($\beta = .288$, $p < 0.01$). Thus, these results were supportive of H₃.

Hypotheses H₄ proposed a positive relationship between communication obstacles and service culture. The finding revealed that communication obstacles was found to insignificantly affect service culture in both flight-attendant group ($\beta = -.005$, $p > 0.05$) and ground-service personnel group ($\beta = -.002$, $p > 0.05$), providing no support for H₄.

Hypotheses H₅ stated that a positive relationship between communication climate and service culture. The finding revealed that communication climate was found to significantly affect service culture in both flight-attendant group ($\beta = .372$, $p < 0.05$) and ground-service personnel group ($\beta = .412$, $p < 0.05$), providing support for H₅. Results of the hypotheses testing of both groups are demonstrated in Table 4 and shown in Figure 1.

Table 4: Summary of Hypotheses Testing Results

Hypotheses	Flight attendants				Ground-service personnel			
	Standardized Coefficients (Beta)	t	Sig.	Results	Standardized Coefficients (Beta)	t	Sig.	Results
H ₁ : Downward communication → Service culture	.152*	2.083	.038	Supported	.090	.873	.384	Not supported
H ₂ : Upward communication → Service culture	.057	.795	.427	Not supported	.078	.775	.440	Not supported
H ₃ : Horizontal communication → Service culture	.212**	3.526	.001	Supported	.288**	3.858	.000	Supported
H ₄ : Communication obstacles → Service culture	-.005	-.098	.922	Not supported	.002	.035	.972	Not supported
H ₅ : Communication climate → Service culture	.372**	5.806	.000	Supported	.412**	4.488	.000	Supported
R ²	43.8%				53.2%			
Adj.R ²	43.8%				53.2%			
F-value	37.952*				29.066*			

*p < 0.05; ** p < 0.01

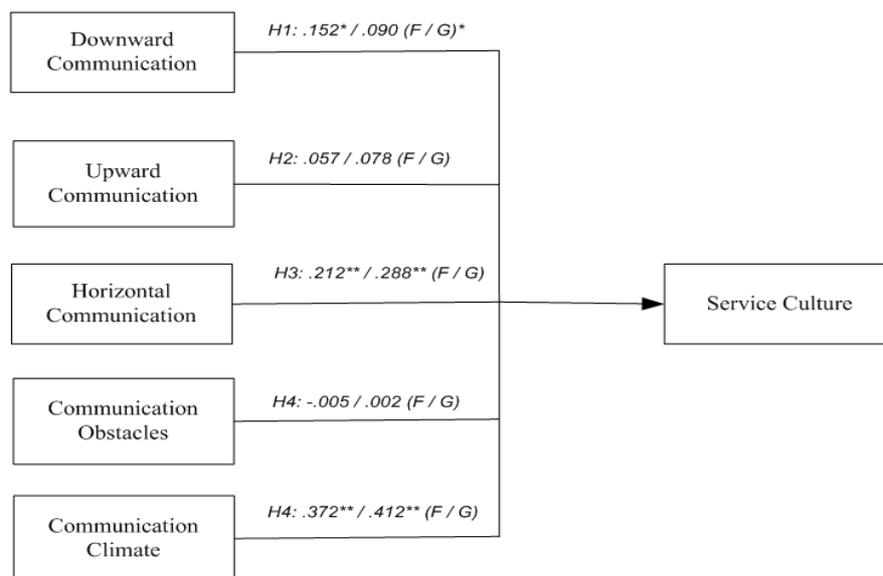


Figure 1: Conceptual Model

Conclusion and Discussion

Regarding the flight-attendant group, the empirical results indicated that the most powerful predictor of service culture was communication climate of both flight attendant ($\beta = .372$) and ground-service personnel groups ($\beta = .412$). Consistently, the open and honest communication climate was found to foster the development of collective behaviors that are customer service orientation (Merio, Bell, Menguc and Whitwell, 2006). Moreover, horizontal communication was found to influence service culture of both flight attendant ($\beta = .212$) and ground-service personnel groups ($\beta = .288$). This finding is consistent with Robbins' notion that horizontal communication was regarded as the effective indicator in facilitating operational coordination among units through the exchange of information throughout the organization.

But downward communication was found to be the prerequisite of service culture only in the flight attendant group ($\beta = .152$). Previous empirical researches supported this finding since the effective downward communication contributes to the formation of service culture which emphasizes the provision of service excellence (Linke and Zerfass, 2011). Furthermore, it also results in organization's productivity, performance (Downs and Adrian, 2004), job satisfaction and organizational commitment (Carrie're and Bourque, 2009) and job performance (Chen, et al., 2006). Contrary to the hypothesis, upward communication and communication obstacles insignificantly affected service culture.

Managerial Implication

Based on the research findings, the management should give more emphasis on horizontal communication in organizations with an aim to cultivate service culture in both flight attendant and ground-service personnel groups. Moreover, the downward communication should also be encouraged to enhance service culture in Thai Airways

International Public Company Limited as well, especially in the flight attendant group. Consequently, the management should promote both kinds of organizational communications to facilitate the formation of employees' commitment in achieving the company's goal of service excellence (Stinglhamber and Vandenberghe, 2003). Regarding the communication climate, the management should develop the supportive, open and honest communication climate within companies to encourage the cultivation of service culture on providing excellent service (Merio, et al., 2006).



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Negotiation Practices in Japan: An update on the Bubble Era

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Abstract

The subject of negotiation practices and preferences by culture continues to attract academics and business practitioners around the world. In the case of Japan, however, little data has been collected since the Bubble Era. Although Japan, bolstered by Abenomics, is regaining vogue as a place of interest for business as well as academic research, textbooks and academic articles may rely on 20-30 year old data. This research updates the knowledge about intra-cultural business negotiation practices in Japan. As data about Japan, Japanese business practitioners and academics as well as overseas practitioners doing business in Japan and those academics with a focus on Japanese business will be interested. This original research includes quantitative and qualitative inputs of 80 Japanese managers.

Keywords: Business negotiation; Japan; cross cultural; business practices

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Introduction

The information available about business negotiation practices in Japan is in need of an update.

This realization and the impetus for this empirical look at the lay of the land came from an academic conference in Kyoto in February 2013 on Japanese business. One of the presenters, a Japanese business professor, delivered a talk on Japanese business negotiation. Yet his frameworks and data were all received from the 1990s and even 1980s; no new data. That display led the author to review the literature on the subject, which showed that very little recent research had been done.

Literature review and study questions

The prevailing ideas about business practices in Japan date back to the Bubble Era (generally considered as the mid-1980s to 1992) and post Bubble years with the flow of research slowing almost to a stop in the late 1990s. Some publications even reach back to aging data, a case in point, Adair, Weingart, and Brett (2007) use data from Adair, Brett, & Okumura (2001) the data for which was developed in the late 1990s. The 2012 work by DeMente lacks freshness and despite the title, is largely based on his previous (1994 and 2004) works.

Even the genre of guides to Doing Business in Japan falls off post bubble. Among the few recent titles Picken (2007) stands out for content on discourse and practice in intercultural interactions with Japanese businesspeople and some points about intracultural behaviors. In another fairly recent contribution, Yamauchi and Orr (2007), point out that Japanese negotiation reality does not match up with the “popular lore” of Doing Business guides and magazine articles. Their article however does not go beyond pointing out the gap between reality and current stereotypes, and offers no empirical evidence other than the experience of the authors. A significant and very recent contribution comes from Haghirian (2010) whose experiences as employee, academic, and consultant bring a welcome update to the conversation.

Yet most of the above works focus on cross cultural interactions. Although we can glean hints from these works about Japanese interactions with Japanese, there is a resounding lack of content on this intracultural topic.

With the golden age of business research on Japan long gone, the current research undertakes an update survey as a first step toward discovering what Japanese businesspeople do and expect in intra-cultural business negotiations.

We must recognize that any given culture is a moving target which is subject to dynamic, non-linear change (Browaeys & Price, 2011; Deardorff, 2006), even if slow (Schwartz, 2006). Knowledge about Japanese business culture created in the 1990s may have transformed or crumbled in the intervening decade or two. A new baseline needs to be established. Transformations may in business culture have occurred over the "Lost Decades" approximately 1992-2012 during which the face of business changed drastically. Some examples of changes in the environment and structure of Japanese business include reforms in cross holding; breakup of the bank keiretsu; key tainted foods scandals (SnowBrand, Fujiya, Akafuku, and others); corporate

governance scandals (including Olympus, Daio Paper, and others); decrease in permanent *seishain* (正社員) employees (Ono, 2010); drops in expense accounts according to the anecdotes of Japanese and foreign business practitioners; the Abenomics reforms, and so on. In short, Japan is in the midst of dynamic change in its business environment. This period of change begs the asking of whether Japanese business behaviors have evolved as well. Re-establishing a baseline of expectations and behaviors of Japanese business practitioners is vital for making sense of the current environment. Therefore this study takes Japanese intracultural business negotiation practices as its focus.

The central questions of this research include:

- What behaviors do Japanese businesspeople use in real business negotiations with other Japanese businesspeople?

This empirical research seeks to answer those questions through a survey of Japanese business actors with roles in decision making and deal making.

Survey Development

The 26 items on the survey instrument regarding negotiation practices were selected based on the content of relatively recent publications and interactions by the author with Japanese business people in formal interviews and informal conversations. Publications dating to the Bubble Era and the years immediately following, up to the mid-1990s, were reviewed, but not specifically used in construction of the survey. Key older texts include Hall and Hall (1987) and Graham (1993). The oldest source used directly in development of the survey was (Nishiyama, 2000).

Haghirian (2010) discusses current business and management practices touching on some negotiation issues. Her work draws from her own recent experiences in the Tokyo business world and is up to date. She notes the tendency toward teams that would be considered large in the Western business world as well as a preference for very deep investigation into potential partners. Like most of the academic and business observers and survey participants, she also notes the formal seating choices that are common in Japan. Her work provides a list of expectations for non-Japanese interacting with Japanese, however she does not directly reveal how Japanese interact intraculturally.

Yotsukura (2003) reveals verbalizations and discourse found in negotiations among Japanese participants. One of the practices identified is the highly repetitive cycle of confirmation between parties. A simple confirmation by telephone of a changed shipping date required approximately 40 back and forth utterances by the two parties. The focus of this work is on discourse and does not clarify tactics and behaviors intended to claim or create value. Nonetheless, this source provide limited input for the current research being based on data collected in the late 1990s and the analysis is limited to discourse, touching only briefly on business negotiation.

DeMente (2004) repeatedly mentions the seemingly hidden nature of decision makers, specialists in his work. Furthermore, he identifies a strong tendency to hide intent until that of the other parties has been revealed. A major thesis of this work is that

brash Westerners misread polite interest as a strong relationship, and minor actors as decision makers, while mistiming their concessions only to be surprised at the end. These points are in the context of Japanese-foreign business negotiations. The content as presented appears to have been up to date in 2004.

Some items were added from the academic literature about negotiation but not about Japan. These were included in order to allow identification of behaviors not widely associated with Japan.

Inclusion of certain survey items

Team size: The relatively large size of teams is mentioned in the context of cross cultural business interactions by Nishiyama (1999), Alston & Takei (2005), and Haghirian (pg. 132, 2010). However only Haghirian discusses this in terms of business negotiation. No sources were found indicating this as a problematic issue in Japanese-Japanese business interactions.

Deep investigation: DeMente (pg 228, 2004), Haghirian (pg. 128, 2010), and Nishiyama (pg. 93, 1999) identify this behavior specifically as a staple of negotiation preparation. They find that Japanese businesses usually expend significant energy on investigating non-Japanese business partners.

Lies: Several sources identified a perception among non-Japanese businesspeople that mistruths are commonplace in dealings with Japanese. Nishiyama (1999), Picken (2007) and other sources make it clear that this may occur where facts are too embarrassing to admit. While misrepresentation of facts may be widespread in many parts of the world, it has become a hot button issue to non-Japanese.

Other topics, see table below, arose from academic writing on negotiation in contexts not specific to Japan. These include new value creation, perceived status of women, formal seating and so on.

Table 1 Sources for development of the survey

Number	As the item appeared on the survey in Japanese	English (not appearing on survey)	Source
1	妥協	Compromise	DeMente (pg. 78, 2004)
2	協力	Collaboration	DeMente (pg. 78, 2004)
3	討論、言い争い	Haggling	Author and other
4	金額交渉をする場合、最初の言い値を思い切り安く（または高く）提示する	Anchoring	Alston & Takei (pg. 122, 2005)
5	嘘、偽り	Lies	DeMente (2004) suggests various types of obfuscations are in play;

			Nishiyama (1999) finds deceits in situations where no alternatives have been prepared; Picken (2007)
6	3人以上のチーム	Teams with more than three members	Alston & Takei (2005); Haghirian (pg. 132, 2010); Nishiyama (1999);
7	情報シェアが簡単に 行える環境	Easy sharing of information	Avoid sharing of information DeMente, 2004; Alston & Takei, 2005; Nishiyama, 1999. Exchange info by implication through complex offers (Imai and Gelfand, 2010).
8	新たな価値を求める	New value creation	Author and other
9	肯定的感情が強い	Strong positive emotions	May show passion, DeMente (pg. 173, 2004);
10	否定的感情が強い	Strong negative emotions	Should not be expressed Alston & Takei, 2005; Nishiyama, 1999
11	所定労働時間内で意義のある進展がある	Substantive progress made after normal work hours	Alston & Takei (pp 112, 122, 2005); Nishiyama (pg 94, 1999)
12	ダイレクトかつ論理的に商談を行う	Direct (linear) logic in use	Circular processes (DeMente, 2004);
13	遠回し、間接的な商談手法をとる	Indirect (non-linear) logic in use	Alston & Takei (pg 140, 2005); Nishiyama (pg 98, 1999). Iterative confirmation process Yotsukura (2003); Haghirian (pg. 133, 2010)
14	チーム内に女性がいれば高い敬意を払う	High respect for women if in the team	Author and other
15	商談の決定権をもつ上司がその場の商談にいない場合は、部下が指揮をとり意思決定を行う	Junior staff lead discussion but decision maker remains in background	DeMente (pg. 291, 2004); Alston & Takei (pg 125, 2005); Nishiyama (126, 1999)
16	返信、返答が1ヶ月以上時間を要する	Gaps longer than 1 month between responses	Author and other
17	会計年度末前は急い	Rush to complete before the end of	Author and other

	で商談を終わらせる	the financial year	
18	商談前の相手側企業に関する事前調査は綿密に行う	Deep investigation prior to negotiations	DeMente (pg 228, 2004); Haghirian (pg. 128, 2010); Nishiyama (pg. 93, 1999)
19	脅しや脅迫による商談	Threats	Alston & Takei (2005) state that even the mildest threats should never be made.
20	契約合意後に割引や特別待遇の要請を行う	Requests for discounts or special conditions after agreement has been reached	Nishiyama (pg 104, 1999);
21	最終意思決定者が明確ではない	Hidden decision maker	Alston & Takei (pg 125, 2005); DeMente (pg 171, 176, 288, 299, 2004); Nishiyama (pg 126, 1999)
22	意表をつく	Surprises, shocks	DeMente (pg 78, 102, 173 2004); Nishiyama (pg 104, 1999); Author
23	義理や人情といった心理的な感情から譲渡につなげる	Naniwabushi used in order to get concessions	Alston & Takei (pg 106, 2005); DeMente (pg 78, 2004); Nishiyama (pg 95, 96, 1999)
24	地位の上下関係によって決まる	Seating by rank	Alston & Takei (pg 85, 2005); DeMente (pg 171, 176, 2004); Haghirian (pg. 132, 2010)
25	提議に関する返答が口頭で行われない	No verbal response to a proposal	Alston & Takei (2005); Author
26	公式な商談での座席配列は年功または	Formal seating order by seniority or importance	Alston & Takei (pg 85, 2005); DeMente (pg 171, 176, 2004); Haghirian (pg. 132, 2010);

The above table shows the sources from which questions were developed. Few of these sources specifically address intra-cultural, i.e. Japanese-Japanese negotiations, though most of the authors have witnessed intra-cultural Japanese interactions. As noted in the table, some questions were developed by the author in response to personal experience in Japan or issues in negotiation studies around the world.

In addition to the 26 core behavior items, rank, business activity, and role in negotiations were captured. Gender was not included in the survey, though about five of the respondents are female.

Finally, free comments on the survey and the topic were possible and 32, or about one-third of the 90 respondents, left usable comments in Japanese or English.

Methodology

The survey based on existing literature and discussions with Japanese and non-Japanese practitioners actively involved in Japanese business. Not all the possible behaviors identified in the literature were included in the survey. One reason for exclusion was the lack of evidence for them found during formal and informal interviews with Japanese business practitioners. Another reason for exclusion from the survey instrument was size. The final survey included some 26 items taking up to 20 minutes to complete. It was piloted with two Japanese managers who provided comments for improvement.

To gather survey responses, 249 emails sent inviting individuals to participate. The emails were culled from business directories, mailing lists, and business cards. Additionally 186 "In Mails" were sent through the LinkedIn social networking service, including 43 from the author's own network. The total outreach sample was 478 managers, selected manually for senior management.

Total valid responses reached 90, or a 19% response rate. Approximately 5% of those contacted through business directories responded. The rough rate of response through LinkedIn was 30%. The approximate rate of response through the author's personal network was 30%. Of the 90 respondents, 10 were removed from statistical analysis because they did not report their managerial rank.

The following table shows the composition of respondents based on their managerial rank after removal of those who reported no rank.

Table 2 Stratification after removal of respondents with no reported rank

Share of total (80 individuals)	Category	Sample Titles	Dummy value
46% (37 individuals)	Top strategy setting	CEO, President, 会長, 社長, 取締役, 代表取締役, 代表,	4
9% (7 individuals)	C-level decision makers	COO, 執行役員, 役員, 常務執行役員	3
14% (11 individuals)	Senior executives	Vice President, Legal Counsel, 本部長, ディレクター, パートナー	2
31% (25 individuals)	Middle and Low level managers	次長, 営業部長, 事業部長, 課長, 部長, 副部長, マネージャー, 購買マネージャー, Sales manager	1

The four levels of rank in the table above were represented in the database with the dummy values one through four, with four indicating top decision making capacity, i.e CEO, president, executive board member or similar.

Of the 80 respondents, 70 provided sufficient information to identify their role in negotiation. These were divided into four categories, as shown in the table below.

Table 3 Respondents by negotiation role

Share of total (70 individuals)	Role in negotiation	Dummy value
57% (40 individuals)	Final decision maker (current or previous)	4
25% (18 individuals)	Leading role, but not final decision maker	3
14% (10 individuals)	Team member	2
3% (2 individuals)	Other supporting role	1

Findings

Certain items that appear in the survey were clearly confirmed or rejected by the survey participants. Other items were confirmed with less unanimity and uniformity than the sources suggested would be the case. These are discussed below

Table 4 Confirmation of behaviors in intra-cultural Japanese business negotiation

Number	In use: Yes, No, Middle	Percent respondents <i>always or often</i> seeing this in business negotiations.	Comment
1	Y	87	In play
2	Y	89	In play
3	M	23	Uncommon
4	Y	52	Not always in use
5	N	18	Rarely in play
6	Y	85	In play
7	Y	71	In play
8	Y	80	In play
9	Y	82	In play
10	M	49	Not always in use
11	Y	59	Not always in use
12	Y	56	Not always in use
13	Y	100	In play
14	M	46	Not always in use

15	M	21	Uncommon
16	Y	50	Not always in use
17	Y	62	In play
18	Y	64	In play
19	N	0	Extinct
20	M	35	Not always in use
21	Y	71	In play
22	N	12	Rarely in play
23	Y	62	In play
24	Y	68	In play
25	Y	57	Not always in use
26	Y	89	In play

Data with dummy values is presented in Appendix 1. Correlations are not included. For clarification of values, please contact the author.

Behaviors identified as always or often in negotiations by more than 60% of respondents are considered to be currently "in play" in Japanese-Japanese business negotiations. These behaviors are likely to be encountered.

Behaviors identified as always or often in negotiations by 21-49% of respondents are considered to be currently "in play" though not reliably or frequently in use in Japanese-Japanese business negotiations. These behaviors may be encountered.

Behaviors identified as always or often in negotiations by less than 20% of respondents are considered to be "rarely in play". These behaviors may not be encountered.

Behaviors identified as always or often in negotiations by 0% of respondents are considered to be "extinct". These behaviors will most probably not be encountered.

Correlational statistics

Correlation of negotiation behaviors with rank and role were examined. Rank in the company and role in negotiation were given dummy values and compared to the frequency or infrequency of behaviors in the survey. Rank in the company was rated from one to four with four being highest rank, i.e. CEO, chairman of the board and so on. Role in negotiation was determined from the brief comments provided in this field and scored from one to four with four indicating final decision making authority. Only one correlation was stronger than 0.2, namely the correlation between rank and observing teams larger than three people (correlation 0.248). No strong or even medium correlations were identified.

The lack of correlation between rank and role combined with the relatively uniform responses to survey questions, despite diversity, suggests that Japanese business negotiators have remarkably similar experiences as shown in the table below by the low variance among responses for the survey questions.

Discussion

This discussion will touch on selected results of the survey.

Info sharing (question 7): Apparently occurs on a widespread level in intra-cultural situations. Non-Japanese Academic and business writers have found Japanese businesspeople to be less than forthcoming, the reasons may lie in conflicting procedure schema (Nishida, 1999), in different practices to establish relationships such as exchanging favors rather than information, or other cross cultural conflicts.

Slow responses, silences (questions 16 and 25): Whereas the non-Japanese authors viewed gaps and silences in the communication flow as an unsettling bargaining tactic (Graham, 1993; Hall & Hall, 1987). Alston and Takei (2005) identified silences during conversation as a tactic. However, the prevalence of gaps and silences in communication were found to be fairly uncommon, that is not always in use, by the Japanese respondents.

Threats (question 19): According to the responses, this behavior must be all but extinct in Japan's business world.

Surprises (question 22): Nishiyama (1999) and DeMente (2004) identify situations where key information or changes are proposed by the Japanese side in cross cultural negotiations. These two sources identify this as frequent and difficult to navigate for non-Japanese. However, the current survey reported a very low incidence of "surprises". It could be that non-Japanese interpret some incidents as surprise, whereas more sensitive Japanese practitioners detect a "surprise" in advance, making it less of a surprise. This ability is suggested by Hall and Hall (1987), as an outgrowth of high context communication skills and by Imai and Gelfand (2010), due to matching schemata about negotiation.

In summary, the findings from these 80 respondents, half of whom are the top decision makers in their organization, confound some widely held impressions about Japanese business behavior.

How are we to understand these gaps?

One possibility is that the behavior of Japanese to other Japanese is strongly different than their behavior when interacting with non-Japanese.

Another possibility is that Japanese and non-Japanese business people, particularly the North Americans and Europeans who usually make up the populations of academic studies, have very different ideas and schemata about concepts such as lies, strong emotion, silence, logic style, and so on.

Limitations

The current study acknowledges limitations including a lack of information about the sector and activity of the businesses represented among the respondents. Further, the role of the respondent in negotiations is not always clear and some responses were

excluded for this reason. Future surveys will need to identify negotiator role more clearly.

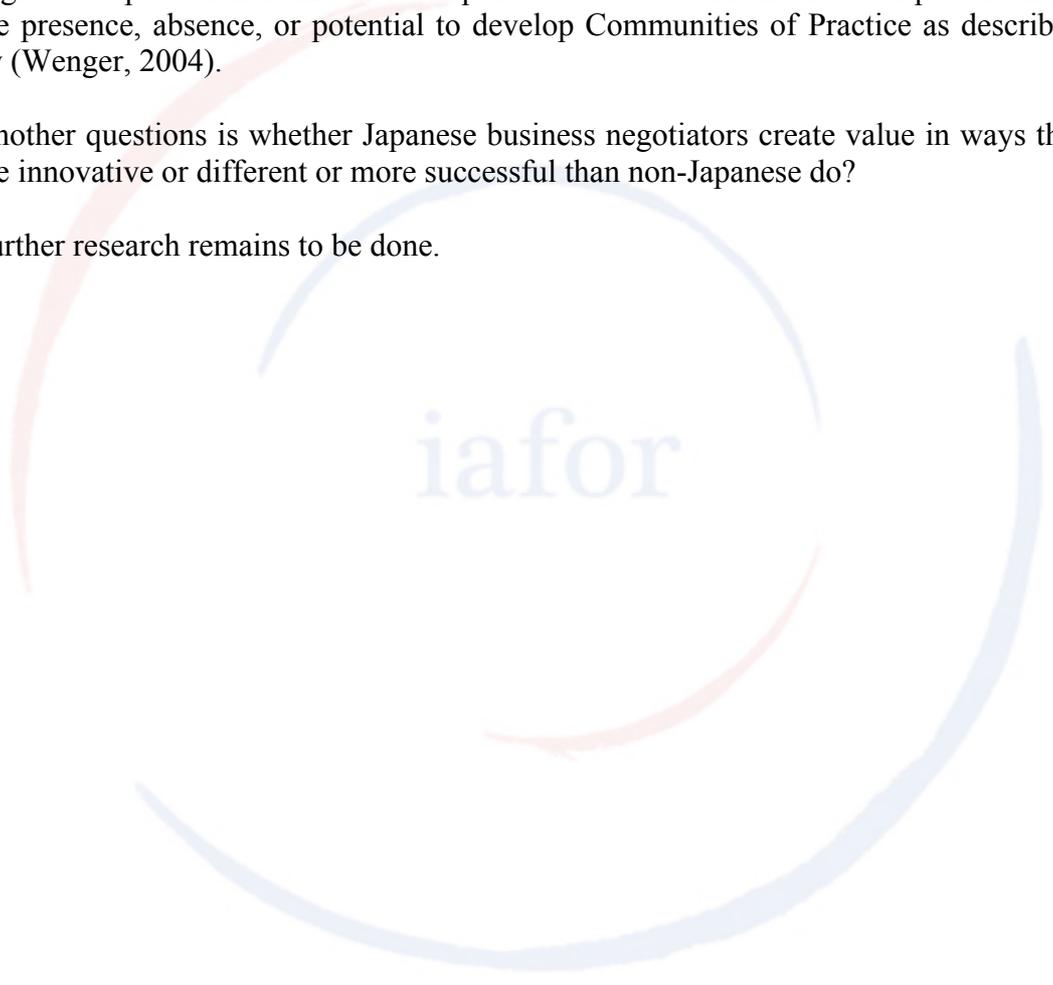
Not all possible behaviors could be included on the survey. An improved version would allow participants to add behaviors they found frequently or which had become less common.

Next steps

A key future questions for researchers on Japan is whether Japanese practitioners exchange information on negotiation within the company and/or among other negotiation practitioners in other companies? Future work should attempt to identify the presence, absence, or potential to develop Communities of Practice as described by (Wenger, 2004).

Another questions is whether Japanese business negotiators create value in ways that are innovative or different or more successful than non-Japanese do?

Further research remains to be done.

The logo for iafor is centered on the page. It consists of the lowercase letters "iafor" in a light blue, sans-serif font. The text is surrounded by two large, thin, curved lines that form a partial circle. One line is light blue and the other is light red, both curving around the text from the bottom and sides.

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Appendix I

Data with dummy values I

Timestamp	Number	Rank	Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
07/25/2014	1	1	3	2	2	3	2	4	2	3	2	2
07/24/2014	2	4	2	2	2	3	3	3	2	2	2	2
07/22/2014	3	4	4	2	1	3	3	3	2	2	2	2
07/20/2014	4	1	4	1	1	1	3	4	1	2	3	2
07/19/2014	5	2	2	2	1	3	2	4	2	1	2	1
07/17/2014	6	4	4	2	1	3	4	4	2	3	3	2
07/17/2014	7	2	3	1	1	4	3	4	2	1	3	2
07/16/2014	8	4	2	2	1	3	2	4	2	2	1	3
07/16/2014	9	4	4	2	2	3	2	2	2	3	3	2
07/15/2014	10	4	4	2	1	3	3	3	2	2	1	1
07/14/2014	11	2	4	1	1	2	2	4	2	2	4	2
07/14/2014	12	2	4	1	1	1	1	3	2	2	1	2
07/14/2014	13	3	4	1	2	4	3	3	3	2	3	1
07/10/2014	14	1	3	3	2	2	1	2	1	2	3	3
07/06/2014	15	1	4	2	2	3	1	3	2	1	1	2
07/03/2014	16	1	1	2	2	4	2	3	2	3	3	2
07/02/2014	17	3	0	2	1	3	2	4	1	3	1	1
07/02/2014	18	2	3	2	2	3	2	2	3	2	2	2
07/01/2014	19	3	4	1	3	4	2	2	3	3	1	3
06/30/2014	20	2	4	2	1	4	3	4	1	1	2	2
06/29/2014	21	1	4	3	1	4	2	3	3	2	1	2
06/29/2014	22	4	4	3	1	3	3	4	2	2	2	1
06/29/2014	23	1	2	2	2	2	2	0	2	2	2	2
06/28/2014	24	4	4	2	2	3	3	4	2	2	2	2
06/28/2014	25	0	NA	2	1	3	4	4	2	3	1	3
06/27/2014	26	1	2	2	3	3	3	3	3	2	3	2
06/27/2014	27	4	4	1	2	4	2	2	2	2	3	3
06/26/2014	28	1	4	1	2	4	3	3	2	4	2	1
06/26/2014	29	1	3	2	2	3	2	0	2	3	2	1
06/26/2014	30	2	0	2	2	3	4	4	1	2	1	2
06/25/2014	31	1	4	1	3	3	2	3	3	2	3	1
06/24/2014	32	4	2	2	2	1	1	3	3	3	2	3
06/24/2014	33	1	4	2	2	4	1	4	1	2	2	2
06/23/2014	34	4	4	1	1	3	2	2	2	3	2	3
06/18/2014	35	2	2	2	1	3	2	0	2	3	2	2
06/18/2014	36	1	0	2	2	3	3	4	1	2	2	2
06/16/2014	37	3	3	1	1	3	3	4	2	2	1	1
06/16/2014	38	4	3	2	2	3	3	1	2	3	1	1
06/15/2014	39	1	2	2	2	3	2	3	1	4	3	3
06/13/2014	40	4	3	1	1	3	2	2	1	3	3	2
06/13/2014	41	1	4	1	1	4	3	4	2	1	1	2

06/13/2014	42	0	NA	2	2	3	3	3	1	2	1	2
06/12/2014	43	2	3	2	3	2	3	2	2	2	3	3
05/30/2014	44	1	3	2	2	2	3	4	2	2	2	1
05/30/2014	45	1	1	4	1	4	2	4	1	2	1	1
05/30/2014	46	0	NA	2	1	3	2	3	1	1	2	2
02/22/2014	47	4	NA	2	1	2	3	2	2	2	1	2
02/19/2014	48	4	2	2	3	4	2	3	2	3	1	2
01/23/2014	49	4	4	2	1	3	3	4	2	2	2	1
01/20/2014	50	4	4	1	2	3	3	4	1	2	1	1
01/20/2014	51	4	2	2	1	3	3	0	5	2	1	0
01/17/2014	52	0	NA	2	1	2	4	4	1	1	1	2
01/16/2014	53	4	4	2	1	3	3	3	2	1	2	0
01/16/2014	54	4	4	2	2	3	3	4	2	3	2	2
01/15/2014	55	2	4	0	0	3	0	0	1	1	1	0
01/14/2014	56	4	4	3	2	3	1	4	1	3	4	3
01/10/2014	57	0	NA	4	0	4	4	4	2	1	0	2
01/10/2014	58	4	2	1	1	2	1	2	2	3	2	0
01/09/2014	59	4	4	1	3	3	2	2	3	3	2	3
01/09/2014	60	4	4	3	3	3	3	4	2	1	2	2
01/08/2014	61	4	4	2	1	3	2	3	1	2	2	1
01/06/2014	62	4	4	2	1	2	2	4	2	1	2	2
12/25/2013	63	3	0	2	2	2	3	4	1	3	2	1
12/24/2013	64	1	4	2	1	2	3	4	3	2	1	2
12/24/2013	65	4	4	2	1	2	3	4	2	2	2	2
12/24/2013	66	4	0	2	0	1	3	4	2	1	2	3
12/20/2013	67	4	4	2	2	4	2	3	1	2	1	2
12/20/2013	68	0	NA	2	2	3	3	3	1	3	2	0
12/19/2013	69	4	4	2	1	3	2	3	2	2	2	2
12/19/2013	70	1	0	2	1	4	4	4	2	1	2	2
12/18/2013	71	4	2	3	1	4	0	0	2	2	1	3
12/16/2013	72	4	4	2	0	4	3	4	2	1	1	1
12/13/2013	73	0	NA	1	3	3	1	2	2	3	1	2
12/03/2013	74	4	2	2	2	3	2	3	2	2	2	2
07/10/2013	75	2	2	2	1	2	4	3	2	2	1	1
07/09/2013	76	1	2	1	2	4	3	3	1	3	1	3
07/07/2013	77	1	2	2	3	0	2	3	0	2	2	0
07/05/2013	78	0	NA	3	1	0	2	4	2	3	3	3
07/05/2013	79	4	0	2	0	4	4	4	2	0	2	1
07/05/2013	80	4	4	2	1	3	2	0	3	1	2	1
07/05/2013	81	4	4	3	1	2	3	3	3	1	1	1
07/05/2013	82	3	4	1	2	3	1	3	2	2	2	2
07/05/2013	83	1	4	3	2	3	1	4	2	2	1	2
07/05/2013	84	3	0	2	1	4	1	3	2	2	2	2
07/02/2013	85	0	NA	2	1	2	1	3	1	1	2	1
06/25/2013	86	1	2	3	1	3	2	4	2	2	2	2

06/24/2013	87	1	0	2	1	0	2	0	2	2	3	2
06/21/2013	88	1	2	1	2	3	4	2	1	3	3	1
08/15/2014	89	0	NA	2	2	3	2	3	1	1	2	1
08/03/2014	90	4	4	2	2	2	2	4	2	2	2	2

Data with dummy values II

Number	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21
1	3	2	2	2	3	4	2	2	2	4	4	2
2	2	3	3	2	2	4	2	1	1	3	3	2
3	2	3	3	2	4	3	2	2	2	3	2	1
4	0	4	3	2	2	2	4	3	3	4	3	3
5	3	1	1	2	2	3	4	1	1	4	4	2
6	2	3	3	2	2	4	3	2	2	4	2	3
7	4	3	3	2	4	4	2	1	1	4	2	2
8	2	3	3	2	3	3	1	2	2	4	2	2
9	2	3	3	2	4	3	1	1	1	3	2	3
10	3	1	2	2	2	3	2	2	2	4	3	2
11	2	3	1	2	2	1	3	1	1	0	3	1
12	3	2	2	2	1	3	3	3	3	4	4	4
13	3	2	2	2	3	3	4	2	2	4	4	2
14	1	3	3	2	3	7	2	2	2	3	7	2
15	2	2	2	2	2	2	2	2	2	0	2	2
16	3	3	2	2	4	4	3	3	3	4	4	2
17	3	1	1	2	3	4	3	4	4	4	4	3
18	2	3	2	2	2	3	2	2	2	4	3	2
19	4	3	4	2	3	4	3	2	2	3	4	2
20	3	2	2	2	2	1	3	3	3	4	4	2
21	4	1	1	2	1	3	3	1	1	4	4	4
22	3	1	1	2	2	2	4	2	2	4	3	3
23	3	2	3	2	3	3	3	0	0	4	0	1
24	3	3	3	2	3	4	3	4	4	4	3	2
25	3	2	2	2	3	4	4	2	2	4	4	2
26	2	3	2	2	4	4	4	3	3	4	4	3
27	3	2	3	2	4	4	3	1	1	3	2	2
28	1	0	1	2	0	3	4	1	1	4	3	3
29	3	2	3	2	2	3	2	2	2	0	2	2
30	2	2	2	2	3	3	1	3	3	3	3	1
31	2	2	3	2	4	4	4	2	2	3	2	3
32	1	4	3	2	4	4	3	3	3	4	2	2
33	2	2	2	2	2	3	1	3	3	4	2	3
34	2	2	2	2	3	3	2	2	2	4	1	2
35	3	3	3	2	3	3	2	2	2	3	2	1
36	3	4	3	2	3	3	3	1	1	4	2	2
37	3	2	2	2	4	3	2	1	1	3	2	2

38	3	3	3	2	2	2	2	2	2	3	2	2
39	2	3	3	2	4	4	3	1	1	4	2	2
40	2	3	4	2	4	4	3	1	1	4	1	2
41	3	1	1	2	4	4	4	2	2	4	4	3
42	3	2	2	2	3	3	4	2	2	4	3	2
43	3	4	3	2	4	1	0	0	0	0	0	3
44	3	2	2	2	4	3	3	3	3	3	3	2
45	3	1	2	2	0	4	4	4	4	4	4	3
46	2	1	2	2	3	4	2	3	3	3	3	3
47	1	1	1	2	2	3	2	1	1	3	1	2
48	2	2	2	2	2	3	2	3	3	4	1	2
49	2	2	3	2	3	2	2	2	2	4	4	2
50	2	2	3	2	2	3	2	2	2	4	3	1
51	2	2	2	2	0	3	3	3	3	4	4	2
52	2	1	2	2	0	1	4	4	4	4	4	4
53	2	2	2	2	0	2	2	2	2	3	3	2
54	2	2	3	2	3	2	2	2	2	4	3	2
55	0	2	2	2	3	4	2	1	1	0	0	1
56	1	3	4	2	2	4	1	2	2	4	3	2
57	3	2	1	2	1	4	4	0	0	3	4	2
58	2	2	3	2	0	4	2	1	1	3	2	1
59	1	3	3	2	4	4	4	3	3	4	3	3
60	4	1	2	2	0	3	3	4	4	4	3	2
61	3	2	1	2	2	2	3	3	3	3	4	1
62	3	2	2	2	2	3	2	2	2	4	4	3
63	3	3	3	2	1	3	2	2	2	4	3	2
64	2	2	1	2	0	4	3	2	2	4	4	2
65	3	2	2	2	4	3	2	3	3	4	4	1
66	2	1	2	2	4	3	2	2	2	4	1	2
67	2	3	3	2	2	4	2	2	2	4	3	2
68	2	3	3	2	4	4	2	2	2	4	3	2
69	2	2	2	2	2	1	4	4	4	3	3	1
70	3	2	2	2	4	2	1	2	2	4	3	1
71	3	1	2	2	0	3	3	0	0	0	0	0
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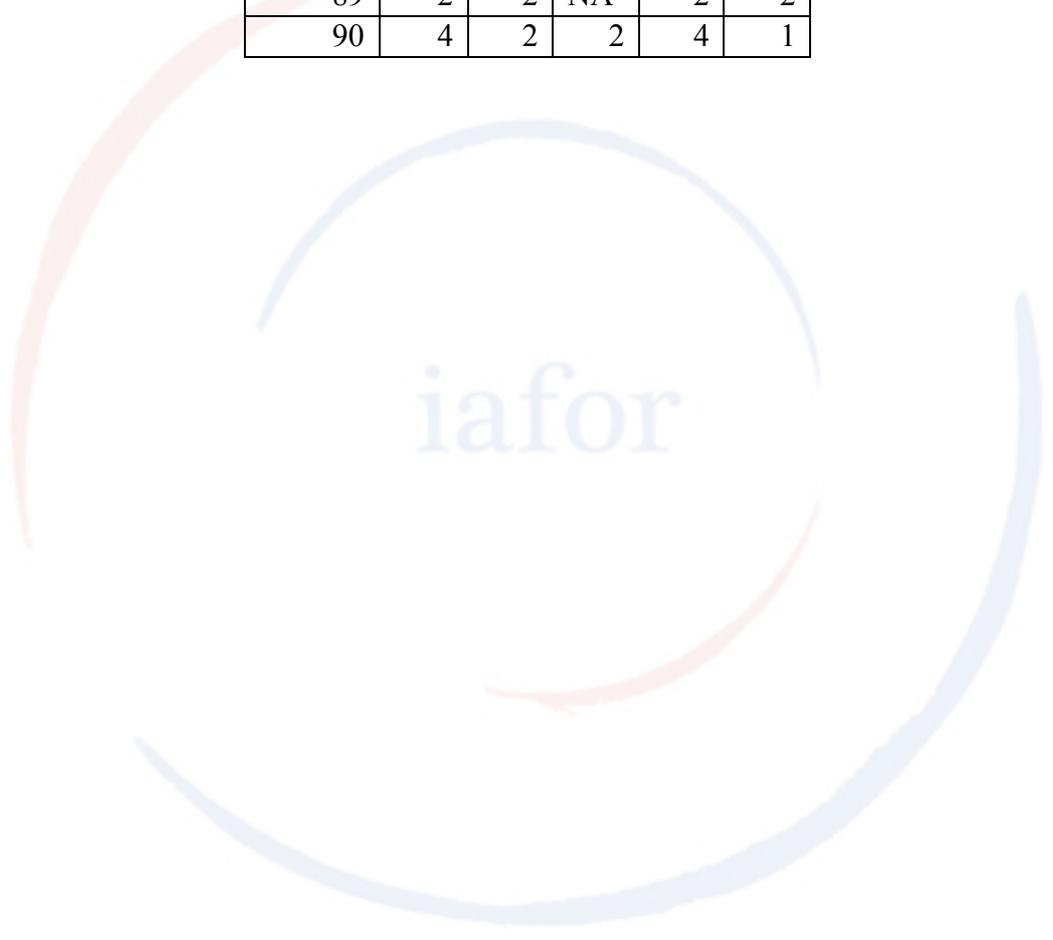
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86	1	3	3	2	2	2	2	2	2	4	2	3
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89	2	2	2	2	0	3	2	NA	2	4	3	2
90	4	3	1	2	2	3	3	3	1	4	4	3

Data with dummy values III

Number	Q22	Q23	Q24	Q25	Q26
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32	4	3	2	1	1

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69	4	2	2	2	2
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76	4	2	1	2	1
77	4	2	2	0	1

78	0	0	0	0	0
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85	2	1	1	3	1
86	3	2	2	2	1
87	3	2	3	3	2
88	3	3	4	1	1
89	2	2	NA	2	2
90	4	2	2	4	1

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***The Conceptual Link between Leadership and Innovation:
The Role of Organizational Climate and Personal Initiative***

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Abstract

Travel and Tourism industry is recognized as one of the vehicles for socio-economic developments. The growing competition arising from globalization trends and technological advances exacerbates the demand for hotels to innovate their services and processes to ensure their effectiveness and competitiveness. It is believed that employees' innovative behavior can be seen as a competitive advantage for their organization and therefore the research into employees' behaviors that associate with innovation is essential. Also, clarifying the factors shaping individual innovation will allow researchers to encourage and motivate such behaviors. Given such importance, the key purpose of this paper is to introduce a conceptual framework that represents the relationship among key organizational variables: namely, leadership, organizational climate, personal initiative and individual innovative behavior. The paper will first review the leadership qualities that are identified as essential for successful innovation practices with its focus on the hotel industry. Then, the four variables are linked by examining organizational climate and personal initiative as moderators on the relationship between leadership and individual innovation behavior. Three propositions are later developed based on the proposed relationships. The framework provides a starting point for further discussion and research on the topic of innovation in the hotel industry which has been neglected with most scholarly studies focusing on manufacturing, and R & D innovation.

Keywords: Leadership, Individual Innovative Behavior, Organizational Climate, Personal Initiative, Hotel Industry

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INTRODUCTION

Today, Tourism industry is considered as one of the most profitable and effectively developing sectors of the world economy. Travel & Tourism direct industry GDP in the year 2011 was larger than the automotive, chemicals and manufacturing sectors. Tourism industry achieved an historic milestone of one billion travelers in a single year of 2012 (UNWTO), International tourism continued its momentum with a 5% growth in 2013.

Globalization has brought remarkable transformational changes in all aspects of tourism and hospitality industry throughout the world. It is creating various challenges, opportunities and threats to the industry participants. Nowadays hotel management can be considered as an art (Jayawardena, 2000). To successfully respond to the market demands, hoteliers should rely on the support and hard effort of front house employees and the skills of the back of house employees to enhance the performance of the hotel and satisfy the guests' demands (Jayawardena, McMillan, Pantin, Taller & Willie 2013, and Slatten et al 2011).

Creativity and innovation in dynamic and growing hotels industry has been emphasized in the literature to strengthen the firms' competitive advantage in the marketplace and increase the quality of services to customers (Slatten, Svenssen & Svaeri 2011; Chen 2010; Ottenbacher 2007; Wong & pang 2003). Assuming hospitality sector characterized by being labor-intensive; the performance of employees in this sector like other service industries, is of particular importance. Employees are the service providers and organization representatives to customers in this sector (Slatten et al 2011; Martinez-Ros & Orfila-Sintes 2011), and also the nature of service job is not all about standardization but personalization and customization to meet the customers' divergent expectations (Slatten et al 2011, Zeithmal et al 2008). Therefore, employees' new ideas, suggestions and participations are an important source in successful innovation practices (Amabile 1988; Scott & Bruce 1994; Woodman, Sawyer & Griffin 1993). In addition, creative employees are those who are more engaged with their work and are willing to take more risk in their tasks (Bagheri, Esmaili, Abbasi & Seraji 2013, Dewett 2004). It is believed that innovation is not only profitable for the organization, but also it develops better socio-psychological benefits for employees of the organization. Innovation raises the level of job satisfaction and provide better network of interpersonal communication across the organization (Janssen 2000).

Due to the crucial role of employees' innovative behavior, scholars have done substantial research in investigating the factors that can endorse innovation in organizations. Research findings constantly showing the notion of creativity is the complicated outcome of person-situation interaction, and social-contextual factors in the organization (Woodman & Schoenfeldt 1990; Woodman, Sawyer & Griffin 1993, West & Anderson 1996). Numbers of environmental and contextual variables such as leadership, organizational support and climate have been identified as motivators of individual level creativity and innovation in organizations (Shalley & Gilson 2004, Shalley, Zhou & Oldham 2004, Ismail 2003; West & Sacramento 2012, Jong & Hartog 2007). Of all the factors that affect employees work environment in organization, leaders are of particular importance as they direct and evaluate employees daily work, influence their access to resources and information, and shape

their engagements with tasks and interactions with others (Guptha & Singh 2013). In general, leadership found to have an effective source of influence on employee's work behavior (Yukl et al 2002). Mumford & Licunan (2004) and Mumford, Scott, Gaddis et al (2002) analysis of leadership and innovation scholarly studies demonstrated not only leadership contributes effectively in the generation of new ideas and products, but also it has a significant role in the success of creative endeavors. Further, in the context of Hotel industry leadership has been found critical in advocating employees' creative accomplishments (Pang & Wong 2003; Chen 2010; Enz & Siguaw 2003; Slatten et al 2011).

This paper is attempting to develop an integrated approach to shed light on the impact of leadership on individual's innovative work behavior. Specifically, this paper suggests a framework to investigate the influence of organizational climate, as organizational contextual factor, and personal initiatives, as an individual level attribute, to fully understand the factors facilitating and enhancing employees' innovative behavior in hotels.

To sum up, we provide theoretical reasoning for why individual innovative behavior is critical in the hotel industry and how the interaction among leadership, organizational climate and personal initiatives will result in higher levels of innovativeness among employees.

LITERATURE REVIEW

HOTEL INDUSTRY INNOVATION

Although innovation theories traditionally developed for manufacturing, service innovation is gaining more attention nowadays. In the face of market changes, customers are bombarded by different product and service offerings in the market, what can empower organizations for success and survival is adding innovative service values to their products (Victorino, Verma, Plaschka & Dev 2005). In this regard referring to the fundamental distinction between service innovation and manufacturing, it would be interesting to elaborate how innovation has been explained in services and more specifically in the hotel industry. Enz et al (2010, pp. 6) defined service innovation as "the introduction of new or novel ideas that focus on services and provide new ways of delivering a benefit, new service concepts or new service business models through continuous operational improvement, technology, investment in employee performance or management of the customer service experience". Within the context of hotel industry, innovativeness can take various forms, such as encouraging employees to come up with creative ideas, simply being open to change, or developing appropriate strategies (Tajeddini, 2010).

Further, Innovation in hotel industry has been categorized in different clusters; market drivers (Ottenbacher 2007; Ottenbacher, Gnoth & Jones 2006), service delivery to customers (Wong & Pang 2003; Heaton & Ford 2001), effective management process and organizational structure (Ottenbacher & Gnoth 2006; Orfila-Sintes & Mattsson 2007; Orfila-Sintes, Crespí-Cladera & Martínez-Ros 2005) and service provider which refers to hotel tangible characteristic and additional services (Orfila-Sintes & Mattsson 2007).

Traditionally hotel industry was concerned by routine operations to provide basic food and accommodation to travelers (Wong & Ladkin 2008) which is no longer effective to satisfy the customers' expectations. Nowadays, Hospitality sector is overflowed by lots of similar and alternative service offerings (Reid Wainata & Mia 2005), customers are not absolutely brand loyal, they are looking for the best offers under budgetary constraints (Olson & Connolly 2000), information technology is rapidly changing the market (Martines-Ras & Orfila-Sintes 2011), new segments have emerged in the market such as leisure, business and sun and sand travellers which all make a significant change in the concept of the hotel industry. Hotels need to innovative their services and operations to satisfy the customers changing demands to survive (Chen 2011; Ottenbacher 2007; Wong & pang 2003). For instance, Jumeirah Essex House at New York City hired a curator to showcase the best artistic works including film, photography, paint, and ceramics in hotel's lobby to show its commitment to culture and art, the programs was unique at that time and fits Jumeirah slogan "stay different" perfectly. Customers have been found to be influenced more by innovative service offerings such as child-care program, personalization and customization of services (Victorino et al 2005; Enz et al 2010).

Reviewing the literature revealed that many scholars highlighted the importance of human resources innovation in hospitality industry (Martines-Ras & Orfila-Sintes 2011; Enz & Siguaw 2003; Ottenbacher & Gnoth 2005; Chen 2011; Ladkin & Wong 2008). If the only way for hotels and resorts to be innovative was by improving tangible objectives, facilities, and high technology that would be simple, but the innovation in this industry requires initiative staff members to satisfy the heterogeneous demands of customers. Hospitality industry is no longer considered as low-level (Baum 2007), it is skill-oriented and soft skills of hospitality employees are of significant importance such as emotional labor (Seymour 2000) and aesthetic labor (Warhurst et al 2000).

The skills of Service employees are critical to success of the organization because they are customer-contact staff, service providers to the customers and directly affect customer service experience (Zeithmal & Bitner 2000; Lopez-Fernandez, Serrano-Bedia & Gomez-Lopez 2011). Data from 196 independent hotels and restaurants operating in the People's Republic of China show that hiring multi-skilled core customer-contact employees and training core customer-contact employees for multiple skills both have significant and positive effects on incremental and radical innovation among hotel and restaurant companies (Chang, Gong, Shum 2011). As Mumford (2000) suggested that innovative outcomes generated from the ability of front-line employees to respond to guest demands and problems creatively.

INDIVIDUAL INNOVATIVE BEHAVIOR

Innovation theorists often explain innovation as being composed of two stages; idea generation and implementation (Axtell et al 2000; Amabile et al 1996). The separation between the two phases is at the point which idea is first generated, so first stage ends with the adoption of an idea, and the second stage ends when the idea is applied (King and Anderson 2002). innovative work behavior, which is an individual's behavior involving the intentional introduction of new and useful ideas, processes, products or procedures within a work role, group or organization (Far & Ford 1990; West & Farr 1989). Creativity is a process in which employees develop

novel and useful solutions to meet challenges and solve work-related problems in the course of goal-directed behavior (Amabile, 1988), it can either be a part of employee's job requirement or go beyond them (Unsworth, 2001). In fact, creative behavior is the building block and input to innovative behavior, and innovation is the process of revolutionizing of organizational practices by producing a useful outcome. Slatten et al (2011) found that employees' creativity significantly related to employees' innovative behavior.

Individual innovation has been operationalized in different ways. Traditional approaches to the study of creativity emphasized on the personality characteristics and traits associated with individuals' creative achievements (Feist 1998). The research has examined personal characteristics such as backgrounds and biographical factors to measure cognitive styles and intelligence of creative people in different domains (Barron & Harrington 1981, James & Asmus 2000, Woodman & Schoenfeldt, 1989). The macro-level approach focuses only on the role of contextual factors and oversight the importance of individual characteristics (Aiken & Hage 1971). Due to ambiguity and unconvincing results, Social-psychological approaches to creativity which put contextual and individual characteristics together developed to bring a new and more comprehensive insight to this research agenda. Amabile's componential model (1983) and Woodman, Sawyer and Griffin (1993) interactionist model of creativity suggested that creativity is the complicated outcome of person-situation interaction and it is influenced by both contextual and individual factors. The social-psychological models emphasize on the importance of considering the interplay between the person and environment in understanding individuals' creativity and innovative behavior.

LEADERSHIP

Innovation research in the tourism and hospitality changed its focus after 2005, before that the scholars were focusing on analyzing the cases of innovation practices from the industry (Tetzschner & Herlau, 2003; Enz & Siguaw, 2003) or identifying the main clusters of innovation in this industry (Hjalager, 2002; Tetzschner & Herlau, 2003). Recently, the main aim is to explore the determinants of innovation in this industry (Orfila-Sintes & Mattsson, 2009; Slatten et al 2011; Pang & Wong 2003). Previous research determined that employees' innovative behavior depends highly on their interactions with others in the organization (Zhou & Shalley 2003). Leadership as an important organizational context has been found critical in advocating employees' creative accomplishments in hotel industry (Pang & Wong 2003; Chen 2010; Enz & Siguaw 2003; Slatten et al 2007).

Leadership is among most considerably studied issues in the behavioral sciences (Barrow 1977), scholars usually define leadership in different ways based on their personal prospects and most interesting facets of the conceptualization of leadership to them (Yukl 1989). The comprehensive review by Dinh, Lord, Gardner, Meuser, Liden & Hu (2014), has identified 752 articles dealing with the topic of leadership, but to date, researchers have not been able to develop a universal model of leadership. Lord et al (2001, pp. 311) indicated there is no universal definition or style of leadership due to "innumerable situational and contextual factors". Due to the nature of work in the hotel industry where employees are in charge of providing services to

customers and responding to their inquiries and problems, it is important to explore what leadership characteristics are more effective for innovation ventures.

Wong & Pang (2003) attempted to identify the motivators to creativity from the perception of managers and supervisors within the context of the hotel industry. The outcome of 20 in-depth interviews and a follow up survey comprising of 288 responses indicated that support and motivation from top managers, detailed and effective interaction and communication between managers and employees play considerably significant role in motivating employee's creativity in this industry. Further, they investigated training and development, autonomy and flexibility, and motivating employee's participation in decision making are among the most important facilitators of individual creativity. Similarly, participation in decision making has been found as an important determinant of innovative behavior (Amabile et al 2004, Jong & Hartog 2007). There is widespread agreement that the delegate-participative leadership encourages creative and innovative performance (Axtell et al 2000; Mumford et al 2002), because it increases the congruence between subordinate goals and organizational goals which results in subordinates carry out their intentions to greater effort toward organizational objectives. Also, it is suggested that employees' insightful ideas are encouraged when hotels or managers provide support for innovation and employees involvement in decision making is motivated (Chen 2011).

Slatten, Svensson and Svaeri (2011) in a study on 72 front line employees from Norway hotel industry found that empowering leadership is positively associated with employee's creativity and innovation in frontline service jobs. Further, Ottenbacher and Gnoth (2005) developed a study to identify the factors that determine innovation success in German hospitality industry. Empowerment highlighted by the authors as a crucial factor of innovation orientation of a hotel's management. Empowering behavior is primarily concerned with the "freedom and the ability to make decisions and commitment" (Forrester 2000, pp. 67). In essence, empowering behaviors reflect giving employees the authority and freedom to make decisions and act independently. It provides subordinates considerable responsibility and autonomy in accomplishing tasks and handling problems without direct supervision (Jung et al 2003). In service industries the "exact tasks" to resolve customer problems is not predictable and employees' personal judgment and immediate actions are required (Banker et al 1996), in this context empowerment is considered as relevant to give employees a sense of courage, responsibility and autonomy to take appropriate actions when required without a long chain of command (Lewis & Gabrielson 1998). In a study of German middle managers Krause (2004) found that granting employees with freedom and autonomy is positively related to different types of innovative behavior; idea generation, testing, and implementation of ideas. Another study by Slåtten, Mehmet Mehmetoglu (2011) on 279 hospitality employees in Norway hotels and restaurants indicated that employee's engagement with work closely related to employee's innovative behavior, accordingly this study revealed that job-autonomy significantly related to higher level of job engagement.

In consistence with past studies, Nagy (2014) in a study on Romanian 3 and 4 stars Spa Hotels, found the lack of creativity and initiatives among employees is the result of some major influences; Authoritarian leadership and enforcing discipline and routines, not involving employee in innovation related discussions and decision makings, and lack of training and development programs. Authoritarian leaders are

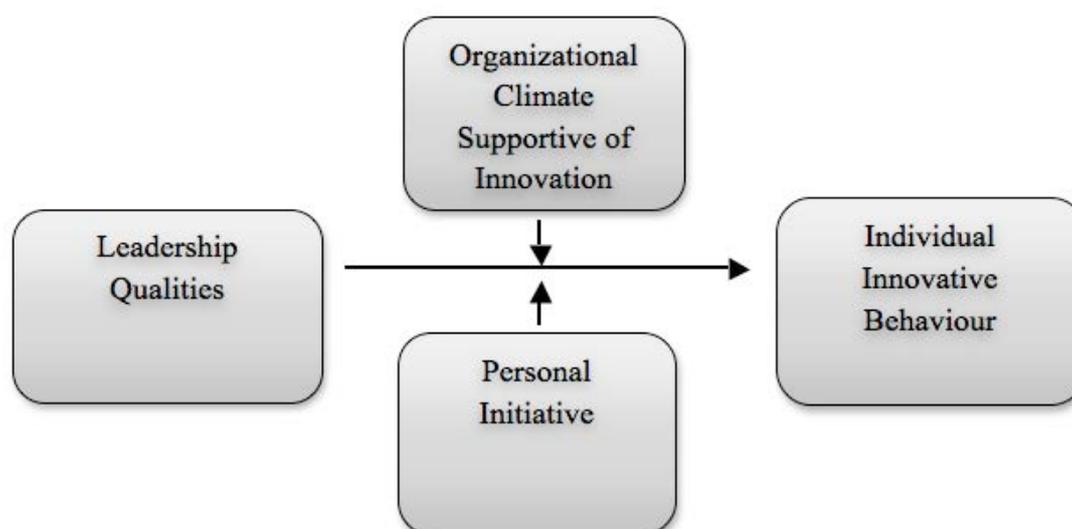
stressing personal power over followers, centralizing the authority of decision making on himself, and assert absolute control over subordinates (Cheng, Chou, Wu, Huang & Farh 2004, Tsui et al 2004; Chu 2004). It is supported in the literature that authoritarian leadership negatively associated with group creativity (Zhang, Tsui & Wang 2011). According to the study of Wong & Pang (2003), setting rules and regulations to follow, conservative management style and corporate bureaucracies are the barriers to creativity in the context of the hotel industry.

CONCEPTUAL FRAMEWORK AND PROPOSITIONS

The development of this study conceptual framework is inspired by the socio-psychological approaches to creativity and innovation (Amabile 1983; Woodman et al 1993). This approach puts the individual and contextual characteristics together to bring a more comprehensive insight into the determinants of creativity and innovative behavior. Although leadership is believed as a critical contributor to employees' innovative behavior in organization, there is a growing attention on the role of organizational and individual attributes to enhance the influence of leadership on subordinates' innovative behavior (Michaelis et al 2009; Wang & Rode 2010). This study proposes although that leadership is a pivotal factor associated with creativity and innovation in organizations, an encouraging and supportive climate can enhance the effect of leadership and promote employee's innovative behavior in organization.

Further, we argue that in the context of hotel industry that employees are service providers, the determinants of personal initiative at individuals are critical. In particular, employees with initiative characteristics are more likely to come up with new ideas and suggestions, and also they will respond to more positively to the leaders.

Figure1. Proposed conceptual framework



LEADERSHIP AND ORGANIZATIONAL CLIMATE

Climate refers to the contextual situation at the organization and its relation with the behaviours, beliefs and thoughts of organizational members. Climate affects the daily life and processes within the organization by shaping the attitudes, feelings and behaviours (Ekvall 1996). Innovation theorists have argued that organizational contextual factors play an important role in the creativity and innovation process (Amabile et al 1996; Oldham & Cummings 1996; Woodman et al 1993). Organizational climate has been considered as a central factor in workplace innovation (McMurray, Islam, Sarros & Pirola-Merlo 2013; Gumusluglu & Ilsev 2009), a climate supportive of innovation indicates the norms and procedures in the organization that promote flexibility and idea generation (Charbonneir-Voirin, Akremi & Vandenberghe 2010; West & Sacramento 2012). Kerr and Jermier (1978) 'substitute for leadership' theory considers various organizational contextual factors influencing leadership process. This theory indicates the reason that leadership is effective or ineffective in some situations depends on organizational characteristics that may 'substitute' or 'neutralize' the impact of leadership. Therefore, it can be concluded that by establishing a climate supportive and fostering creativity and innovation, leaders can considerably influence employees' innovative behaviour (Scott & Bruce 1994; Jung et al 2003; Yukl 2001). It is believed that employees perceiving climate supportive of innovation respond more favourably to leaders (Scot & Bruce 2004; Boerner & Von Stereit 2005; Jung et al 2003; McMurray 2013). Organizational climate supportive of change and flexibility provides employees with signals that organizational norms encourage taking initiatives and new idea development (West et al 2003), in this circumstance subordinates will more positively respond to the innovative leadership behaviours.

Innovative climate is the extent to which organization supports change, members' different approaches and diversity (Scot & Bruce 1994; Seigel and Kaemmerer 1978), organizational willingness to consider new ideas (Abbey & Dickson 1983), the supply of resources for achieving innovative outcomes and organizational rewards for innovative attempts (Scot & Bruce 1994), practical support for introducing new ideas and approaches (West 1990). Wang and Rode (2010) argument that the relationship between transformational leadership and employee creativity will be weaker under high innovative climate was rejected in, this study indicated that three way interaction of transformational leadership, identification with leader and climate for innovation was associated with employee creativity. Michaelis et al (2009) indicated subordinates responds to the same leadership style depends on contextual factors such as organizational climate. Jung et al (2003) in a study of 32 Taiwanese organizations investigated that climate supportive of innovation raised the positive effect of transformational leadership on organizational innovation. Further, the results of Boerner & Von Stereit (2005) study revealed that transformational leadership style increased the quality of symphony orchestra only in circumstances that it was associated with highly cooperative climate. McMurray and colleagues (2013) in a study of a non-profit charitable organization in Australia found organizational climate act as a stimulus on the impact of leadership on workplace innovation. This research outcome highlighted the need of establishing a supportive working climate to enhance workplace innovation in non-profit organizations.

This study argues that the correlation between leadership and employee's creativity and innovative behaviour varies when employees working in a healthy organizational environment supportive and encouraging of innovation. Shamir & Howell, 1999 (p. 279) stated "The study of leadership needs to reflect not only leaders' personal characteristics and behaviours, but also the situational factors which influence leadership emergence and effectiveness".

LEADERSHIP AND PERSONAL INITIATIVE

Personal initiative (PI) is a multi-factorial behaviour (Frese & Fray 2001). Personal initiative has been explained by psychological action-theory as a "behaviour syndrome resulting in an individual's taking an active and self-starting approach to work and going beyond what is formally required in a given job" (Frese et al 1996, pp. 38). Personal initiative is conceptualized as an individual-level construct and mainly emphasizes on three characteristics: self-starting, proactive and persistent approach to surpassing barriers and problems toward achievement of organizational goals and objectives (Frese & Fray 2001). It is believed that employees with personal initiative are active and have a persistent approach rather than passive and conformist toward organizational objectives (Baer & Frese 2003; Stroppa & Spieb 2010; Hakenen et al 2008), which makes PI as an important requirement for challenging working condition of the 21st century (Frese & Fay 2001).

The study of Binnewies, Ohly & Sonnentag (2007, pp. 450) determined that personal initiative have positive correlation with idea generation, personal initiatives serves as a "motivational promoter" at this stage and fosters individual engagement in working on creative solutions. According to Levitt (2002) creative people may have ideas and new suggestions for the business, but it is not enough to make changes, initiative is required to take the right efforts and make ideas heard and applied. The results of Miron, Erez and Naveh (2004) study demonstrated that the initiative is significantly moderating the relation between creativity and innovation performance in that individuals with higher rather than low initiatives attain more effective innovation performance.

Employees with a higher level of personal initiative actively engage in idea generation, and implementation of innovation (Baer & Frese 2003; Binnewies, Ohly & Sonnentag 2007; Frese & Fay 2001). This study suggests that the correlation between leadership and employees' creativity and innovation varies when employees show higher levels of initiative. The self-starting, proactive and goal-oriented characteristics of individuals with high PI in a working environment that leaders are supportive, empowering and articulating innovative vision would result in more creative ideas and better efforts for idea implementation. This argument has been supported by Michaelis et al (2009) study on 198 employees in lower and middle management positions of a multinational automotive corporation. The results of this study indicated that employees who perceive high levels of climate for initiative reply more effectively to leader behaviours and they believe setbacks and failure will be endured by top managers, on the other hand in low levels of climate for initiative employees feel sacrificed to organizational innovation practices.

PROPOSITIONS

Based on the above discussion, the following propositions are developed:

Proposition 1: Leadership will significantly affect individual innovative behaviour.

Proposition 2: Organizational climate supportive of innovation will moderate the relationship between leadership and individual innovative behaviour.

Proposition 3: Personal initiative will moderate the relationship between leadership and individual innovative behaviour.

CONTRIBUTION OF THE FRAMEWORK

This paper proposed a framework contributes to the body of knowledge in regards to employees' innovative behaviour. Given the importance of service employees' innovation as a competitive advantage for hotels, the suggested model from the literature shed light on the integration of critical constructs to promote human resources innovation. This paper offers practical implications for managers of hotels and other service organizations which require more consideration and empirical investigation. First, even if employees will be provided by the required internal and external resources, to be innovative, without organizational environment supporting and encouraging followers' innovative behaviour the efforts won't be effective. Achieving the desired outcome, requires a deeper understanding of the leadership qualities affiliated with service employees' innovative behaviour ,and also other organizational contextual factors and individual characteristics strengthen the linkage between leadership and subordinates' innovation. Further, this study takes into account the inter-sectorial innovation differences, by emphasizing on investigating the appropriate leadership qualities for creativity and innovation purposes in the hotel industry.

CONCLUSION AND FUTURE RESEARCH

Not only innovation is a mean for an organization to convert change into opportunities (Huse, Neubaum & Gabrielsson 2005) but also it is an opportunity for long-term stability and profitability (Cooper & Edgett 1999). Service innovation will continue to be a driving force of the global economy and the main source of competition. Service employees are assets and source of creative ideas for service organizations because of the importance of service delivery to customers. According to Lashley (2008) service organizations should concentrate on host and guest transactions to build exceptional customer service, satisfaction, loyalty and competitive advantage. Despite the critical role of employees' creativity and innovation in service industries such as the hotel industry, little research to date has been done to investigate the factors encouraging and cultivating employees' innovative behaviour in this particular industrial sector.

This paper suggests that, in motivating and advocating employees' creativity in hotel industry, leadership does matter. Although leadership is undoubtedly associated with subordinates creativity and innovation, employees working in a climate cultivating innovation and taking initiatives get empowered and accept the challenge to contribute actively toward accomplishment of organizational mission and objectives (Jung et al 2003; Liao & Chuang 2007).

Furthermore, the necessity of quality and skilled labourers in order to provide excellent customer services and unique hospitality products /services has been emphasized in the literature (Ottenbacher, Gnoth 2005). Education and training found to be an effective response to pressure from the financial and economic crisis in the Hotel industry (Martinez Ross & Orfila-Sintes 2012). It is suggested that successful hospitality innovation are highly depending on organizational approach in developing systematic interpersonal and general trainings (Ottenbacher 2007). In this regards, the results of this research will produce beneficial guidelines for training and developments in the Hotel industry.

The framework provides a starting point for further discussion and research. It offers scholars and industry managers a new perspective on the relationship among leadership, Organizational climate and personal initiative and employees' creativity and innovation in hotel industry.

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Strategic Partnership between Australia and Thailand: East Timor and a Legal Case against EU at WTO

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Abstract

This paper uses the concept of strategic partnership to analyse the co-operation between Australia and Thailand in the peacekeeping operations in East Timor and a legal case against the European Union (EU) at the World Trade Organisation (WTO) over the EU's excess export of highly subsidised sugar. A strategic partnership in this paper does focus on how two countries work together and support each other in security and economics. In security, Australia and Thailand worked together as strategic partners to restore peace and security in East Timor after the vast majority of the East Timorese voted in the referendum for independence in 1999. Australia played leading roles in the peacekeeping operations and was mainly responsible for disarming militias in the western part of East Timor. Thailand, on the other hand, helped legitimise Australian leading roles and was assign to be engaged with local population and initiate development projects to uplift the quality of life of East Timorese people in the eastern part of the territory. In economics, Australia and Thailand worked together to lodge a legal case against the EU at the World Trade Organisation on their excess export of highly subsidised sugar. The WTO verdict was in their favour.

Keywords: strategic partnership, peacekeeping operations in East Timor, sugar case, World Trade Organisation, European Union

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Introduction

Thailand and Australia established diplomatic relations in 1952 (Battersby, 2000, p. 29; Department of American and South Pacific Affairs, 2012, p. 3). The roles of Australia and Thailand on the world stage, especially in international organisations and the relationship between the two countries can be traced back to the First World War. During the War, Australia and Thailand were on the same side supporting Great Britain, France, Russia and their allies in the war against Germany, Austria-Hungary and their allies. Australia and Thailand emerged from the war victorious and became members of the newly-established League of Nations, which had the ultimate aim of guaranteeing global peace and security.

During the Cold War, Australia and Thailand shared common values and objectives, especially in regards to attempts at preventing the expansion of communism in the Asia-Pacific region, by allying and co-operating militarily with the United States. Both countries deployed troops to support the United States in the Korean War. In 1954, both countries became signatories of the South-East Asia Collective Defence Treaty or Manila Pact and member states of the South East Asia Treaty Organisation (SEATO), which was set up to prevent further communist expansion in the region (Millar, 1991, pp. 170-171).

Australia and Thailand worked together more closely on many regional and global issues in the 1980s. In 1986, Thailand joined Australia in the formation of the Cairns Group of Fair Trading Nations, commonly known as the Cairns Group, to put forward the liberalisation of agricultural products in the Uruguay Round of multilateral trade negotiations (Higgott & Cooper, 1990, p. 590). Both Australia and Thailand also played important roles in restoring peace and stability in Cambodia, especially after Vietnam invaded Cambodia in 1978 and removed the Khmer Rouge from power. Even though the two countries held different stances on the status of the Khmer Rouge in the peace process (Hewison, 1995, pp. 431-433; Lee, 2006, pp. 230-231), they co-operated with the international organisations including the Association of Southeast Asian Nations (ASEAN) and the United Nations (UN) as well as other great powers including the United States and China to incorporate all major factions of Cambodia at the negotiating table. The co-operation finally led to the withdrawal of Vietnamese troops from Cambodia in 1989, and later, a general election in this country. Hewison (1995, p. 430) observed that the civilian Thai government led by the retired General Chatichai Choonhavan “was a crucial ally in promoting Australian Foreign Minister Gareth Evans’ Cambodian peace proposals.”

When the severe economic crisis occurred in Thailand in 1997 and spread across the region, Australia was among the first countries to provide financial assistance for Thailand and other affected countries (Wesley, 2002, p. 305). In 1999, when Australia under the Howard government agreed to lead the International Force for East Timor (INTERFET) to restore security and stability in that country, Thailand expressed its support by making a substantial military contribution to this operation. A Thai military officer became the deputy commander of this international peacekeeping force.

In the 21st century, The Thailand-Australia Free Trade Agreement (TAFTA) was signed in Canberra in 2004 and came into effect on 1 January 2005 (Krongkaew, 2009,

p. 50). In 2004, Australia and Thailand along with Brazil, three top sugar exporting countries, worked together to lodge a legal case against the European Union's excess export of subsidised sugar at the World Trade Organisation (WTO) ("Australia to formally challenge EU sugar subsidies," 2003). In 2005, WTO's ruling was issued against the EU, and it became a victory for the three countries ("EU agrees cut in sugar subsidies", 2005; World Trade Organisation, 2005, p. 120).

Despite the fact that Australia and Thailand co-operated on many issues at both regional and global levels, the existing literature is not sufficient to understand the strategic partnership between Australia and Thailand. This paper aims to fill the academic gap by clarifying the concept of strategic partnership and examining the relationship between Australia and Thailand, especially how Australia and Thailand worked together as strategic partners to restore peace and order in East Timor and to lodge a legal case against the European Union at the World Trade Organisation.

Defining a Strategic Partnership

'Strategic partnership' is one of the vaguest terms in international relations. Some scholars, for example, Grevi (2010, p. 2), in the context of the European Union (EU), contended that "Strategic partnerships are a political category that no EU document or statement clearly defines."

When Schmidt (2010, p. 3) reviewed the concept of strategic partnership from EU documents, there are two groups of scholars debating whether the lack of obvious definition of the term is problematic or not. The first group of scholars exemplified by Grevi argues that there is no problem due to the lack of conceptual clarity of the concept of strategic partnership, on the contrary, it is an advantage because "a certain degree of flexibility and constructive ambiguity is indispensable for a concept such as this. In the absence of a uniform conceptual straightjacket, there is room for mutual adjustments, concessions, trade-offs, pragmatism and an incremental approach." By contrast, Biscop and Renard (2009, p. 7) identified two major problems of this concept. First, this concept has never been defined and it has been interpreted differently within and outside the EU. The objectives of strategic partnerships are also ill-defined. Second, the criteria for other countries to be qualified for strategic partnerships are too few, and they are not clear enough. There are many questions which arise why the EU chooses each country as their strategic partners.

Nadkarni (2010, p. 201) argued that a strategic partnership is different from alliance, as she put it:

strategic partnerships represent unique diplomatic instruments that allow states to pursue multidimensional bilateral, regional, and global issue agendas and diverse diplomatic goals without compromising freedom of action. Such partnerships, in allowing both parties to maintain at least the fiction of equality generally absent in alliances, make them easier to sell at home and help in protecting the country's image abroad.

Nadkarni (2010 p. 48) went on to elaborate that the strategic partnerships are "less inflexible than defensive military alliances, since they are neither explicitly targeted at a specific country nor contain binding defense commitments. These partnerships have

emerged as a safe policy option for secondary powers in a complex and globalizing world.”

Moreover, Nadkarni (2010, pp. 48-49) also distinguished a strategic partnership from ad hoc relationships by suggesting: “strategic partnerships call for greater engagement between the parties than mere ad hoc bilateral relationships that ensue as a result of normal diplomatic intercourse between states.” According to Nadkarni (2010, pp. 48-49), there are some common elements of strategic partnerships which can be summarised as follows: (1) formalised written agreements; (2) multi-level institutional links; (3) meetings at various levels - from the level of bureaucratic officials to the summit meetings between leaders; (4) military ties development; (5) attempts at stronger economic relationship; and (6) promotion each other’s cultures through activities.

One of the limitations of Nadkarni’s approach is that, as a written agreement is one of the main elements of a strategic partnership, when Nadkarni chose the cases for analysis, only three strategic partnerships between states with written agreements are selected, namely: Sino-Russian, Indo-Russian and Sino-Indian (Nadkarni, 2010, pp. 52-148). The relationships between other states are completely excluded from the analysis no matter how closely they work together and how intense their relationships are. In this regard, Australia-Thailand relations cannot be considered as a strategic partnership according to Nadkarni because Australia and Thailand do not have any written agreements which formalise the relationship as a strategic partnership despite the fact that Australia and Thailand have been working together on many issues regionally and globally.

On the other hand, Wilkins (2008, p. 363; 2011, p. 123) did not mention a written agreement as one of the features of a strategic partnership when he recast the business definition of a strategic partnership and defined the term in the context of international relations as:

structured collaboration between states (or other actors) to take joint advantage of economic opportunities, or to respond to security challenges more effectively than could be achieved in isolation. Strategic partnering occurs both in and between the international and domestic sectors (levels). Besides allowing information, skills, and resources to be shared, a strategic partnership also permits the partners to share risk.

However, when Wilkins picked up the cases for analysis, the same problems arise. Most of the case studies selected are not different from Nadkarni’s. The strategic partnerships between Russia and China, Russia and India, Japan and Australia as well as Japan and India (Wilkins, 2008, pp. 368-376; 2011, pp. 127-145) have some forms of written strategic partnership agreements.

While Goldstein’s definition shares some elements of a strategic partnership with Nadkarni’s, a formal written agreement was excluded from the definition. Apart from focusing on how the parties to a strategic partnership work together on matters of shared concerns, Goldstein also highlighted the significance of official visits, meetings and summits between government officials and leaders of the parties when he defined a strategic partnership as follows:

The essential elements are a commitment to promoting stable relationship and extensive economic intercourse, muting disagreements about domestic politics in the interest of working together on matters of shared concern in international diplomacy, and routinizing the frequent exchange of official visits, especially those by representatives of each country's military and regular summit meetings between top government leaders (Goldstein, 2003, p. 75).

This approach pays attention mostly to formal mechanisms such as summit meetings between leaders, official visits or ministerial meetings of the parties to a strategic partnership. Accordingly, when analysing strategic partnerships between states, this approach tends to present meticulous details of numerous meetings and visits at different levels between those states as well as the outcome documents. Therefore, this approach can only explain strategic partnerships generally, but it does not highlight any significant cases in which the two states work closely together as strategic partners and examine them profoundly.

When Jiraporn Jirananthakij defined the term strategic partnership in the context of the relationship between China and the United States under the Clinton administration (1993-2001), her definition is similar to Goldstein's as she did not refer to a formal written agreement as a prerequisite for a strategic partnership, but she defined the term in a more flexible way by also focusing on a co-operative relationship, not official visits and summits. According to Jiraporn Jirananthakij (2003, p. 72), a strategic partnership is "a co-operative relationship which encompasses co-operation on a wide range of issues for long-term mutual benefits of the two countries and the world."

There are at least two different stances on the areas of co-operation in a strategic partnership. The first group of scholars suggest that a strategic partnership should span numerous areas of co-operation. Grevi (2010, p. 8) stressed that a strategic partnership is a comprehensive relationship, as he put it, "Strategic partnerships are also comprehensive ones, and not fragmented depending on whether economic, political or security issues are concerned, because the vital interests of the parties span across these different domains."

Some other scholars propose that a strategic partnership concentrates more on security and economic issues even though they recognise that there could be some other areas of co-operation. According to Wilkins (2008, pp. 122-123), economic and security issues are the key areas of co-operation in a strategic partnership. Other areas such as environmental protection, border security, atomic energy, disaster relief and links between people of the parties to a strategic partnership are also touched on in Wilkins' analysis, but they are not explained in great detail (Wilkins, 2008, p. 371; 2011, pp. 129, 138).

Tolipov (2006, p. 3) highlighted security interests as the most important sphere of co-operation in a strategic partnership, as he pointed out, "intensive cooperation takes place not just in one but in many spheres with special emphasis on national security interests."

Among the two groups of scholars, there is a consensus that security and economic issues are the main two spheres of co-operation of a strategic partnership.

Based on the literature on strategic partnership, this paper adopts the approach to defining a strategic partnership in a broader and more flexible sense proposed by Jirananthakij and Goldstein which focuses on how the two parties to a strategic partnership, in this case Australia and Thailand, co-operated to work together on many issues. Accordingly, formal written strategic partnership agreements as Nadkarni highlighted are excluded from the definition of a strategic partnership. Besides, the definition does not focus much on formal institutions, meetings and visits at different levels between the parties to a strategic partnership as Goldstein and Nadkarni suggest. However, these elements of a strategic partnership will be referred to in case they are considered useful and significant for explaining and understanding the relationship between Australia and Thailand. Moreover, as there is a consensus among scholars that security and economic spheres are significant in a strategic partnership, these two spheres will be examined in this paper.

Overall, the definition of a strategic partnership between Australia and Thailand in this paper is a co-operative relationship between two states to work closely together in the spheres of security and economics in order to advance their perceived self-interests.

Australia and Thailand in East Timor

Prime Minister John Howard of Australia (2011, p. 336) identified in his autobiography that the liberation of East Timor from Indonesia in 1999 was one of the achievements during his prime ministership of which he was most proud. In 1999, Australia under his government led a multinational force, International Force for East Timor (INTERFET), authorised by the United Nations Security Council (UNSC), to restore peace and stability in East Timor and to pave the way for and facilitate the transition to East Timor's independence.

Indonesia invaded East Timor on 7 December 1975 but Indonesia's incorporation of East Timor was never recognised by the international community. However, Australia and Thailand alongside many other countries supported Indonesia and tried to prevent the issue of East Timor from being debated at international organisations. Australia and Thailand recognised Indonesia's sovereignty over this territory. Despite the fact that Australia sometimes criticised human rights abuses by the Indonesian government in East Timor or called for reconciliation and greater political autonomy for the territory, none of them aimed to push for the separation of East Timor from Indonesia.

The situation and the dynamics with regard to East Timor changed substantially when the Asian financial crisis originated in Thailand in 1997 and spread to other Southeast and East Asian countries including Indonesia. President Suharto failed to resolve the crisis. He was forced to resign in 1998 and was replaced by Vice-President, Dr Bucharuddin Jusuf Habibie. As Howard (2011, p. 340) observed, Habibie regarded East Timor differently from his predecessor as a liability rather than an asset for Indonesia. He also tried to improve the image of Indonesia in the international community as it was significant for Indonesia's economic recovery.

Habibie later announced that East Timorese people would be offered a clear choice between limited autonomy within Indonesia or immediate independence. Before the referendum, violence occurred in East Timor. The militias in East Timor killed and tortured people in order to intimidate them not to vote for independence. Against the background of the series of violence and human rights violation, the referendum finally took place on 30 August 1999. The vast majority of the East Timorese, 78.5% rejected the autonomy option (Martin, 2001, p. 11).

The pro-integration militias began their violent campaign against the population, the independence supporters and the UN staff. Overall, approximately 400,000 people fled their houses; 250,000 people were forced to evacuate to West Timor. Many towns were razed and infrastructure in Dili, its capital city, and other major cities were largely destroyed (Federer, 2005, p. 64; Greenlees & Garran, 2002, p. 202).

Australia was under intense pressure to do something to restore peace and order in East Timor. However, it was obvious that Australia could not conduct the peacekeeping operations unilaterally. Kofi Annan, former UN Secretary-General (Annan & Mousavizadeh, 2012, p. 106), realised that the international force to be established needed to have “a significant Asian component if it were not to be seen as a Western invasion of Indonesia.” Annan’s another concern was that Australia’s neighbouring country did not consider Australia as truly Asian.

Howard needed to contact many global and regional leaders. Thailand was one of the Southeast Asian countries which Australia approached and sought contribution. The Chuan Leekpai government of Thailand at the time supported Australia by providing the second largest number of troops after Australia and the deputy commander of the International Force for East Timor (INTERFET). Thailand also asked Japan to provide financial assistance for the operation (Er, 2010, p. 47).

The fund provided by Japan enabled Thailand and the Philippines to take part in the INTERFET, which helped legitimise Australian roles in East Timor. As Er (2010, p. 47) observed, Japan’s financial contribution was “extended not only to East Timor but also to ensure the viability of ASEAN as a regional institution.” Walton (2004, p. 244) suggested that Japan was more comfortable to respond to the request by friendly Southeast Asian nations, not to overt pressure by Australia.

It means politically and diplomatically, Australia’s leading roles in East Timor were significant because no ASEAN countries had sufficient experience, capabilities or intention to lead a multinational peacekeeping force in East Timor. When Australia decided to lead the force, other ASEAN countries including Thailand were willing to follow. Blaxland (2002, p. 7), observed “without Australia taking the lead, the others [*other ASEAN nations*] would not have participated.”

On the other hand, Thailand’s status as an Asian and an Indonesia’s ASEAN fellow country helped legitimise Australia’s leading roles in East Timor. Moreover, Thailand could also make use of its strong relationship with Japan to secure its financial contribution for the operation.

At the operational level, Australians were responsible for the western part of East Timor including Dili, its capital city. Their main duties were to disarm militias and

secure the border with West Timor. Australia assigned Asian countries including Thailand to be responsible for the Eastern part of East Timor. Thailand wished to avoid confrontation with the Indonesian security forces and militias and Thailand could make use of its expertise in development to assist local people to get on with their normal lives.

By the end of 1999, after INTERFET could effectively control East Timor, the Australian government urged the United Nations to take over the mission from INTERFET. Australia and Thailand continued to work together in the United Nations Transitional Administration in East Timor (UNTAET) peacekeeping force. The first commander was Lieutenant General Jaime de los Santos from the Philippines. He was succeeded by Lieutenant General Boonsrang Niumpradit from Thailand until 31 August 2001. The two deputy commanders were Australian army officers: Major-General Michael Smith and Major-General Roger Powell respectively. Smith assisted Boonsrang in negotiations with Indonesia, planning strategic operations against militias and visiting each country's contingents in various parts of East Timor (Smith, 2014). Powell had experience in military training, so apart from his mission as the deputy of Boonsrang, he was also responsible for training local security forces in East Timor and how to separate power between the police forces, military forces and the civilian authorities at the district level in East Timor (Powell, 2014).

Thai military officers in East Timor in INTERFET and UNTAET complemented Australian officers by sharing at least three qualifications and skills. Firstly, they were able to get along with the military officers from other countries and local population well. Colonel Noppadol Charoenporn (retired as General), the commander of Thai troops during INTERFET (2013) claimed that Thai soldiers in Bacau and Viqueque did not have to hold the guns in their hands when patrolling around the villages because Thai army officers always smiled at and greeted the local people in order to gain their trust and co-operation.

During UNTAET, when Boonsrang became the Commander of the UNTAET PKF, he was able to create the environment in which troops from different countries including Australia and Thailand could work together better. Powell (2014) praised Boonsrang for his empathy for each individual staff and his ability to draw out everybody's strengths. Coming from a non-English speaking country, Boonsrang realised that there could have been problems in communication between nations, so he asked military officers from every country at the morning briefing on his first day as the commander, 22 July 2000, to speak with one another slowly and clearly (Niumpradit, 2004, p. 4). This clearly showed Boonsrang's sensitivity towards encouraging teamwork between troops from different nations. Powell (2014) recalled that one of the strategies of Boonsrang to build stronger relationships between his staff and between the local communities was to invite them to have Thai food with him every Friday night and thought them how to cook Thai food. Thai food became one of Boonsrang's effective tools to connect people from different cultures and languages in East Timor.

Secondly, Thai troops followed his Majesty King Bhumibol Adulyadej's footsteps in improving the agricultural skills of the local population. When Thailand faced the communist threat during the Cold War, King Bhumibol led the nation to fight communism by initiating development projects around the country, especially in the

North East. He insisted that alleviating poverty and improving people's livelihoods were the best ways to reduce support for communist insurgent (Grossman & Faulder, 2011, p. 247).

Colonel Pichate Wisaijorn (retired as General) (2014), the commander of the second Thai contingent deployed to East Timor under UNTAET, who started agricultural development projects, explained that he followed King Bhumibhol's footsteps to help local people to improve agriculture. Strategically, it was a way to garner support from local people because they would feel that soldiers were their friends. This could also help to prevent the enemies from mobilising them. He thought peace would not be restored if people were still starving. He thought the condition of soil and lands of East Timor were not appropriate for agriculture because during the occupation by Indonesia, chemical fertiliser had been heavily used. He decided to teach the East Timorese to produce high quality organic fertiliser by applying a technique called "Effective Microorganism (EM)". Pichate also taught the East Timorese to dig a pond and to cover it with plastic bag and fill it with water to breed walking catfish to be highly nutritious food for the people. Moreover, he taught the East Timorese how to use buffaloes and ploughs to plough the rice fields, which is more effective than the traditional way in which people whipped horses tied to a pole in the middle of the rice field to make them run and step on the soil.

The last qualification and skill was profound understanding of the way of life and the mentality of the East Timorese which is similar to that of people in the countryside of Thailand. The first significant step of Boonsrang's was to ensure the positive attitude of military officers in the field towards local people. Boonsrang argued that "if the multinational force conducting operations in East Timor did not believe that the East Timorese people were good, they would not commit to working for them wholeheartedly, and it would be difficult to be successful" (Malikaew, 2012, p. 61).

Some foreign troops, especially those from Western countries, observed that the East Timorese children were prone to violence when they saw the children playing toys which looked like guns made of bamboo. They also soaked paper and moulded it into circular shapes to use as fake bullets (Malikaew, 2012, p. 53). Moreover, the East Timorese children often fought against one another and loved cockfighting. Boonsrang needed to explain to the western peacekeepers that because of the poverty, the East Timorese children could not afford expensive modern toys, so they needed to create their own toys from natural materials available locally or sometimes fought against one another.

The fact that the qualifications and skills of Australian and Thai troops were complementary led to the success of the peacekeeping operations in East Timor. While Australian troops focused on securing the western part of East Timor and strategic operations against the militia, Thai troops were successful in engaging with the local population, uplifting their quality of life and influencing some foreign troops to adopt more positive attitudes of towards the East Timorese, based on their profound understanding of their lives and mentality.

Australia and Thailand against the European Union (EU) at the World Trade Organisation (WTO)

In 2003, Australian Trade Minister Mark Vaile stated that the European Union (EU) was exporting highly subsidized sugar to the world market and “distorting world markets to the detriment of sugar exporters worldwide, including Australia” (“Australia to formally challenge EU sugar subsidies,” 2003). Vaile announced that “We [Australia] have joined Brazil and Thailand in seeking an investigation because we believe aspects of the EU's support for its sugar regime are clearly contrary to WTO rules” (“Australia to formally challenge EU sugar subsidies,” 2003) He also argued that the EU is the world's largest exporter of white sugar. The EU spends more than A\$10 billion on price support and in excess of A\$2.7 billion on export subsidies on more than six million tonnes of sugar (“Australia to formally challenge EU sugar subsidies,” 2003).

Not only the EU had provided subsidies for EU sugar farmers, the EU also provided financial support for sugar from its their former colonies, for example, the African, Caribbean and Pacific (ACP) countries such as Mauritius, Barbados and Fiji. The EU bought sugar from those countries at higher prices and exported at lower prices. The EU subsidised the margin (Asavapisit, 2013). This type of sugar is called “Quota C” or “C sugar”.

Australia invited Thailand and Brazil, two other major sugar exporters to lodge a legal case against the European Union at the World Trade Organisation (WTO). Puangrat Asavapisit (2013), former Permanent Representative of Thailand to the WTO, explained that Australia and Thailand had been working closely together since the establishment of the Cairns Group for Fair Trading Nations, commonly known as the Cairns Group. The Group was established to put forward the liberalisation of agricultural products at the forums of the General Agreement on Tariffs and Trade (GATT) and the World Trade Organisation (WTO) and to counter-balance the influence of the EU and the United States because the EU and the United States had never been willing to open their markets to agricultural products from other countries through various means such as maintaining import quotas and restrictions, providing high level of subsidies to farmers, imposing numerous non-tariff barriers etc (Kenyon & Lee, 2006, pp. 8-12). Initially, senior officials of many agricultural exporting countries including Australia met in Pattaya, Thailand, and agreed in principle to form the Cairns Group, but ministers met again in Cairns Australia in 1986 to formally form the group (Asavapisit, 2013). Moreover, at the World Trade Organisation, Australian and Thailand permanent representatives along with others of the Cairns Group nations always have working lunch or working dinner together in order to consult with one another and work collaboratively on numerous trade issues. These are the reasons why Thai was willing to co-operate with Australia when invited.

Puangrat (Asavapisit, 2013) argued that when Australia and Thailand as well as Brazil, three largest world sugar exporting countries worked collaboratively to lodge a legal case against the EU, they could help one another on the legal aspects of the case. Each country had different legal arguments on the issue and each of them helped make the case more comprehensive. For example, according to Australia, the EU provided “export subsidies in excess of the export subsidy commitments” (World Trade Organisation, 2005). Thailand contended, inter alia, that, “The EC sugar regime

accords imported sugar a less favourable treatment than that accorded to domestic sugar and provides for subsidies contingent upon the use of domestic over imported products.”

However, David Spencer (2014), former Australian Permanent Representative to the WTO, observed that “The fact that three of the largest sugar exporters and representatives of both the developed and developing world joined forces to lodge the complaint looked good from a political point of view but did not mean that we had three times the legal validity of our arguments”. Surakiart Sathirathai (2014), former Thailand’s Foreign Affairs Minister and an expert on international trade laws, argued along similar lines that Australia-Thailand co-operation in the sugar case was significant because it was a rare co-operation between developed and developing countries on trade issue. Finally, the WTO ruled that the EU subsidies were contradictory to the GATT and WTO rules. In 2005, the EU agreed to comply with the verdict by reducing the subsidies provided for their farmers and their former colonies (“EU agrees cut in sugar subsidies”, 2005).

Conclusion

Australia and Thailand worked together as strategic partners to complement each other’s in both security and economic issues without any formal written agreements between each other. In security, Australia and Thailand supported each other in the peacekeeping operations in East Timor, from INTERFET to UNTAET. While Australia provided leadership roles and was responsible for disarming militias in the western part of the territory, Thailand’s contribution helped legitimise Australian roles, satisfy Indonesia and revive people’s lives. On trade issues, Australia and Thailand co-operated to lodge a legal case against the EU on their excess export of highly subsidised sugar, which distorted the global sugar market, at the WTO. Australia and Thailand presented different legal arguments to complement each other and make the case more comprehensive. The verdict was in their favour.

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***A Novel Executable Framework for Protecting Personal Information at Risk:
Taiwan Experiences***

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Abstract

Both government and commercial organizations are collecting personal data about individuals at an increasing rate. Online attacks against computer systems are also on the increase and are increasingly considered a risk for these organizations. It's about time to manage privacy and security of on-line information by reviewing their relevant laws and regulations. Privacy concerns have resulted in laws and regulations including Taiwan's Personal Information Protection Act (PIPA). By taking a proactive stance towards privacy invasion, organizations can help stave off excessive government intervention to tighten controls over what can be done with an individual's personal data. This proposed P-P (Performance Evaluation - Policy Management) framework is divided into two phases: Performance Evaluation and Policy Management. This framework is presented to provide guidance for managers tasked with implementing an organization's privacy policy. The study closes with recommendations for privacy and security best practices for information managers. We anticipate collateral benefits for law enforcement in the cybercrime investigation of data leakage.

Keywords: Personal Information Protection Act, Information Security, Performance Evaluation, Policy Management

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1. Introduction

Due to the rapid growth of digital data, the demands for personal information as a thing of value have also increased. Users are often unaware of the fact that their data is being collected and processed for various reasons. These include consumer behavior analysis, personalized advertisement, opinion mining or profiling (Theoharidou and Gritzalis, 2007). There is a widespread lack of suitable strategies to respond to the digital revolution, and personal information protection strategies are in urgent need of reform. Due to the ease of rapid conversion, convenient transmission and widespread access, common information security mechanisms do not provide users with a high degree of control over their resources at runtime (Chakraborty, Shen, Raghavan, Shoukry, Millar, and Srivastava, 2014). Recent media attention to information protection issues has shown that people are increasingly concerned about their rights to protection of their personal information. On-line information privacy is important. People desire more control over their information and the subsequent use (e.g., collection, process, use, and transmission). A proactive stance against privacy invasion can also help stave off government intervention to tighten controls over what can be done with an individual's personal information. It's about time to manage privacy and security of on-line information by reviewing the relevant laws and regulations. It is increasingly becoming an organization's most important assets as well as a significant potential liability.

Since there is no comprehensive privacy statute that protects on-line personal information, it is about time to pay more attentions on privacy enhancement (Wang and Kobsa, 2009). A patchwork of laws and regulations is always insufficient to meet the demands of on-line privacy. Privacy has different aspects or dimensions: informational, physical, decisional, proprietary or relational. This study focuses primarily on informational privacy, which fits well within the general definition of privacy as a condition of limited access to an individual or information about an individual (Rothstein, 2014). Concerns of privacy harm have resulted in laws and regulations. Any discussion of the privacy laws in Taiwan, especially privacy of personal information, should start with the Computer-processed Personal Information Protection Act (CPIPA) in 1995. The Taiwan Legislative Yuan passed an amendment to the CPIPA on April 27, 2010 and promulgated as the Personal Information Protection Act (PIPA). The amendment broadens the scope of the act, and the definition of data is no longer limited to "computer-processed" data. The act applies to all individuals and organizations. The act imposes costs. Taiwan's PIPA sets out the ground rules for how a government or non-government organization may collect, process, use or transmit information about any person. It strikes a balance between personal right to control access to and use of personal information for legitimate and reasonable purposes.

The related works are discussed in Section 2. Section 3 presents a case scenario and its analyses. The P-P (Performance Evaluation - Policy Management) framework of privacy enhancement is proposed in Section 4. The conclusion is drawn in Section 5.

2. Reviews

This section gives a broad overview of the legal and practical issues. It also presents a literature review on the following personal information issues (Chakraborty, 2002;

TW Ministry of Justice, 2010): Urgent Needs to Enhance Privacy Control, Protective Guidelines of Personal Information, and Potential Features of Taiwan PIPA.

2.1 Urgent Needs to Enhance Privacy Control

Organizations are growing to incorporate almost everything available on the web. The ability to gather much information on individuals is largely because of advances in on-line technology. It is important for information system managers and professionals to understand the issues surrounding personal information protection in order to protect the rights of those from and about whom they collect data. We are facing a research challenge and an engineering challenge to make data protection a competitive advantage. We need formal frameworks not for their own sake, but for privacy assurances we can count on. We need models and tools to cope with diverse privacy attitudes. And, we need experiments to learn and gain insight from consumers' on-line privacy choices.

2.2 Protective Guidelines of Personal Information

The central rules of the PIPA are based upon a set of protective guidelines, which can be summarized in Table 1 (Bygrave, 2002; Online Trust Alliance, 2014):

Table 1: Protective Guideline of Taiwan PIPA

Purpose	Organizations	Individuals
Necessary	Fair Means	Individuals' Consent
Collected	Lawful Means	Informed Individuals
Processed	Security Measures	Responsible Individuals

(1) Purposes

Organizations must state their purpose for data collection, and explain how the personal information will be used. The use of personal information must be aligned with the stated purpose and be justifiable to meet that purpose.

- Necessary purposes: The collected amount of personal information should be necessary to achieve the purposes for which the data are gathered and further preceded.
- Collected purposes: Personal information should be collected for specified, lawful, legitimate purposes.
- Processed purposes: Personal information should be relevant, accurate and complete in relation to processed purposes.

(2) Organizations

- Fair and lawful means: Personal information should be collected by fair and lawful means.
- Security measures: Security measures should be taken to protect personal information.

(3) Individuals

- Individuals' consent: Organizations will be required to advise an individual that their information is collected, and shall obtain the written consent of the affected individual.
- Informed individuals: Persons should be informed of, and given access to information.
- Responsible individuals: Those who are responsible for handling personal information should be accountable for implementing controls in accordance with the above principles.

2.3 Potential Features of Taiwan PIPA

Personal information also has a dark side in the background. People are increasingly becoming a data source for various stakeholders (Thomas, 2014). Personal information includes a natural person's name, date of birth, national identification number, passport number, physical description, fingerprints, marital status, family, education, occupation, medical records, medical history, genetic information, sex life, criminal records, contact information, financial status, social activities, and other data which is sufficient to directly or in combination with other information identify an individual person. Certain types of information require greater control including medical information, genetic information, sex life, examinations and criminal records. Personal information in these categories may only be collected, processed, used or transmitted in specific circumstances. The act excludes personal information accessed during private and family activities and the posting of information or group photos on Facebook, twitter, blogs, or social network websites from prior consent requirement. The potential features of Taiwan PIPA can be explored from the following attributes (TW Ministry of Justice, 2010).

(1) Sanctions against Data Controllers

The act grants authorities various means to sanction data controllers who violate the act unless data controllers can prove that they took measures to prevent the violation.

(2) Impose Fines

Criminal liability is initiated where a data controller illegally collects, processes, uses, or transmits personal information in a way that is likely to harm an individual. Under the act, authorities may impose fines ranging from NT\$ 20,000 to NT\$ 500,000 on offenders. The act increases criminal penalties for violations with intent to profit. Where such illegal activity is undertaken with intent to profit, offenders face more severe punishments including imprisonment of up to five years and fines of up to NT\$ 1 million.

(3) Recovery for Damages

An injured party may claim actual and non-pecuniary damages. The maximum damages may be claimed is NT\$ 2 million. An injured party may also claim measures to restore reputational damage. The act allows for class action whereby 20 or more

claimants may collectively bring suit through a foundation or public interest association.

3. Case Study of Extortion Ring

The internet facilitates criminal activity both directly and by making it easier to seek out potential victims. The following scenario of extortion ring case, which is based on lots of personal information, is presented. This example is intended to help organizations better understand the risks of data loss. It is observed that personal information is very critical to explore their potential victims as far as any criminal rings are concerned. It is also an urgent need to explore a wide variety of contexts in which PIPA can be implemented to safeguard this information.

3.1 Scenario: CIB Arrests Four Suspects for Online Extortion

The scenario of this case is:

(1) Original Police Complaint

A large on-line retailer in Taiwan had experienced a leak of customer data dating back to 2011. The extortion ring contacted the organization in November 2013. They threatened to release personal information of the organization's customers unless they paid ransom. The organization contacted law enforcement and said that several unidentified individuals had been threatening to release the above-mentioned data on the internet for potential misuse by criminals. Although the organization sent out a press release to contain the incident, they continued to receive threats.

Communication with the organization included email. Email clients often contain header information showing the origin and route of the message. The CIB was able to trace through the email headers back to the extortion ring. On January 27, 2014, Criminal Investigation Bureau (CIB) mobilized 20 police officers to conduct raids in Taiwan, and arresting 4 suspects (Taiwan Criminal Investigation Bureau, 2014).

(2) Data Loss

The customer information fell into two categories. Personal identification data (which can be used to transact with government or non-government organizations under an assumed identify) and financial data (which can be used to conduct secure electronic payments and related financial transactions). Both types of information would be of interest to criminal actors.

(3) Promulgate PIPA in Taiwan

Monetary fines and penalties are traditionally integral to punishment / deterrence in most democratic societies. Prior to Taiwan's revised PIPA (which took effect in October 2012), criminal and civil liability arising from leakage of information was not a strong part of the legal system. With possible fines of up to US \$500,000, PIPA significantly raised the costs of information disclosure whether intentional or unintentional. In this case, the extortion ring was able to hold this penalty over the victim's heads in order to coerce them into paying ransom. Although the original fines

were designed to deter or prevent data loss, in this case, they had the unintentional effect of enabling the extortion ring.

3.2 Case Analyses: New Threats on the Internet

Nowadays, instead of writing letters or making a telephone call, people communicate with each other on Facebook, Twitter, Line, Whatsapp or other online social networking websites. We should use our skills and expertise to restore privacy and freedom to the internet. The following analyses of personal information are conducted to address the changing role of the internet (Jaishankar, 2011; Jone, Bejtlich and Rose, 2006; National Institute of Justice, 2007).

(1) Find Online Victims

Every day, privacy on-line is eroded against our will. People are losing control over the dissemination of their information. This has assisted many criminals in planning extortion and other crimes. How can extortion rings find victims? Computer networks contribute to a greater flow of information. The internet provides a comprehensive tool that is accessible to everyone. The internet has the advantage of protecting offenders' identity, and allows offenders to monitor victims' activities.

(2) Shared Information

Extensive amounts of personal information are shared on the internet. With more people turning to the internet to have fun, find love, research topics, perform analysis and conduct business, offenders have started focusing more heavily on hacking, data extortion, money laundering, credit card scams, pornography, and unconventional sexuality.

(3) New Threats

Connecting computers to the internet is inherently risky. It is almost difficult to prevent the data leakage from happening. Our world is changing. The rate of changes shows no sign of slowing down. Cyber technology and personal information is neutral, but their usage can generate great value or create significant harm.

4. Proposed Framework

People want the benefits that information sharing can bring. A proper on-line privacy protection solution is necessary to enhance privacy in on-line service. Do organizations analyze the vulnerabilities (or problems) they have before addressing them? Creating and implementing a proper privacy enhancement framework become common sense. However, this kind of common sense issues are ignored due to a lack of understanding their importance. This proposed P-P framework in Table 2 is divided into two phases (Cotter, 2004; National Institute of Justice, 2007; USA White House, 2011): Performance Evaluation Phase and Policy Management Phase. Each phase is explored from the following issues: concern, strategy, and principle.

Table 2: The P-P Framework of Privacy Enhancement

Phase I	Performance Evaluation Phase	
Concern	Individuals' Privacy	Customers' Openness
Strategy	Internal Capability	External Environment
Principle	1. Internet Data Quality 2. Collection Limitation 3. Use Limitation	1. External Openness 2. Transmission Confidentiality 3. Information Sharing
Phase II	Policy Management Phase	
Concern	Controllers' Security	Auditors' Protection
Strategy	Prevention Measure	Detection Measure
Principle	1. Media Security 2. Identification and Authentication Mechanism 3. Least Privilege	1. Information System Monitoring 2. Access Control 3. Protection of Information at Rest

4.1 Performance Evaluation Phase

Individuals do not abandon their right to personal privacy or data protection. The purpose of performance evaluation focuses attention on the protection of personal information. In the following, we demonstrate the internal capability from individuals' privacy concerns, and external environment from customers' concern viewpoint (National Institute of Justice, 2007; USA White House, 2011).

4.1.1 Internal Capability: Individuals' Privacy Concerns

Protecting privacy is a vague concept. Different organizations might have completely different interests and views. The notion of privacy involves a basic sense of human dignity, which can be compromised by the proliferation of sensitive information about oneself. Trust, respect, and personal integrity are at issue. In order to deal with the issues on the internal capability of privacy concern, some proposed principles are listed below.

(1) Internal Data Quality

Personal information should be relevant to the purposes for which they are to be used, and should be accurate, complete and kept up-to-date. Individuals often seek assurance that their data is well protected.

(2) Collection Limitation

The purposes for collecting personal information should be specified. There should be limits to the collection of personal information. Any data should be obtained by lawful and fair means with the knowledge or consent of the individual.

(3) Use Limitation

Personal information should not be disclosed, made available to others except with the consent of the individual or by the authority of law.

4.1.2 External Environment: Customers' Openness Concern

In order to deal with the issues on the external environment of customers' openness concern, some proposed principles are listed below.

(1) External Openness

When controllers of sensitive datasets release data, they often reveal more information. There should be a general policy of openness about developments, practices and policies with respect to personal information. Means should be readily available of establishing the existence of personal information, and the main purposes of their use.

(2) Transmission Confidentiality

Organizations can protect the confidentiality of transmitted personal information. This is often accomplished by encrypting the communications in transmission or by encrypting the information before it is transmitted.

(3) Information Sharing

Organizations can provide automated mechanisms to assist data controllers and auditors in determining whether individuals or customers match access restrictions, such as contractually-based restrictions, for personal information. Organizations can protect digital media and mobile devices outside the organization's controlled areas. Organizations can choose to prohibit or strictly limit remote access to personal information.

4.2 Policy Management Phase

Organizational policies may play an important role in cyber security domain. To combat the problem an organization has to resort to the policy management phase of prevention and detection measures. In the following, we demonstrate the prevention measure from data controllers' security concern and detection measure from data auditors' protection concern (Cotter, 2004; National Institute of Justice, 2007).

4.2.1 Prevention Measure: Controllers' Security Concern

In order to deal with the issues on the prevention measure of data controllers' security concern, some proposed principles are listed below.

(1) Media Security

Organizations can restrict access to digital media containing personal information, including digital media (e.g., CDs, USB flash drives, backup tapes) and non-digital media (e.g., paper, microfilm). This could also include portable and mobile devices with a storage capability. Moreover, organizations can label digital media and output containing personal information to indicate how it should be distributed and handled.

(2) Identification and Authentication Mechanism

The requirement for the authentication mechanism depends on the impact level of the personal information and the system as a whole. Users should be uniquely identified and authenticated before accessing personal information.

(3) Least Privilege

Concerning personal information, the organization can ensure that users who access personal information only have access to the minimum amount of personal information, along with only those privileges (e.g., read, write, execute) that are necessary to perform their jobs.

4.2.2 Detection Measure: Auditors' Protection Concern

The value of data auditors is to help organization's routine surveillance and computer monitoring. That can be implemented from the basis of the surveillance data reported at the daily, weekly, monthly or six-month review. If organizations have any problem, the report of routine surveillance can be analyzed from daily auditing records. In order to deal with the issues on the detection measure of data auditors' protection concern, some proposed principles are listed below.

(1) Information System Monitoring

Organizations can employ automatic tools to monitor computer systems at network boundaries for unusual events. The log is accessed by a small number of system administrators when they troubleshoot operational problems or incidents. All access to the log occurs only from the organization's own systems. No remote control services are allowed.

(2) Access Control

Organizations can control access to personal information through access control policies and access enforcement mechanisms. Access control describes the collection of mechanisms that permits administrators of a system to exercise a directing or restraining influence over the behavior, use, and content of a system.

(3) Protection of Information at Rest

Organizations can protect the confidentiality of personal information at rest, which refers to information stored on a secondary storage device, such as a hard drive or backup tape. This is usually accomplished by encrypting the stored information.

5. Conclusion

Information security today must account for highly interconnected global including critical transactions taking place over the internet. Privacy violations on the internet present a significant problem, and we should try our best to minimize these in order to have a better and more secure future in cyber space. Securing information has become one of the biggest challenges nowadays. Despite laws, legislations and technical

attempts to solve the personal information protection issue, we still need to constantly defend and preserve people's data against any unauthorized disclosure. Individuals or customers have a right to ask for adequate privacy controls. An organization can use a well-designed framework to develop consumer trust, and to make better investment decisions about technology infrastructure. This proposed P-P framework is very delicate and requires deep understanding of both internal and external aspects. That framework includes the proper measures to conduct protection actions, and provides managers guidance in dealing with privacy policy. The main contributions of this study lie in analyzing the internet privacy violation, conceptualizing a novel privacy-enhanced framework, providing the privacy strategy on the internet, and improving the ability on information security. The study closes with recommendations for privacy and security best practices for information managers. That also benefits the cybercrime investigation of data leakage.

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The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The logo is surrounded by a large, faint, circular graphic element composed of two overlapping arcs, one in a light red color and one in a light blue color, creating a partial circular frame around the text.

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***A Novel Process Framework for Digital Forensics Tools:
Based on ISO/IEC 27037:2012***

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Abstract

Cybercrime has reached unprecedented proportions nowadays. In order to assist digital forensics specialists, many digital forensics tools have been designed from open source programs or business software, which are based on law, policy and practice. Cybercrime examiners often encounter a dilemma in choosing proper tools on the workflow of identifying, collecting, acquiring and preserving digital evidences. This study develops a novel process framework to examine some popular free tools, and proposes a standard evidential suite, which can be performed on the following three periods: preclusion, incident and aftermath. The nature of this framework suggests substantial benefits from using ISO/IEC 27037:2012 approach as a critical reference for digital forensics process. To ensure the quality of evidence collection, this framework may help to clarify the issue at hand, retain most of the useful information, and provide details of how this novel approach links evidence to a verifiable reconstruction of events at the crime scene. This framework allows for a stronger presentation of evidence in a cybercrime case.

Keywords: Criminal Justice Policy, ISO/IEC 27037, Cybercrime, Digital Forensics

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1. Introduction

Many banks, institutions, corporations, or businesses often employ data networks to process digital transactions and store any other relevant data. The internet was created to serve the communication needs of a well-defined community. Internet is continuously evolving as the world continues to become more connected every day. However, there is a much wider and varied community of users and services with conflicting interests. Data networks have become the target of frequent attacks to steal electronic files, and lead to loss of credit card information, or other purchasing sensitive information (Vacca, 2014). Cybercrime has impacted our lives (Raghavan, 2014). This unauthorized access of computer system can be internal users or external offenders, a person who would attempt to break into network servers that they have no permission to access. Cybercrime has reached unprecedented proportions nowadays.

When there are some suspicious activities of alert detection on a running system, the system administrator in inner organization should find some human artifacts. If there is something abnormal, that is about time to consider whether the organization should prosecute the offender. When there is an individual complaint or alert detection on abnormal activities, an incident report is necessary to formulate an investigation plan, determine the worth assessment of coordinated resources, and obtain an authorization of search warrant. A security breach is the violation of computer security policies in a system. Responding to a security breach is challenging to keep up with new technologies. The auditing log is an alert to systems administrators, who may or may not choose to pursue further investigation (Vacca, 2014). This growing need of cybercrime investigation and digital forensics has sparked heated debates about tools, terminology, definitions, standards, and other aspects. It should come as no surprise that this study reflects the issue of 'accessing the original data' in the terminology debate. The need of accessing the original data is considered a necessity by internal system administrators and incident response specialists (ISO, 2012). This study presents an approach to implement digital forensics tools and discusses some related issues.

In Section 2, the following literature reviews are discussed: ISO/IEC 27037 Guidelines for Digital Evidence and ACPO Good Practice Guide for Digital Evidence. Section 3 develops a novel process framework on four processes: Identification, Collection, Acquisition and Preservation. The discussions on personnel competency in digital forensics process are presented in Section 4. The conclusion is drawn in Section 5.

2. Review

Cybercrime examiners often encounter a dilemma in choosing proper tools on the workflow of identifying, collecting, acquiring and preserving digital evidences. Agencies used to recommend that investigators just pull the plug on live computers and take everything with them. As cybercrime became more prevalent, data examining operations became flooded. When computers are turned on at a location, forensic technicians frequently perform a live analysis about the software and network before shutting down equipment (Stephenson, 2014). The dispute of live analysis on the original evidence can be settled and based on ISO/IEC 27037: 2012. The follow-

up research will implement a suitable forensic toolkit in a live analysis for internal system administrators or incident response specialists. To have a better understanding in a live analysis, the issues on digital forensics are reviewed below.

2.1 ISO/IEC 27307 Guidelines for Digital Evidence

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. ISO/IEC 27037 provides guidelines for specific activities in handling potential digital evidence; these processes are: identification, collection, acquisition and preservation of potential digital evidence. This standard ensures that responsible individuals manage potential digital evidence in practical ways that are acceptable worldwide, with the objective to facilitate investigation involving digital devices and digital evidence in a systematic and impartial manner while preserving its integrity and authenticity (ISO, 2012).

As the cybercrime increases in the modern society, the need for digital forensics becomes an integral part of our society, and brings the justice from increasing numbers of the cybercrime. Errors can be made when the examiner investigates cybercrime events. It is essential that digital examiners develop appropriate skills to get round these problems. In order to ensure that the evidence is admissible in court, examiners should take some rigorous procedures on some recommendations (ISO, 2012). There is also an urgent need to set up a standard in the evidence collection issues. Digital forensics is the science of recovering digital evidence from a digital source under forensically sound conditions (Casey, 2011). Forensics is heterogeneous and digital forensics is no exception to this. Digital forensics is a branch of forensic science that is used to encompassing the data investigation in digital devices.

2.2 ACPO Good Practice Guide for Digital Evidence

Every case is different. Forensics is intangible by nature. Investigating human misuse of computers creates some technical puzzles, especially when offenders attempt to conceal their activities on the internet (Casey, 2010). This good practice guide for digital evidence was produced by the ACPO (Association of Chief Police Officers) Crime Business Area and was originally approved by ACPO Cabinet in December 2007. The purpose of this document is to provide guidance not only to assist law enforcement but for all that assists in investigating cyber security incidents and crime. It is updated according to legislative and policy changes. It is also generally adopted by law enforcement agencies all over the world. The principles of digital evidence are listed below (ACPO, 2012).

- Principle 1: No action taken by law enforcement agencies, persons employed within those agencies or their agents should change data which may subsequently be relied upon in court.
- Principle 2: In circumstances where a person finds it necessary to access original data, that person must be competent to do so and be able to give evidence explaining the relevance and the implications of their actions.
- Principle 3: An audit trail or other record of all processes applied to digital evidence should be created and preserved. An independent third party should be able to examine those processes and achieve the same result.

- Principle 4: The person in charge of the investigation has overall responsibility for ensuring that the law and these principles are adhered to.

3. A Process Framework for Digital Forensics Tools

As the cybercrime increases nowadays, there is an urgent need to set up a standard, which is constructed by extending and unifying the existing approaches. There is a lack of standards in the digital forensics processes. In order to obtain the required evidences that are needed in the court for prosecution, several works have been carried out in the domain of digital forensics process. They can include proactive, active and reactive attitude (Roger & Achille, 2012). None of the proper investigation approaches have taken into consideration three perspectives despite they are linked together in the case management of cybercrime within an organization.

This study tries to provide an in-depth guide to digital forensics from the pioneers of the following processes (see Figure 1 and Table 1): Identification, Collection, Acquisition, and Preservation. There are multiple tools, both free and commercial, that can copy physical memory to a storage device in Window-based or Unix-based system. This section combines 75 free command-line digital forensics tools in a Window-based batch file as a live incident toolkit, which is further categorized into volatile data and non-volatile data (see Table 2-1, 2-2, 2-3, and Table 2-4).

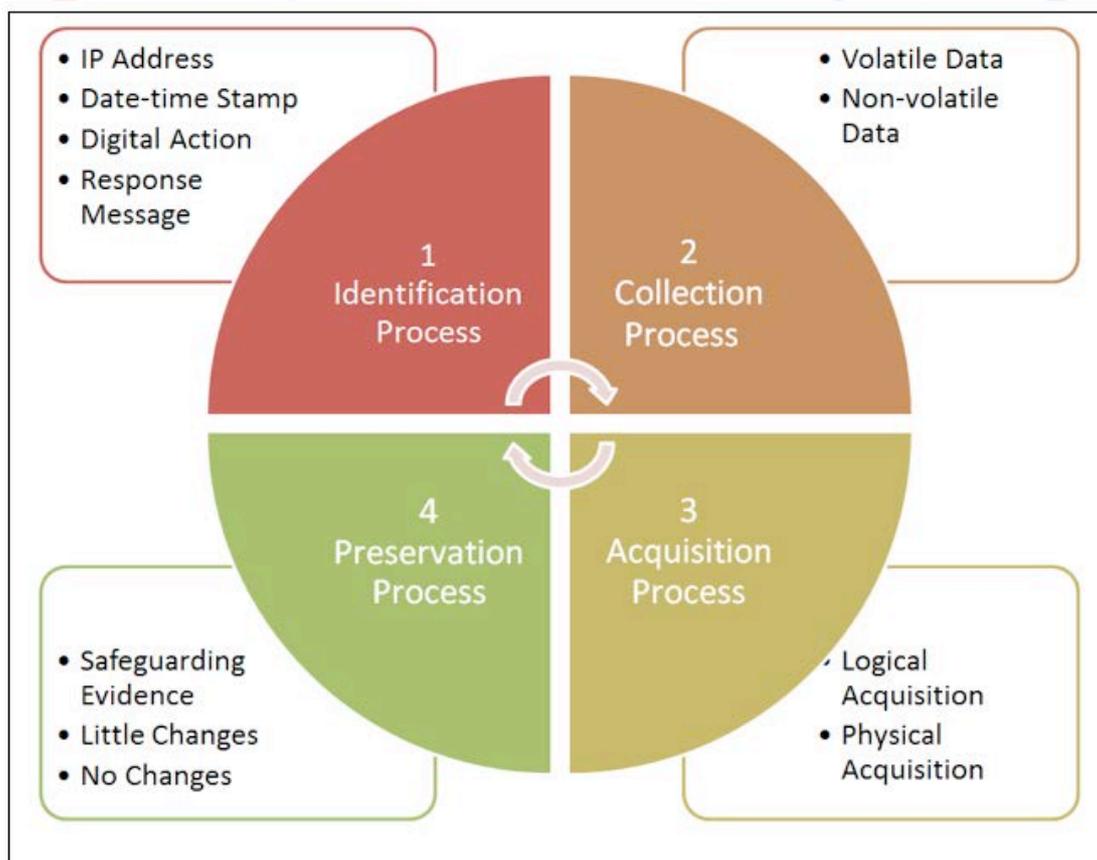


Figure 1: A Process Framework for Digital Forensics

Table 1: The Framework Concern for Digital Forensics

Concern Process	Period			Goal
	Prelusion	Incident	Aftermath	
Identification	Log Identification (IP Address and Date-time Stamp)	Incident Identification (Digital Action)	Evidence Identification (Response Message)	Identify Relevant Evidence to the Incident
Collection	Network Collection (Volatile Data)	Real-time Memory Collection (Volatile Data)	Host Image Collection (Non-volatile Data)	Gather Evidential Items to Prove Something
Acquisition	Prelusion Detection (Logical Acquisition)	Incident Investigation (Physical Acquisition)	Aftermath Forensics (Physical Acquisition)	Adopt Suitable Methods to Produce a Copy
Preservation	Safeguarding Evidence	Little Changes	No Changes	Maintain the Reasonable Integrity of the Evidence

To quickly process data, the computer needs to move the data from the slow hard drive into the faster random access memory (RAM). We examine volatile memory and its role in live forensics. Live forensics is the relatively new concept of gathering evidence while the computer is in operation, unlike dead forensics. There is a considerable amount of very important information in RAM that is part of the live data related to both the operating system and the running programs. Collecting live data is not the end of the process. Live forensics has the potential for gathering much more timely evidence than dead forensics (Stephenson, 2014).

These tables have illustrates the four-element observation of auditing log in digital forensics tools. Their outputs are also explored from the four elements of auditing logs: IP Address, Date-time Stamp, Digital Action, and Response Message. These four elements are the key to prosecute any offenders.

3.1 Identification Process: Identify Relevant Evidence to the Incident

The identification process should identify electronic storage devices, which may contain potential digital evidence relevant to the incident. The identification process involves the search for, recognition and documentation of potential digital artifacts (ISO, 2012). Information required to keep track of these states can grouped into log identification, incident identification, and evidence identification. Always keep in mind the four elements of auditing logs within any network or computer: IP Address, Date-time Stamp, Digital Action, and Response Message (Johnson, 2013). These four elements are composed of the facts behind the evidence, which can be further identified into the different logs audited.

3.1.1 IP Address

- Network access: Take care more on the accesses to the systems and networks.
- Unexplained accounts: Watch out the unexplained administration/user accounts and their IP addresses

3.1.2 Date-time Stamp

- Malicious files: Rename malicious executable files with normal file names, and modify their date-time stamps.
- IP address: The date-time stamp is often followed by the source and destination IP address.

3.1.3 Digital Action

- Alerts or alarms: During initial response efforts always notice the alerts or alarms of unusual actions in Firewall, Intrusion Detection System (IDS), or anti-virus products.
- Unusual actions: Suspicious entries of unusual actions in the system or network activities.

3.1.4 Response Message

- Successful login: Examine the file metadata of unfamiliar new files or filenames in system directories.
- Unsuccessful attempts: Keep eyes on (more than three) excessive unsuccessful login attempts.

3.2 Collection Process: Gather Evidential Items to Prove Something

The collection process gathers the physical items that contain potential digital evidence (ISO, 2012). Information required to keep track of these states can be grouped into network collection (between application programs and translation servers), real-time memory collection (volatile vs. non-volatile data), and host image collection. The network log is usually hidden, but it appears automatically if a serious problem occurs. Collection is the digital evidence handling process where devices that may contain potential digital evidence are removed from their original location to a laboratory or another controlled environment for later acquisition and analysis (ISO, 2012). The collection process includes documenting the whole approach, as well as the packaging of these devices prior to transportation. Mobile phones and PDAs should be secured and prevented from receiving or transmitting data once they are identified and collected as evidence (Johnson, 2013).

3.2.1 Volatile Data

The volatility of the data should be identified to ensure the correct order of the collection and acquisition processes to obtain the best evidence. How to collect digital evidence at the incident scene is a topic constantly under debate, and no single right answer exists. Some first responders might immediately access the original data (i.e. volatile/non-volatile data collection), shut down the computer (i.e., a clean shutdown), literally pull the plug (i.e., a dirty shutdown), disconnect the computer from the network, or do nothing at all (Malin, Casey & Aquilina, 2008). However, some

crucial information is still lost no matter what kinds of actions examiners may take.

(1) System Details

The critical system details of volatile data can illustrate how the system was compromised and how the evidence was recorded. Examples include date-time stamps, network status, opening port, and running process. The system details of volatile data in live analysis are illustrated to match the four elements of auditing logs in Table 2-1.

Table 2-1: System Details of Volatile Data in Live Analysis

Type	Sub-type	No	Tool's Command	IP Address	Date-time Stamp	Digital Action	Response Message	
1-1. System Details	1-1-1. Date-time Stamps	1	date /t		V			
		2	time /t		V			
	1-1-2. Network Status	3	tcpvcon	V		V	V	
		4	netstat -an -p tcp	V		V	V	
		5	netstat -an	V		V	V	
		6	netstat -s				V	
		7	net view	V				
		8	net session	V		V		
		9	net use	V		V	V	
		10	NetResView /stext	V			V	
		11	psfile			V		
		12	net share				V	
		13	net file			V		
		14	OpenedFilesView /stext			V	V	
		1-1-3. Opening Port	15	fport -p			V	V
			16	getport			V	V
	17		eports /stext	V		V	V	
	1-1-4. Running Process	18	Pslist			V		
		19	Psservice config			V		
		20	Handle			V	V	
		21	listdlls				V	
		22	psgetsid				V	
		23	pulist			V		

(2) Ephemeral Information

The ephemeral information of volatile data can demonstrate the insight of the infection. Examples include login user, auto run and table information. The ephemeral information of volatile data in live analysis is illustrated to match the four elements of auditing logs in Table 2-2.

Table 2-2: Ephemeral Information of Volatile Data in Live Analysis

Type	Sub-type	No	Tool's Command	IP Address	Date-time Stamp	Digital Action	Response Message
1-2. Ephemeral Information	1-2-1. Login User	24	Whoami				V
		25	net accounts				V
		26	userdump				V
		27	net user				V
		28	net localgroup				V
		29	psloggedon			V	V
		30	joa				V
	1-2-2. Autorun	31	UserProfilesView /stext			V	V
		32	Autorunsc				V
		33	net start				V
		34	WhatInStartup /stext			V	V
	1-2-3. Table Information	35	route print -4	V			V
		36	route print -6	V			V
37		arp -a	V			V	

3.2.2 Non-volatile Data

Non-volatile data means the data is storage in electrically addressed systems (ex: read-only memory) and mechanically addressed systems (ex: hard disks, optical disc, magnetic tape, holographic memory, and such). Electrically addressed systems are expensive, but fast; whereas mechanically addressed systems are cheap, but are slow.

(1) Host Settings

The host settings of non-volatile data can reveal the status and settings of the examined system. Examples include IP configuration, system configuration and system files. The host settings of non-volatile data in live analysis are illustrated to match the four elements of auditing logs in Table 2-3.

Table 2-3: Host Settings of Non-volatile Data in Live Analysis

Type	Sub-type	No	Tool's Command	IP Address	Date-time Stamp	Digital Action	Response Message
2-1. Host Setting	2-1-1. IP Configuration	38	hostname				V
		39	ipconfig/all	V		V	V
	2-2-2. System Configuration	40	systeminfo	V	V		V
		41	net config				V
		42	psinfo		V		V
		43	awatch /stext	V		V	V
	2-2-3. System Files	44	myuninst /stext				V
		45	dir /t:c /s %windir%				V
		46	dir /t:c /s "C:\Program Files (x86)\"				V
		47	dir /t:c /s "C:\Program Files\"				V

(2) Auditing Logs

The auditing logs of non-volatile data can support the understanding of the infection. Examples include used log, cache view and stored password. The auditing logs of volatile data in live analysis are illustrated in Table 2-2.

Table 2-4: Auditing Logs of Non-volatile Data in Live Analysis

Type	Sub-type	No	Tool's Command	IP Address	Date-time Stamp	Digital Action	Response Message
2-2. Auditing Logs	2-3-1. Used Log	48	recentfilesview /stext		V		V
		49	usbdeview /stext		V		V
		50	auditpol				V
		51	Psloglist		V		V
		52	faview /stext	V	V		V
		53	schtasks /Query		V	V	V
		54	SkypeLogView /stext		V	V	V
		55	mzcv /stext	V	V	V	V
		56	Mozillahistoryview /stext	V	V	V	V
		57	MyLastSearch /stext		V	V	V
	58	browsinghistoryview /stext	V	V	V	V	
	59	iehv /stext	V	V	V	V	
	2-3-2. Cache View	60	insideClipboard /stext				V
		61	chromecacheview /stext	V	V	V	V
		62	Mozillacacheview /stext	V	V	V	V
		63	IECacheView /stext	V	V	V	V
	2-3-3. Stored Password	64	OperaCacheView /stext	V	V	V	V
		65	dialupass /stext	V			V
		66	chromepass /stext	V	V		V
		67	mailpv /stext	V			V
		68	iepv /stext	V			V
		69	mypass /stext				V
		70	netpass /stext		V		V
71		pspv /stext				V	
72		PstPassword /stext		V		V	
73		PwDump7				V	

	74	VNCPassView /stext				V
	75	WirelessKeyView /stext		V		V

3.3 Acquisition Process: Adopt Suitable Methods to Produce a Copy

The acquisition process creates a copy of data within a defined set (ISO, 2012). Cloning is the preferred method of data acquisition. The acquisition process involves creating a digital evidence copy (e.g. complete hard disk, partition, selected files) within a defined set, and minimizing the damage to the potential digital evidence (ISO, 2012). The examiner should adopt a reliable acquisition method based on the suitable situation, cost and time, and document the decision for using a particular method or tool appropriately. Information required to keep track of these states can grouped into logical acquisition and physical acquisition.

3.3.1 Logical Acquisition

During logical acquisition, active files and non-file-based allocated space on the digital storage media may be copied; deleted files and unallocated space may not be copied, depending on the method used (ISO, 2012).

3.3.2 Physical Acquisition

There may be instances in which it is not feasible or permissible to create a physical acquisition of an evidence source, such as when the source is too large or the time is limited.

3.4 Preservation Process: Maintain the Reasonable Integrity of the Evidence

The preservation process maintains and safeguards the integrity and/or original condition of the potential digital evidence (ISO, 2012). It should be initiated and maintained throughout the digital evidence handling processes, starting from the identification of the digital devices that contain potential digital evidence. Information required to keep track of these states can grouped into safeguarding evidence, little changes and no changes.

3.4.1 Safeguarding Evidence

In order to facilitate a useful investigation with minimal interruption of inner organization activities, a fast and methodical intervention must be committed to safeguard potential digital evidence and digital devices (Roger & Achille, 2012).

3.4.2 Little Changes

Mostly open source tools acquire network connections, execute commands in memory, and make other alternations on the affected machine. It may cause alteration in volatile data. Modification of memory content is unavoidable while examiners perform live forensic analysis to collect evidence. The rationale actions should be documented if unavoidable changes were made.

3.4.3 No Changes

The preservation process involves the safeguarding of potential digital evidence and digital devices that may contain potential digital evidence from tampering or spoliation. It is better to be no spoliation to the data itself or any metadata associated with it.

4. Personnel Competency in Digital Forensics Process

As ICT devices continue to update, people must adopt new principles, methods or tools to keep in good status of handling cybercrime issues. This section describes an adjustment approach composed of two concepts in digital forensics process: core capability and dynamic capability. The details of core capability and dynamic capability are described as follows (see Figure 2).

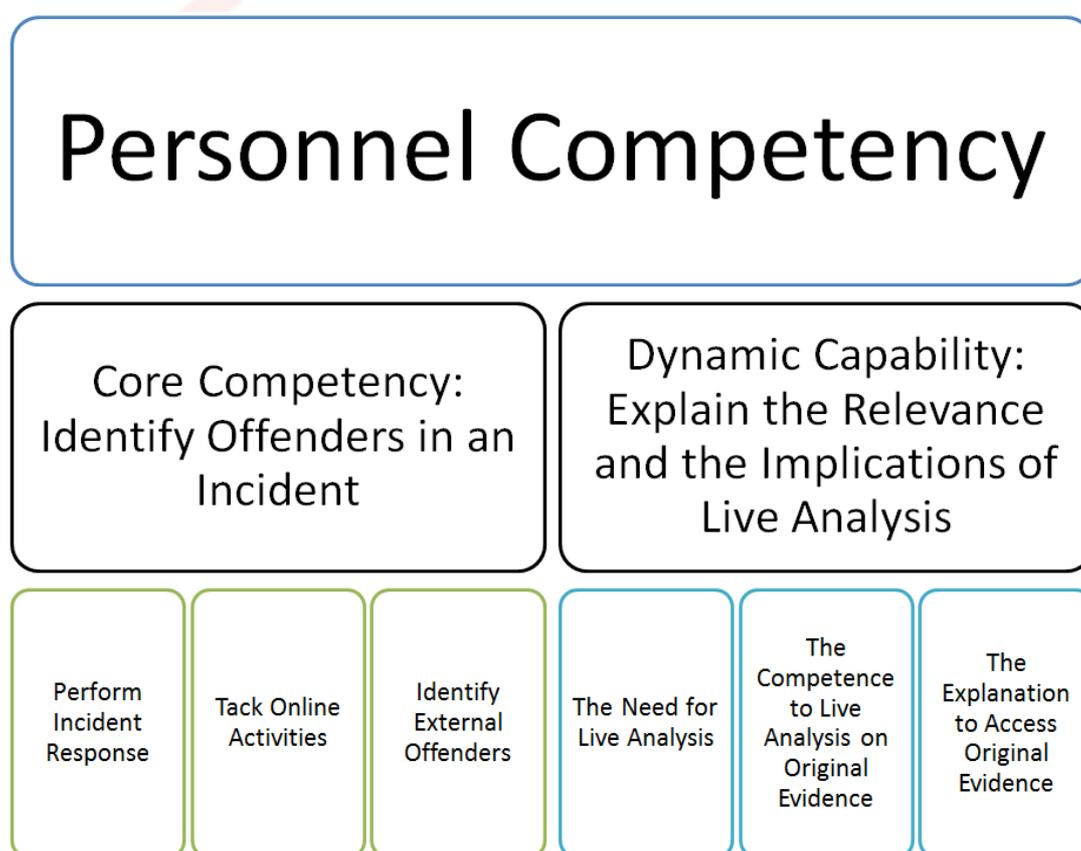


Figure 2: Personnel Competency in Digital Forensics Process

4.1 Core Competency: Identify Offenders in an Incident

It is not easy for criminal investigators to jump to conclusions. The gathering information of IP address, date-time stamp, digital action and response message is just a starting point for the investigation. Digital Action and Response Message are the only way to make sure what really happened. Additional clues must be identified and analyzed by technical experts and forensic investigators. There is no agreement in performing different tasks in the associated achievement of investigation goal. Core competency is essentially what a cyber-investigator does well that distinguishes it from other investigators. The concept of core competency includes the concept of

competitive advantage and the key ability that an agency has acquired (Prahalad & Hamel, 1990).

4.1.1 Perform Incident Response

The tools, methods, and disciplines used to perform incident response vary day by day. The incident response requires the legal disciplines and public relations to effectively handling an incident (Luttgens & Pepe, 2014). Reconstructing an event is a necessary process in forensics investigations. Because examiners have limited resources, it does not make sense to collect large volumes of data that may never have enough time to examine later. This study shows several ways to leverage strings to prove or disprove that certain actions took place on a computer system (Ligh, Case, Levy & Walters, 2014).

4.1.2 Tack Online Activities

The focus of many forensic investigations is tracking a suspect's activities based on artifacts created by web browsers, address books, email and chat clients, word processors, social media applications, and calendars (Ligh, Case, Levy & Walters, 2014). Examiners have to accomplish their activities faster than ever. In order to assist digital forensics specialists, many digital forensics tools have been designed from open source programs or business software, which are based on law, policy and practice.

4.1.3 Identify External Offenders

Since the internet is widely used for daily routine activities by all kinds of businesses, law enforcement agents have enacted stiffer penalties for hackers. We need to identify the threats posed to the network from external offenders when those from internal users are easily traceable (Vacca, 2014).

4.2 Dynamic Capability: Explain the Relevance and the Implications of Live Analysis

Dynamic capability refers to the capacity of an organization to purposefully create, extend, or modify its resource base (Prahalad & Hamel, 1990). Dynamic capability is the agency's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Dynamic capability is distinct from core competency or operational capability, which pertain to the current operations of a law enforcement agency. Devices containing potential digital evidence may be in one of two states: when the system is powered on or when the system is powered off (ISO, 2012). Digital forensics is separated by dead analysis and live analysis, which identify that the system is boot or not at that time (Yadav, 2011). If the system is boot then it called live analysis. Dead analysis may lose data or information due to shutdown of digital device or removal the plug. In fact, courts are starting to compel preservation of volatile computer data in some cases, which requires digital examiners to preserve data on live systems (Casey, 2011).

4.2.1 The Need for Live Analysis

When a computer is involved in an incident, there are several choices to proceed during an investigation. Sometimes system administrators cannot afford to remove the computer from the network. A traditional forensic duplication cannot be acquired because a proper backup server cannot be swapped in its place. The data currently in memory may be the only evidence of the incident. A live response process contains information such as the current network connections, running processes, and open files. The live incident response process has become a technique for collecting and analyzing forensically sound evidence. Once the memory data has been collected, there are a variety of techniques to extract evidential data from it. The above tools provide the ability to extract meaningful information from the memory data, such as running processes, dump user passwords, dump contents of open files, and many other items (Stephenson, 2014).

4.2.2 The Competence to Live Analysis on Original Evidence

The process of live analysis becomes an important issue in a security breach. This is applicable especially in a live response scenario of malware investigation. Different approaches and tools are required, depending on the state of the device (ISO, 2012). When the volatile evidence is necessary, there are countless tools that can be part of live collection. The choice of which tools to include must be based on the each case (Stephenson, 2014). Since each case is different, it is almost impossible to create a manual which can cover all possibilities. The cybercrime investigation is contingent upon various situational factors, including the capabilities and behaviors of offenders, and the investigator's preferred style. There is no best way of investigation. An investigation style that is effective in some situations may not be successful in others. Investigators who are very effective at one place and time may become unsuccessful either when they have transplanted to another situation or when the factors around them change.

4.2.3 The Explanation to Access Original Evidence

It is no longer possible to ignore the volatile data of computer memory during a subsequent analysis. With the rise of challenges in the digital forensic investigation field, some interesting problems are looming on the horizon for both victims and examiners. It is no longer sufficient to collect the non-volatile data of digital evidence when examiners pull the plug and take the computer back to the lab. In circumstances where a person finds it necessary to access the original data held on a computer or on storage media, that person must be competent to do so and be able to explain the relevance and the implications of their actions (ACPO, 2012).

5. Conclusion

Security breaches become a part of life nowadays. When cyber threats originate from malicious offenders or trusted insiders, the need to quickly assess and appropriately respond is essential. To uncover the truth, Cyber-crime investigations should be founded on the latest information technology. Often the criminals' activities have left behind a communication trail on the networks used to connect to the crime scene. It is possible to extract clues from these locations as well. However, proving the

offender has caused the damage to the system is a tough job. This framework allows for a stronger presentation of evidence in a cybercrime case. It is crucial to use some toolkits and perform a forensic analysis of the compromised computer. Examiners should propose a handful of realistic questions, explore some approaches to execute it, and uncover potential information to answer them. To ensure the quality of evidence collection, this framework may help to clarify the issue at hand, retain most of the useful information, and provide details of how this novel approach links evidence to a verifiable reconstruction of events at the crime scene.

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Human Capital and Technical Efficiency: An Analysis of the Stochastic Production Frontier and Inefficiency Effects Model for Thai Manufacturing SMEs

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Abstract

This study employs the 2006 manufacturing sector survey collected by the Foundation of Thailand Productivity Institute (FTPI) in collaboration with the World Bank to empirically examine the impact of human capital's characteristics such as education, tenure, and age upon the technical efficiency of Thai manufacturing SMEs including Thai manufacturers in the aggregate. The one-stage procedure introduced by Battese and Coelli (1995) is applied in this study. Focusing on Thai manufacturing SMEs, the study's results show that workers' education and in-house and outside training play a key role in enhancing SME technical efficiency. Older enterprises and unskilled workers also contribute positively to SME technical efficiency. In contrast, larger firms are likely to be significantly and negatively related to SME technical efficiency. Skilled workers' age and years of tenure are not significantly related to SME technical efficiency performance.

With respect to all Thai manufacturers, their workers' education and skilled workers' age are significantly and positively related to technical efficiency. In contrast, firm size, skilled workers' tenure, and the presence of unskilled workers are found to be significantly and negatively related to their technical efficiency. More importantly, Thai manufacturing SMEs as well as all Thai manufacturers greatly rely on labour input rather than capital input to increase their output. This result implies that over-reliance on labour results in a low-cost labour trap that exists among Thai manufacturing SMEs including all Thai manufacturers. The production of Thai manufacturing SMEs and Thai manufacturers exhibits constant returns to scale and decreasing returns to scale, respectively. They also face a moderate level of technical inefficiency. Empirically evidence-based policies and recommendations are also provided in this study.

Keywords: Thai Manufacturing SMEs, Stochastic Frontier Analysis, Technical Efficiency

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1. Introduction

Small and medium-sized enterprises (SMEs) play a key role in Thailand's social and economic development (Brimble et al., 2002). Their contribution to the economy has been significant in terms of business numbers, employment, and production. The contribution of SMEs to employment has gained importance due to the employment of more than 78.8 percent of total workers over the period 2007 to 2012 (see OSMEP (2007-2012)). Manufacturing SMEs alone contribute to the economy by employing about one-third of all workers. While the share of SMEs to total business numbers has remained stable, accounting for about 99.5 percent of total enterprises during 2007-2012, the proportion of manufacturing SMEs to total SMEs and to total enterprises, both at around 28.2 percent in 2007, has dropped to around 17.7 percent and 17.4 percent in 2012, respectively (see OSMEP (2007-2012)). Nevertheless, SMEs still play significant roles and functions in assisting large enterprises, particularly in the context of regional production networks, as they help link all important units of industry and fill gaps in industrial clusters that might not be completed by large enterprises alone (Mephokee, 2003; Regnier, 2000). They also supply goods, services, information, and knowledge for large enterprises, and play a pivotal role in the production process of export goods (Tapaneeyangkul, 2001).

One prominent problem is that Thai SMEs are not fully competitive. The competitiveness of Thai industry, particularly of SMEs, has not advanced to a higher production frontier, but instead has relied greatly on low-cost labour, especially low-cost foreign labour and natural resource (raw materials) advantages rather than technological capabilities or skilled labour. The World Bank (2008) points out that with intensifying global competition and higher commodity prices, Thailand confronts a serious challenge to sustain its growth and become a higher-income country while escaping the middle income trap¹.

According to Thailand's industrial master plan (2012-2031), Thai manufacturing enterprises enjoy a comparative advantage with cheap labour and foreign direct investment without enhanced productivity. They lack (i) new technology, (ii) product and process innovation, (iii) financial access, (iv) skilled labour, (v) raw materials, (vi) high value-added production, and (vii) managerial skills (Ministry of Industry, 2012). More importantly, Thailand's labour productivity growth rate has fallen considerably, from 5.9 percent to 2.1 percent between 2005 and 2010. Similarly, total factor productivity growth declined from 3.6 percent during 1975-1990 to 3.2 between 2005 and 2010 (APO, 2013). The lack of a large, skilled workforce can worsen Thailand's problem of insufficient human capital, which eventually will constrain production efficiency. At present, Thailand is in a difficult competitive position as it cannot continue to depend on cheap labour due to recent increases in the minimum wage; therefore, it must move up the technology hierarchy and improve the efficiency and productivity of its enterprises. Education and employee training, therefore, increasingly become important sources for the development of Thailand's productivity and efficiency, since the shortage of engineers and skilled technical workers can obstruct future productivity growth as critiqued in Liefner and Schiller (2008) and OECD (2013).

¹ Thailand had moved rapidly from a low-income country to a middle-income country from the 1970s to mid-1990s due to rapid growth in per capita income. However, in recent years its real GDP growth has slowed and has been lower than that of other developing countries in East Asia (World Bank Office-Thailand, 2008, p. 4).

To address these problems, this paper addresses the following research questions: How do Thai manufacturing SMEs, including Thai manufacturers in the aggregate, perform in terms of technical efficiency? Which of the following characteristics of human capital factors, such as workers' education, age, and tenure, can influence the technical efficiency performance of Thai manufacturing SMEs as well as all Thai manufacturers? How can the technical efficiency of Thai manufacturing SMEs, including Thai manufacturers in the aggregate, be enhanced?

Little research has been conducted, with the exception of, for example, Charoenrat et al. (2013), on the competitiveness and efficiency of Thai SMEs. No empirical study, however, has examined the importance of human capital on efficiency, such as i) skilled workers' years of education as well as education levels of the workforce, ii) skilled workers' years of tenure, iii) skilled workers' age, and iv) unskilled foreign workers, as well as v) in-house and outside training for workers. This study's key objectives are to rectify this gap. To establish a basic understanding relating to the sources of firm performance, a review of the empirical literature will be discussed in Section 2.

2. A review of literature

This section provides a review of the literature regarding the effects of employees' characteristics and firm-specific factors on firm performance.

2.1 Workers' characteristics and firm performance

Human capital has been known as an important factor in a firm's effectiveness, which can be acquired through i) formal education, ii) general vocational training, and iii) knowledge and skilled specific to the firm through accumulating experience in the focal firm and firm-specific training (Yanadori and Kato, 2007). A number of empirical studies have examined the association between firm performance and employees' characteristics as follows:

2.1.1 Workers' education

Education is often used as a proxy for human capital in the literature, such as in Grund and Westergard-Nielsen (2005); Batra and Tan (2003); Batra and Tan (2003) use cross-sectional surveys for six economies (Columbia, Guatemala, Indonesia, Malaysia, Mexico, and Taiwan) to investigate the factors affecting SME efficiency. Their results reveal that higher educational levels among SME workers is associated with higher efficiency across all six economies. Employing panel data of 400 Greek manufacturing firms in 2004, 2006, and 2008, Magoutas et al. (2012) find that human capital, measured by the number of employees with university degrees as a ratio to total employment, has a significant and positive impact on the growth rates of firms. In contrast, Grund and Westergaard-Nielsen (2005) find a negative and significant association between workers' education and firm performance in Danish enterprises.

2.1.2 Workers' tenure

Another workforce characteristic is the tenure of employees, which can contribute significantly to firm performance. At an organization, a firm's average employee tenure captures the stock of firm-specific human capital its workers have obtained. As a result, longer average employee tenure will result in greater firm-specific human capital, leading to better organizational effectiveness (Yanadori and Kato, 2007). A number of empirical studies have investigated the association between employee tenure and firm performance. For instance, Yanadori and Kato (2007) employ data from Japanese firms and find that average employee tenure is significantly and positively related to labour productivity. In contrast, Grund and Westergaard-Nielsen (2005) find mixed results regarding the effects of mean employee tenure on firm performance as measured by value added per employee in Danish firms.

2.1.3 Workers' age

Workforce age plays an important role in determining firm performance. A number of empirical studies have examined the relationship between workers' age and firm performance (Lallemand and Ryck (2009); Grund and Westergaard-Nielsen (2005)). For example, Lallemand and Ryck (2009) use the Structure of Earnings Survey (SES) and Structure of Business Survey from 1995 to 2003 to investigate the workforce age structure on the productivity of large Belgian firms. They find that younger employees are significantly more productive than older employees, and age-structure effects on productivity have substantially decreased over time. Grund and Westergaard-Nielsen (2005) employ unbalanced panel data from the Integrated Database for Labour Market Research (IDA) and Statistics Denmark for Center for Corporate Performance during the period 1992-1997. They reveal that both mean age and dispersion of age in firms are inversely u-shaped related to firm performance, implying that younger workers are more likely than older workers to contribute positively to firm performance, but after a certain threshold the workers' mean age has a significant and negative effect on firm performance as measured by value added per employee.

2.1.4 Employee training

Employee training is a human resource management practice that can help firms enhance human capital, leading to performance improvement because employees' knowledge, skills, and abilities can be developed, and the motivation and commitment to their organization's tasks can be increased through employee training programs (Huang et al., 2012). The researchers employ data from Chinese manufacturing firms in 2010 and 2011 and find that employee training may have a positive direct effect on a firm's performance in sustainable development. Nikandrou et al. (2008) use the 1999 Cranet survey to investigate the association between training and development and performance of 5,189 organizations in 14 European countries. The results reveal that employee training and development is very important to European organizations due to the demand for new and increasingly higher skill levels, increased international competition, and rapid changes in technology and organizational structures. Batra and Tan (2003) also find that skilled worker training is significantly related positively to the technical efficiency of SMEs in Columbia, Guatemala, Indonesia, Malaysia, and Mexico.

2.2 Firm age

Firm age can be related significantly to firm efficiency, since older enterprises learn from past mistakes through the learning-by-doing process and improve managerial skills from accumulated experience (Charoenrat et al., 2013). A number of empirical studies have also examined the association between a firm's age and its performance as measured by efficiency (Charoenrat et al. (2013); Tran et al. (2008); Le and Harvie (2010); Burki and Terrell (1998)). Charoenrat et al. (2013) reveal mixed findings between firm age and technical efficiency in Thai manufacturing SMEs. Similarly, Tran et al. (2003) find mixed results between firm age and technical efficiency in the case of non-state manufacturing industries in Viet Nam. Burki and Terrell (1998) employ two-stage Data Envelopment Analysis to examine factors that impact the efficiency of 153 Pakistani small manufacturing firms. They suggest that firm age has a significant and positive effect on efficiency. However, Tran et al. (2008) utilize firm-level data in Vietnam in 1996 and 2001 and find that firm age has an insignificant and negative effect on firm technical efficiency, suggesting no evidence of a "learning by doing" experience. Similarly, Le and Harvie (2010) employ large surveys of domestic non-state manufacturing SMEs in 2002, 2005, and 2007 to investigate the technical efficiency performance in Vietnam, and find that older manufacturing SMEs are likely to be technically inefficient².

2.3 Firm size

Firm size can contribute significantly to efficiency due to the economies of scale and scope of larger enterprises (Charoenrat et al., 2013). Several empirical studies have explored the effects of firm size and age on efficiency (Charoenrat et al. (2013); Le and Harvie (2010); Kim (2003); Alvarez and Crespi (2003)). With respect to the effect of firm size on technical efficiency, empirical results are still ambiguous depending on country and sector analysed. For instance, Charoenrat et al. (2013) employ cross-sectional data from the 2007 manufacturing census to examine the significant factors of SME technical efficiency. They reveal that firm size is significantly and positively related to SME technical efficiency. Similarly, Kim (2003) finds that firm size has a significant and positive association with the technical efficiency of Korean manufacturing industries. Alvarez and Crespi (2003) suggest that larger enterprises are more efficient than smaller enterprises among 1,091 Chilean manufacturing small enterprises since small enterprises are likely to face the following challenges: (i) difficulty in accessing external loans for investments, (ii) lack of efficient resources (e.g., human capital), (iii) lack of economies of scale, and (iv) lack of formal contracts with customers and suppliers. An empirical study of Vietnamese SMEs by Le and Harvie (2010) suggest that larger Vietnamese manufacturing SMEs are likely to be technically inefficient compared with small ones. They also explain that small enterprises are more efficient due to flexibility in diversifying and adjusting their businesses and activities in a rapidly changing economy in transition.

² Due to the SMEs using old technology or their existence in an environment lacking competition and where state ownership dominates.

2.4 Foreign unskilled labour

Industrialization is likely to lead to an increase in demand for a country's foreign labour; therefore, foreign labour tends to affect the domestic labour market and productivity. A number of empirical studies have examined the correlation between foreign workers and productivity, such as Noor et al. (2011), Llull (2008) and Peri (2009). Llull (2008) also suggests that immigration has a significant and negative impact on productivity, but a positive effect on labour participation and employment in OECD countries. Peri (2009) reveals no evidence across U.S. states that migrants crowd out domestic employment, but they help promote efficient task specialization that increases the total factor of production. Noor et al. (2011) points out that foreign labour is positively and significantly associated with labour productivity in the Malaysian manufacturing sector.

All of these sources, which may be related to firm efficiency, will be empirically examined with an analysis of the stochastic frontier production and inefficiency effects model in this study, as discussed in the following section.

3. Methodology

A firm's performance can be measured by several criteria such as financial performance, efficiency, productivity, growth, employment, exports, and market share. As its measurement gauge, however, this paper employs technical efficiency, which will be discussed as follows:

3.1 Concept of technical efficiency

Technical efficiency is defined as the capacity and ability of a firm to produce at the maximum possible output from a given bundle of inputs and technology. For instance, a firm can operate at its optimal scale (technically efficient point) if its operation is on the production frontier, which can be at points A and B as shown in Figure 1. Nevertheless, this technically efficient concept differs from allocative efficiency, which refers to a firm's ability and willingness to equate its marginal revenue with marginal cost (Kalirajan and Shand, 1999). More importantly, productivity and efficiency, both frequently mentioned in the literature, differ conceptually. "Productivity" basically refers to "total factor productivity", which is defined as the ratio of total outputs over total inputs (Coelli et al., 2005). A technically inefficient firm's operation is beneath the production frontier at point C, since it can obtain the same level of output at point B without requiring greater input (Figure 1) (Coelli et al., 2005). Technical efficiency can be predicted by employing the stochastic frontier production, which was independently proposed by Aigner, Lovell and Schmidt (1977) and Meeusen and van den Broeck (1977) within a cross-sectional context. This methodology will be discussed in more detail in Section 3.2.

3.2 The stochastic frontier production and Inefficiency Effects Model

This study applies the one-stage process suggested by Battese and Coelli (1995). They presented a model in which the stochastic frontier production and inefficiency effects model are estimated simultaneously in the context of panel data. Inefficiency effects are stochastic and the model allows for the estimation of both technical change in the

stochastic frontier and time-varying technical inefficiencies. Their model can be expressed in general form as follows:

$$Y_{it} = X_{it}\beta + V_{it} - U_{it} \quad , i=1, \dots, N, t=1, \dots, T, \quad (1)$$

where

- Y_{it} is the production (or the logarithm of the production) of the i^{th} firm in the t^{th} time period;
- X_{it} is a $k \times 1$ vector of (transformations of the) input quantities of the i^{th} firm in the t^{th} time period;
- β is a vector of unknown parameters;
- V_{it} are random variables assumed to be identically and independently distributed (iid) $N(0, \sigma_v^2)$ and independent of the U_{it}
- U_{it} are non-negative random variables that are assumed to account for technical inefficiency in production and to be independently distributed as truncations at zero of the $N(Z_{it}\delta, \sigma_u^2)$ distribution; where the inefficiency effects, U_{it} in the stochastic frontier production can be specified as follows:

$$U_{it} = Z_{it}\delta + W_{it} \quad (2)$$

- where z_{it} is a $p \times 1$ vector of variables that may affect a firm's inefficiency; and
- δ is an $1 \times p$ vector of parameters to be estimated; and
- W_{it} is defined by the truncation of the normal distribution with zero mean and variance, σ^2 , such that the point of truncation is $z_{it}\delta$ (e.g., $w_{it} \geq -z_{it}\delta$).

This model uses the parameterisation from Battese and Corra (1977), replacing σ_v^2 and σ_u^2 with $\sigma^2 = \sigma_v^2 + \sigma_u^2$ and $\gamma = \sigma_u^2 / \sigma^2$. In the model, the technical efficiencies of production can be predicted using the conditional expectations of $\exp(-u_{it})$, given the composed error term of the stochastic frontier. Hence, given the above assumptions, the technical efficiency of the i^{th} firm can be defined as follows:

$$TE_{it} = \exp(-u_{it}) = \exp(-Z_{it}\delta - W_{it}) \quad (3)$$

The value of technical efficiency (TE_i) ranges between zero and one. Y_i achieves its maximum feasible output if and only if $TE_i = 1$. $TE_i < 1$ illustrates a measure of the shortfall of observed output from maximum feasible output. The original specification as indicated in equation (1) can also be represented as the log-linear Cobb-Douglas stochastic frontier model version in the context of cross-sectional data, which consists of three main components: (i) a deterministic component, (ii) a noise effect, and (iii) an inefficiency effect (Coelli et al., 2005, p. 243).

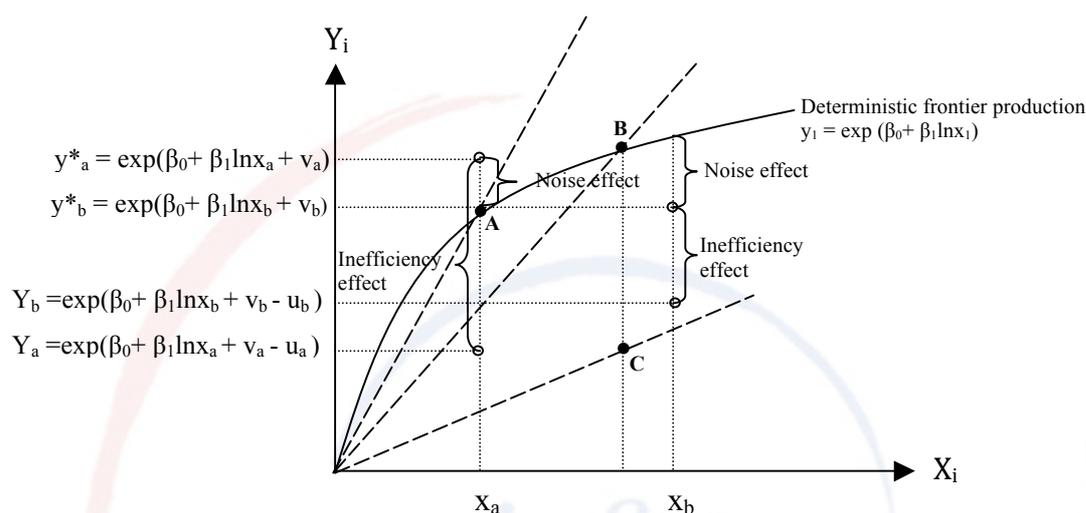
$$\ln y_i = \beta_0 + \beta_1 \ln x_i + v_i - u_i \quad (4)$$

$$y_i = \exp(\beta_0 + \beta_1 \ln x_i + v_i - u_i)$$

$$y_i = \underbrace{\exp(\beta_0 + \beta_1 \ln x_i)}_{\text{Deterministic Component}} \times \underbrace{\exp(v_i)}_{\text{Noise}} \times \underbrace{\exp(-u_i)}_{\text{Inefficiency}}$$

Stochastic frontier analysis can be explained graphically, as shown in Figure 1.

Figure 1: The stochastic frontier production



Source: Adapted from Coelli et al. (2005, p. 244)

From Figure 1, it is assumed that there are two firms: firm A uses input x_a to produce production y_a , while firm B uses input x_b to produce production y_b . If the inefficiency effects of firms A and B are zero ($u_a = 0$ and $u_b = 0$), their (unobserved) outputs would be at y^*_a and y^*_b , respectively. The firms differ in that firm A's (unobserved) frontier production lies above the deterministic frontier, since its "noise effect" (v_a) is positive, while firm B's (unobserved) frontier production lies within the deterministic frontier due to its negative "noise effect" (v_b). Therefore, unobserved frontier productions are likely to lie either above or below the deterministic frontier. However, the observed frontier productions tend to lie below the deterministic frontier³.

As a result, the Battese and Coelli (1995) model can be applied in the context of cross-sectional data for this study. More specifically, this study uses the method of maximum likelihood (ML), which is preferred to other estimators (e.g., corrected ordinary least squares (COLS) and ordinary least squares (OLS⁴)) since ML estimators have asymptotic properties that are desirable for large samples (Coelli et al., 2005, p. 245). Therefore, the Battese and Coelli (2005) model can be estimated here with a set of identified variables to be discussed in the following section:

³ For example, Firm A lies above the deterministic frontier since the "noise effect" is positive and greater than the inefficiency effect.

⁴ Coelli et al. (2005) also argue that the slope estimators obtained from ordinary least squares (OLS) are consistent, but the intercept estimator is biased downwards. Technical efficiency, therefore, cannot be predicted by using OLS.

4. Empirical model

Applying the model of Battese and Coelli (1995), the Cobb-Douglas functional form employed in this paper can be written as:

$$\ln(Y_i) = \beta_0 + \beta_1 \ln(K_i) + \beta_2 \ln(L_i) + V_i - U_i \quad (5)$$

Where:

Y_i = Value added of the i^{th} firm

K_i = Total fixed assets of the i^{th} firm

L_i = Total wages and salaries of the i^{th} firm

V_i = Random error ($V_i \sim N(0, \sigma_v^2)$)

U_i = Non-negative random variable (or technical inefficiency) ($U_i \sim N(Z_i \delta, \sigma_u^2)$)

The Inefficiency Effects Model can be written as follows:

$$U_i = \sigma_0 + \sigma_1 \text{Skilled_edu}_i + \sigma_2 \text{Skilled_tenure}_i + \sigma_3 \text{Skilled_age}_i + \sigma_4 \text{Workforce_edu}_i + \sigma_5 \text{Employees_training}_i + \sigma_6 \text{Firm_size}_i + \sigma_7 \text{Firm_age}_i + \sigma_8 \text{Unskilled_foreign}_i + W_i \quad (6)$$

Where:

Skilled_edu_i = Average number of years of skilled production workers' education in firm i ;

Skilled_tenure_i = Average number of years of skilled production workers' tenure;

Skilled_age_i = Average age of skilled production workers in firm i ;

Workforce_edu_i = The percentage of workforce in firm i with at least university-level education;

$\text{Employees_training}_i$ = Dummy for in-house and formal outside training;

$\text{Employees_training}_i = 1$ if firm i provides in-house and formal outside training for employees.

$= 0$, otherwise

Firm_size_i = Firm size of firm i , represented by total number of workers;

Firm_age_i = Firm age of firm i ;

$\text{Unskilled_foreign}_i$ = The percentage of foreign unskilled workers of firm i ;

W_i = Random error ($W_i \sim N(0, \sigma_w^2)$)

5. Data source and data classification

This study utilizes the 2006 Enterprise Survey (Manufacturing Sector Survey) for Thailand collected by the Foundation of Thailand Productivity Institute (FTPI) in collaboration with the World Bank. This survey was conducted by interviewing business owners and top managers of 1,043 firms. According to a number of missing data in the survey as well as the negative values of value-added output, capital input, and labour input in the natural logarithm form of the stochastic production function, 121 firms are excluded from the sample. Finally, 922 firms are used to conduct this study's empirical analysis. For the classification of Thai manufacturing SMEs, an enterprise that either employs fewer than 50 workers or has fixed assets with a value not exceeding 50 million baht is considered to be a small enterprise. Furthermore, an enterprise that either employs between 51 and 200 workers or has fixed assets with a value between 51 and 200 million baht is defined as a medium-sized enterprise. With respect to these criteria, enterprises that have 200 or fewer workers are selected as SMEs for this study. As a result, 643 enterprises are defined as SMEs.

More importantly, the questionnaire administered to the CEOs, general managers, and business owners makes this survey more useful than the 2007 Thai Industrial Census conducted by the National Statistical Office of Thailand; that census does not provide, for example, personal data regarding human capital stock such as average number of years of workers' education, tenure, and age as well as the percentage of foreign unskilled workers. The use of the 2006 Enterprise Survey (Manufacturing Sector Survey) for Thailand with the analysis of stochastic production frontier and inefficiency effects model as explained in Sections 3 and 4 can provide the empirical results in Section 6.2. However, hypothesis tests of the stochastic frontier model and inefficiency effects are crucial to investigate the existence of inefficiency effects model and stochastic inefficiency effects that will be shown in the following section (Section 6.1).

6. Hypothesis tests and empirical results

6.1 Hypothesis tests of the stochastic frontier model and inefficiency effects model

With respect to Equations (5) and (6), two null hypothesis tests are required: (i) the absence of inefficiency effects and (ii) the absence of stochastic inefficiency effects (see Table 1). A likelihood-ratio test (LR test) is used to test these hypotheses as follows:

$$\lambda = -2 \{ \log[L(H_0)] - \log[L(H_1)] \} \quad (7)$$

where, $\log[L(H_0)]$ and $\log[L(H_1)]$ are obtained from the maximized values of the log-likelihood function under the null hypothesis (H_0) and the alternative hypothesis (H_1), respectively. The LR test statistic has an asymptotic chi-square distribution with parameters equal to the number of restricted parameters imposed under the null hypothesis.

From Table 1, the null hypothesis (i), which specifies that the inefficiency effects are excluded from the model ($H_0: \gamma = \delta_0 = \dots = \delta_8 = 0$), is strongly rejected at the one-percent level of significance, since the LR statistic test is greater than the critical value of approximately chi-square distribution at the one-percent level of significance. This result suggests that the model of inefficiency effects exists in Thai manufacturing SMEs as well as in all Thai manufacturing enterprises. Moreover, the estimates for the variance parameter γ in Tables 2 and 3 are 0.86690 and 0.90877, respectively, which is close to one and suggests that the inefficiency effects are likely to be highly significant in the analysis for the value of production inefficiency among Thai SMEs including all Thai manufacturing enterprises (see Battese and Coelli (1995)).

Table 1: Statistics for Hypothesis Tests of the Stochastic Frontier Model and Inefficiency Effects Model

	Thai manufacturing Enterprises	Thai manufacturing SMEs
Null Hypothesis (i) No technical inefficiency Effects ($H_0: \gamma = \delta_0 = \dots = \delta_8 = 0$)		
Critical Value	22.53*	22.53*
Decision	Reject	Reject
Null Hypothesis (ii) Non stochastic Inefficiency ($H_0: \gamma = 0$)		
LR Statistics	20.29	10.90
Critical Value	5.41*	5.41*
Decision	Reject	Reject

Note: All critical values of the test statistic in Hypotheses (i) and (ii) indicated by * are presented at the 1% level of significance, which contains a mixture of a chi-square distributions obtained from Table 1 of Kodde and Palm (1986).

The null hypothesis (ii) that the inefficiency effects are not stochastic ($\gamma = 0$) is strongly rejected for Thai manufacturing SMEs as well as for all Thai manufacturing enterprises. The rejection of this hypothesis implies that the model of inefficiency effects is not reduced to a traditional mean response function since the variance of the inefficiency effects is not zero (see Battese and Coelli, (1995)). In other words, all the explanatory variables in the inefficiency effects model are not included in the production function in this study, suggesting that the inefficiency effects model is applicable, and therefore the estimated parameters can be identified in the model of inefficiency effects.

6.2 Empirical results

According to Tables 2 and 3, the significant and negative results regarding the effects of employee education as represented by skilled workers' years of education and education levels of the workforce on firm technical inefficiency indicate that employee education plays an important role in enhancing the technical efficiency of Thai manufacturing SMEs including all Thai manufacturers. These results are also

consistent with a number of studies that were discussed in Section 2, such as Batra and Tan (2003) and Magoutas et al. (2012), implying that educated workers are more proficient at learning and responding to new information and technology. In addition, education is a significant discriminant of efficient and inefficient firms as suggested by Batra and Tan (2003).

Similarly, the significant and negative estimated coefficient of in-house and outside training for workers at Thai manufacturing SMEs indicates that in-house and outside training play a key role in enhancing technical efficiency, since it can help Thai SMEs develop their human capital, leading to the enhancement of SME performance as suggested by Huang et al. (2012). These results are consistent with the findings of Huang et al. (2012), Nikandrou et al. (2008), and Batra and Tan (2003). However, a significant result of in-house and outside employee training is not found in the case of all Thai manufacturers.

In addition, skilled workers' age is significantly and positively related to the technical efficiency of Thai manufacturing enterprises in the aggregate, suggesting that older employees may accumulate work experience, which helps increase firm efficiency. This result, however, differs from the results of other empirical studies such as Lallemand and Ryck (2009) and Grund and Westergaard-Nielsen (2005). This might be due to cultural differences in human resource management practices; for instance, seniority plays a predominant role in many Thai enterprises. An insignificant result of skilled workers' age is found among Thai manufacturing SMEs.

Skilled workers' tenure has a significant and negative effect on the technical efficiency of Thai manufacturers in the aggregate, but an insignificant finding is found among Thai SMEs. The significant and negative result implies that employee tenure does not capture the stock of firm-specific human capital its workers have obtained, and therefore does not lead to better organizational effectiveness. This finding in the study contradicts other results, such as those from Yandori and Kato (2007) and Grund and Westergaard-Nielsen (2005).

Firm age is significantly and positively related to the technical efficiency of Thai manufacturing SMEs, indicating that older firms learn from past mistakes through the learning-by-doing process and improve managerial skills from accumulated experience. This finding is similar to the empirical results of Burki and Terrell (1998). An insignificant result of firm age, however, is found for Thai manufacturers in the aggregate. Firm size is significantly and negatively related to the technical efficiency of Thai manufacturing SMEs including all manufacturers, implying that larger firms do not gain benefits from economies of scale and scope. This finding is consistent with the findings of Le and Harvie (2010) that suggest small enterprises are more efficient due to flexibility in diversifying and adjusting their businesses and activities in a rapidly changing economy in transition. Unskilled foreign workers contribute positively to the technical efficiency of Thai manufacturing SMEs, but a significant and negative result is found among all Thai manufacturers. This result implies that Thai manufacturing SMEs benefit from hiring inexpensive foreign unskilled labour due to a reduction in production costs.

Table 2: Stochastic Production Frontier and Inefficiency Effects Model for Thai Manufacturing SMEs

	Coefficient	standard-error	t-ratio
<i>Stochastic Production Frontier</i>			
Dependent variable: Ln(Y _i)			
Constant	0.48298	(0.54411)	0.88765
Ln(K _i)	0.18991	(0.02142)	8.86607*
Ln (L _i)	0.81245	(0.04322)	18.79583*
<i>Inefficiency effects model</i>			
Dependent variable: U _i			
Constant	-3.09868	(1.50539)	-2.05838*
Skilled_edu _i	-0.11519	(0.04650)	-2.47709*
Skilled_tenure _i	-0.02788	(0.02289)	-1.21807
Skilled_age _i	0.03401	(0.02404)	1.41441
Workforce_edu _i	-0.04273	(0.01253)	-3.40923*
Employees_training _i	-0.66130	(0.31385)	-2.10704*
Firm_size _i	0.00790	(0.00347)	2.27792*
Firm_age _i	-0.14219	(0.04399)	-3.23191*
Unskilled_foreign _i	-0.07034	(0.02578)	-2.72825*
sigma-squared (σ^2)	3.51850	(0.73918)	4.76001*
Gamma (γ)	0.86690	(0.03252)	26.66073*

Note: Standard errors are in brackets; * and ** indicate that the coefficients are statistically significant at 5% and 10%, respectively.

Table 3: Stochastic Production Frontier and Inefficiency Effects Model for Thai Manufacturing Enterprises

	Coefficient	standard-error	t-ratio
<i>Stochastic Production Frontier</i>			
Dependent variable: Ln(Y _i)			
Constant	1.52565	(0.32374)	4.71257*
Ln(K _i)	0.23596	(0.01887)	12.50673*
Ln (L _i)	0.69980	(0.03075)	22.75518*
<i>Inefficiency effects model</i>			
Dependent variable: U _i			
Constant	-2.33592	(1.82367)	-1.28089
Skilled_educ _i	-0.31332	(0.09461)	-3.31157*
Skilled_tenure _i	0.04840	(0.01955)	2.47600*
Skilled_age _i	-0.04872	(0.02060)	-2.36560*
Workforce_educ _i	-0.09441	(0.02533)	-3.72650*
Employees_training _i	0.24791	(0.30529)	0.81205
Firm_size _i	0.00053	(0.00026)	2.01552*
Firm_age _i	0.00627	(0.01078)	0.58141
Unskilled_foreign _i	0.01276	(0.00662)	1.92758**
sigma-squared (σ^2)	5.24906	(1.40442)	3.73753*
Gamma (γ)	0.90877	(0.02548)	35.66426*

Note: Standard errors are in brackets; * and ** indicate that the coefficients are statistically significant at 5% and 10%, respectively.

The weighted average technical efficiency of Thai manufacturing SMEs and Thai manufacturers in the aggregate are approximately 68.62 percent and 65.81 percent, respectively, signifying a moderate level of technical inefficiency that is reducing potential output. According to the sum of significantly estimated coefficients of capital and labour inputs as shown in Tables 2 and 3, the production of Thai manufacturing SMEs is under constant returns to scale (1.00236), but the production of all Thai manufacturing firms face decreasing returns to scale (0.93576). In addition, their production relies greatly on labour input rather than capital input.

7. Conclusion and policy implications

This study employs the 2006 manufacturing sector survey collected by the Foundation of Thailand Productivity Institute (FTPI) in collaboration with the World Bank to empirically examine the significant importance of human capital characteristics, such as skilled workers' education, tenure, and age as well as the presence of unskilled foreign workers on the technical efficiency performance of Thai manufacturing SMEs including Thai manufacturers in the aggregate. The effects of other determinants, such as i) firm size and ii) firm age on firm technical efficiency, are also investigated. This study applied the one-stage procedure introduced by Battese and Coelli (1995).

The study's results indicate that skilled employees who attain more years of education, workers' education to at least a bachelor's level, and in-house and outside training play a key role in promoting the technical efficiency of Thai manufacturing SMEs. Government policies that focus on enhancing employee knowledge and training should be implemented to increase SME efficiency. More importantly, linkages between educational institutions and industry in Thailand should be encouraged to promote a skilled labour supply in specific sectors. Older SMEs contribute positively to their technical efficiency. Young SMEs, therefore, should be given first priority for government assistance through financial and non-financial support. Unskilled foreign workers contribute positively to SME technical efficiency. Enhancing the skills of workers, especially of foreign unskilled workers through education and job training programs, is important to increase SME production efficiency. Nevertheless, larger SMEs are likely to have less technical efficiency or face diseconomies of scale in the long run. Government policies, therefore, might encourage those large SMEs to establish new subsidiaries in order to optimize efficiency in the long run. Skilled workers' age and years of tenure are insignificantly related to SME technical efficiency.

Focusing on Thai manufacturing enterprises in the aggregate, skilled workers who attain more years in education, employees with at least a bachelor's degree, and older skilled workers tend to contribute negatively to technical efficiency. In addition, larger Thai manufacturing enterprises do not gain benefits from economies of scale and scope, while the tenure of skilled workers and the employment of unskilled workers do not enhance a firm's technical efficiency. This study also reveals that Thai manufacturing SMEs as well as all Thai manufacturers basically rely on labour input rather than capital input to increase output. This result implies that over-reliance on labour, resulting in a low-cost labour trap, exists among Thai manufacturing SMEs including all Thai manufacturers. The production of Thai manufacturing SMEs including all Thai manufacturers also exhibits constant returns to scale and decreasing returns to scale, respectively. Finally, they all face a moderate level of technical inefficiency. Consequently, specific policies are required for Thai manufacturing SMEs including all Thai manufacturers, such as i) enhancement of input efficiencies (e.g., more skilled labour) to be able to move toward their most efficient production frontier given current technology, and ii) utilization of improved technology that helps shift their current frontier outward. In other words, upgrading technology helps them to develop the value chain while avoiding labour-intensive production and the low value-added trap in their production as suggested by Le and Harvie (2010).

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Measuring the Effects of Online-To-Offline Marketing

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Introduction

In recent years, Due to the rising of electronic commerce and mobile commerce, customers tend to adopt multiple channels while searching and purchasing productions or services. Nielsen (2014) reported the 96% of Taiwan's web user went online shopping, and searching and purchasing products through mobile devices (smart phones and tablets) increased from 24% to 32%. Customers' enhanced their cross channel shopping behavior by applying more functions through mobile devices. According to a Taylor Nelson Sofres' (2013) survey, 24% of people use a smartphone or tablet to search for information on a product at home, 21% use mobile devices to compare prices in store, 16% view product information, 16% use coupons, and 15% use mobile commerce to purchase products. ComScore (2013) investigated 3,000 customers, 44% reported that if stores provided online ordering and in-store pickup, then they would prefer to patronize these stores. Stores that adopted the online-to-offline (O2O) marketing model would attract customers to visit the store and purchase products. Therefore, understanding the O2O marketing model has become increasingly crucial and important. This study aimed to develop a model to measure how to efficiently mix the marketing resources on offline and online channels, in order to create a successful O2O marketing strategy. Our research purposes include: (1) To build the measured variables to identify how to adopt O2O marketing (2) To use explore factor analysis to extract the key factors of O2O marketing adoption (3) To explore searching and purchasing behavior on offline and online channels. (4) To provide the conclusion and managerial implications for improving O2O marketing strategies

Literature Review

Online-to-offline(O2O) Marketing

The online-to-offline (O2O) marketing model is also known as the online and offline integration model. Alex Rampell, the chief executive officer and founder of TrialPay, stated that the key to O2O is that it locates customers online and brings them into real-world stores (TechCrunch, 2010). The model is a combination of a payment model and foot traffic generator for merchants (as well as a "discovery" mechanism for customers) that enables offline purchase. For example, an online channel cannot provide an actual restaurant experience and is used only to trade goods unilaterally. By contrast, an offline channel cannot provide people with information on store location or promotions. Therefore, a complementary model that enables the industry to attract additional customers to the physical store is necessary. The Online Economy

(2012) indicated that because of the increase in social networking sites and location-based services, customers currently obtain preferential information on products through both channels and then purchase the products in a physical store (The Online Economy, 2012).

Conway (2011) surveyed currently available methods for four O2O models: the traditional online store, location-based services, social commerce, and group purchasing. In addition, the O2O marketing model has become a critical topic in channel integration (Business Inside, 2011). Customers will consider to various factors to adopt the most appropriate channel to execute their transactions. For instance, if customers seek to search for information quickly, they would select an online store or use a mobile device to search for information. Conversely, if customers want to try on or touch a product, they would visit a physical store to locate a product. Therefore, we believe that understanding the customer factor of search and purchase and the subsequent adoption behavior are crucial. Moreover, marketers need to mix their marketing resources on offline and online/mobile channels to effectively and efficiently catch their targeted customers.

Online-To-Offline Adoption Factors For Searching Process

Information Availability. Verhoef et al. (2007) considered the availability of product information and the amount of useful information would considerably influence customers to choose the most proper channel to search or purchase. Wolfenbarger and Gilly (2001) revealed that information availability was one of the reasons for customers to choose online channels to search and purchase goods. Scholars have stated that the Internet provides the most efficient ways for customers to obtain that information. If customers could easily receive information and compare prices from one channel, they will tend search and make a purchase there (Nobel et al, 2005). Thus, we propose hypothesis 1:

H₁: Customers who take information availability more seriously have greater chances to search goods through an online channel.

Search Convenience. Customers would select a channel which can quickly provide product information (Verhoef et al., 2007). Gupta, Su, and Walter (2004) argued that online channels could offer faster outcomes for searching product information. In addition, Bang et al. (2013) stated that mobile devices had the advantage to search information at anytime, anywhere. Several studies have also indicated that search

convenience affects the channel choice for customers to search. (Kacen, Hess, & Kevin Chiang, 2013; Schröder & Zaharia, 2008; Verhoef et al., 2007). Thus, we propose hypothesis 2:

H₂: Customers who take search convenience more seriously have greater chances to search goods through an online channel.

Search Enjoyment. Forsythe, Liu, Shannon, and Gardner (2006) determined that customers were highly concerned their enjoyment of searching process. Customers need more hedonic elements from the shopping experience (Schröder and Zaharia, 2008). Several scholars have determined that customers would use a channel which could provide enjoyable shopping experience. Customers would prefer to search goods in stores, because they could experience more shopping pleasure and had more face-to-face interaction with sale staffs.(Konus, Verhoef, & Neslin, 2008; Levin, Levin, & Weller, 2005; Jones,1999; Rohm & Swaminathan, 2004; Schröder & Zaharia, 2008). Thus, we propose hypothesis 3:

H₃: Customers who take search enjoyment more seriously have greater chances to search goods through an offline channel.

Tangible. Shin (2007) indicated that customers do not purchase goods through an online channel because they cannot assess the actual quality of products at the time of purchase, thus causing uncertainty regarding the goods. Customers can touch and experience the real product through an offline channel. Customers would tend to check physical products at stores to reduce the uncertainty (Jiang and Balasubramanian, 2014). Numerous studies have also indicated that tangible factor was crucial in O2O marketing (Kacen et al., 2013; Levin et al., 2005; Yu et al., 2011). Thus, we propose hypothesis 4:

H₄: Customers who take tangible products more seriously have greater chances to search goods through an offline channel.

Media Richness. Media richness is a characteristic that enables a marketing channel to communicate information to customers and help them undertake a decision-making channel (Maity & Dass, 2014). Relevant literature reports that media richness affects the information search of customers. Brunelle (2009) indicated that customers are affected by media richness change their intent to adopt e-commerce to search for information. Maity and Dass (2014) stated that offline, online and mobile would provide different degrees of media richness. If customers want to acquire in-depth information or timely feedback then they could ask a salesperson in a physical store. We believed that media richness could affect the customers' choice of search channel.

Thus, we propose hypothesis 5:

H5: Customers who take media richness more seriously have greater chances to search goods through an offline channel.

For Purchasing Process

Price and Promotion. Several scholars indicated that price and promotion influence the channel choice of customers in the process of purchase. Bakos (1997) indicated that price is a critical factor influencing the choice of channel to purchase goods. For instance, customers believe that they can find inexpensive prices through the online channel and would thus use an online channel to search for prices and promotions for a product. Numerous studies have revealed that customers search for products using an offline channel but use the online store to purchase these products when the price in the offline channel is exceedingly high (Crespo & Del Bosque, 2010; Kacen et al., 2013; Konuş et al., 2008; Maity & Dass, 2014; Schröder & Zaharia, 2008; Van Baal & Dach, 2005; Verhoef et al., 2007). Therefore, we believe that price and promotion are crucial factors in the O2O marketing model. Thus, we propose hypothesis 6:

H₆: Customers who take price and promotion more seriously have greater chances to make purchases through an online channel.

Product Variety. Keeney (1999) argued that if stores provided more product selections, the more opportunity customers could make a purchase there. Verhoef et al. (2007) indicated that if stores provided an assortment of products (ex: popular or new product), customers could change the channel. In addition, numerous studies have shown that e-retailing can provide a wide assortment of products and abundant information. These benefits are often discussed in the context of superior e-merchandizing motivating people to shop online (Clemes, Gan, & Zhang, 2013; Evanschitzky, Iyer, Hesse, & Ahlert, 2004). Thus, We propose hypothesis 7:

H₇: Customers who take product variety more seriously have greater chances to make purchases through an online channel.

Purchase Convenience. Verhoef et al. (2007) determined that if a channel provided high efficiency and speed in the purchase process, customers would prefer to purchase goods through that channel. In addition, Schröder and Zaharia (2008) indicated that convenience orientation characterizes customers who regard shopping as a rational problem-solving process. Acquiring a sought-after product with a minimal investment in time and physical and mental effort is crucial to customers. Gupta et al. (2004) indicated that if customers wanted to search for and purchase products, they would

consider whether considerable effort or time would be expended to search for products. For instance, if customers search for products at a physical store, they would expend much effort and time on the road. In addition, if customers cannot find an appropriate product (when the price is exceedingly high or the product does not have favorable attributes), they would need to expend additional effort and time searching for the product. Bang et al. (2013) stated that the advantages of mobile devices are that information can be searched for and products can be purchased anytime, anywhere. Several studies have shown that purchase convenience was a crucial factor in the purchase process (Chocarro, Cortiñas, & Villanueva, 2013; Kwon & Jain, 2009; Schröder & Zaharia, 2008). Thus, if a channel could expedite the purchase process, customers would select this channel to purchase products. Thus, we propose hypothesis 8:

H₈: Customers who take purchase convenience more seriously have greater chances to make purchases through an online channel.

Purchase Risk. Cox and Rich (1964) defined risk perception as perception of uncertainty in the process of purchase. Taylor (1974) indicated that customers changed the purchase channel because of different risks that influenced customer decisions. He stated that product performance risk and security risk might affect purchase decisions. Featherman and Pavlou (2003) indicated that customers were concerned about potential loss of control over personal information; for example, when information on customers is used without their knowledge or permission, they seldom purchase on online stores. Kleijnen, De Ruyter, and Wetzels (2007) observed that customers concerned about risk seldom use m-commerce. Several studies have indicated that purchase risk affect the channel choice of customers (Clemes et al., 2013; Liu & Forsythe, 2011; Schröder & Zaharia, 2008). Thus, we propose hypothesis 9:

H₉: Customers who take purchase risk more seriously have greater chances to make purchases through an offline channel.

Service quality. Many studies have indicated that if stores provided superior service quality, then customers may change the final purchase channel. Parasuraman, Zeithaml, and Berry (2002) indicated that service quality includes tangibles, reliability, responsiveness, assurance, and empathy. A. Parasuraman, Zeithaml, and Malhotra (2005) also discussed e-service quality, asserting that offline quality and online quality differed, and proposed an e-quality includes can offer various means of returns or more make items available for delivery within a suitable time frame. In addition, Kacen et al. (2013) indicated that if customers who cared about service quality tended

to purchase at offline stores. Numerous studies have indicated that service quality is a critical factor in the purchase process (Verhoef et al., 2007; Yu et al., 2011). Thus, we propose hypothesis 10:

H₁₀: Customers who take service quality more seriously have greater chances to make purchases through an offline channel.

Immediate possession. Several studies have suggested that direct marketers can reduce customer resistance to catalogues or make Internet purchases by reducing delivery time. Thus, customers may decide to use offline stores by immediate possession instead of online stores (Balasubramanian, 1998; Rohm & Swaminathan, 2004). Alba et al. (1997) stated that brick and mortar retailers provide instantaneous possession of products, whereas purchasing through online retailers incurs a time delay. Numerous studies have indicated that if customers could receive the product immediately, they could change the purchase channel (Chiang, Zhang, & Zhou, 2006; Kacen et al., 2013; Noble et al., 2005; Rohm & Swaminathan, 2004). Thus, we propose hypothesis 11:

H₁₁: Customers who take immediate possession more seriously have greater chances to make purchases through an offline channel.

Research Methodology

This study designed four research steps to examine how O2O marketing works. First, Base on literature review, we developed a questionnaire to measure O2O marketing adoption behavior. Second, samples were collected by using Insightxplorer's web survey system, Third, using exploratory factor analysis to extract the key factors for the O2O marketing adoption behavior.. Fourth, we Conducting probit regression analysis to measure the searching and purchasing behavior on offline and online channels.

Data Collection and Sample

Based on the literature review, this study developed a questionnaire that comprised 42 questions to measure the key constructs of O2O marketing, as shown in Questionnaire design of O2O marketing constructs. InsightXplorer (IX) survey and Cyberpanel system were conducted to collect samples (InsightXplorer, 2014). In the web survey ,we first asked respondents the channel through which they usually search for or purchase products, such as apparel, personal computers, and smartphones; in other words, the channel that they most frequently preferred to search for or purchase

products. In order to ensure that the questionnaire applied to Internet users, we used a structured sampling proportion of gender and age, according to the internet population report, published by the Taiwan Network Information Center (TWNIC). The current study received a total of 689 valid responses. Among the respondents, 339 (49.2%) of the participants were men and 350 (50.8%) were women; 185 (26.8%) were aged between 20 and 29 years, 228 (33.1%) were aged between 30 and 39 years, 160 (23.3%) were aged between 40 and 49 years, and 116 (10.2%) were older than 50 years.

Table 1. Questionnaire design of O2O marketing constructs

Constructs [↙]	Number of questions [↙]	Serial number [↙]
Information Availability [↙]	4 [↙]	IA1-IA4 [↙]
Search Convenience [↙]	3 [↙]	SC1-SC3 [↙]
Media Richness [↙]	4 [↙]	MR1-MR4 [↙]
Enjoyment [↙]	4 [↙]	EN1-EN4 [↙]
Tangible [↙]	3 [↙]	TAN1-TAN3 [↙]
Service Quality [↙]	4 [↙]	SQ1-ACS4 [↙]
Purchase Convenience [↙]	4 [↙]	PC1-PC4 [↙]
Purchase Risk [↙]	6 [↙]	RC1-RC6 [↙]
Price and Promotion [↙]	4 [↙]	PP1-PP4 [↙]
Product Variety [↙]	3 [↙]	PV1-PV3 [↙]
Immediate Possession [↙]	3 [↙]	IP1-IP3 [↙]

Results and Analysis

Reliability. This study applied Cronbach's α to measure the reliability of the questionnaire. The Cronbach's α of each dimension is presented as follows: Information Availability was 0.90, Search Convenience was 0.89, media richness was 0.81, Enjoyment was 0.88, Tangible was 0.86, Service Quality was 0.83, Purchase Convenience was 0.84, Purchase Risk was 0.90, Price and Promotion was 0.83, Product Variety was 0.80 and Immediate Possession was 0.76. All the Cronbach's α of our questionnaire were higher than 0.7, indicating a high level of internal consistency.

Factor analysis. Exploratory factor analysis (EFA) was conducted to extract factors of O2O adoption behavior. The Kaiser–Meyer–Olkin measure of sampling adequacy was calculated (KMO = 0.961), and Bartlett's test of sphericity verified that

relationships among the items existed (chi-square = 22985.336, d.f. = 1128, Sig. < 0.05). Therefore, factor analysis was suitable for this study.

The results of EFA revealed five factors as the search factor of O2O marketing adoption behavior: information availability, search convenience, media richness, enjoyment, and tangibles (see Table 2). According to Verhoef et al. (2007), To et al. (2007), Shim, Eastlick, Lotz, and Warrington (2001), and Brunelle (2009), this study confirmed that these five factors were components of the search factor. The results of EFA revealed six factors as the purchase key elements of O2O marketing adoption behavior: service quality, purchase convenience, purchase risk, price and promotion, product variety, and immediate possession (see Table 3). According to Verhoef et al. (2007), Kleijnen, de Ruyter, and Wetzels (2007), and Noble, Griffith, and Weinberger (2005), this study confirmed that these six factors were components of the purchase factor.

Table 2. EFA Results for Searching Behavior

Factor [↕]	Cronbach's α [↕]	Eigen value [↕]	% of Variance [↕]	Cumulative % [↕]
Information Availability [↕]	0.72~0.85 [↕]	3.44 [↕]	19.16 [↕]	19.16% [↕]
Enjoyment [↕]	0.61~0.89 [↕]	3.10 [↕]	17.25 [↕]	36.41% [↕]
Tangible [↕]	0.79~0.89 [↕]	2.47 [↕]	13.76 [↕]	50.17% [↕]
Media Richness	0.61~0.74 [↕]	2.47 [↕]	13.73 [↕]	63.89% [↕]
Search Convenience [↕]	0.61~0.79 [↕]	2.20 [↕]	12.58 [↕]	76.47% [↕]

Table 3. EFA Results for Purchasing Behavior

Factor [↕]	Cronbach's α [↕]	Eigen value [↕]	% of Variance [↕]	Cumulative % [↕]
Purchase risk [↕]	0.72~0.81 [↕]	4.35 [↕]	18.11% [↕]	18.11% [↕]
Price and Promotion [↕]	0.61~0.84 [↕]	2.96 [↕]	12.31 [↕]	30.43% [↕]
Service quality [↕]	0.57~0.69 [↕]	2.75 [↕]	11.47 [↕]	41.90% [↕]
Purchase convenience [↕]	0.47~0.82 [↕]	2.32 [↕]	9.65 [↕]	51.54% [↕]
Product variety [↕]	0.65~0.77 [↕]	2.27 [↕]	9.45 [↕]	60.99% [↕]
Immediate possession [↕]	0.54~0.82 [↕]	2.26 [↕]	9.42 [↕]	70.41% [↕]

Probit regression analysis. This study applied probit regression to explore customers' tendency to search and purchase on offline and online channels. In addition, we also compared the differences in searching and purchasing behavior between two different goods, apparel and smartphones.

For apparel products, regarding search stage, The results of analyzing apparel searching behavior showed that only tangibles factor ($\beta=.174$, $Z=2.18$, $p<0.05$) significantly influenced customers to search offline. However, information availability, search convenience, media richness, and enjoyment had no impacts on both channels.

Regarding purchase stage, The results of analyzing apparel purchasing behavior showed that product variety ($\beta=.307$, $Z=2.89$, $p<0.05$) and immediate possession ($\beta=.270$, $Z=2.75$, $p<0.05$) revealed significant influences to purchase offline. Meanwhile, price and promotion ($\beta=.182$, $Z=1.88$, $p<0.1$) factors showed marginally impacts to purchase online ($p<.1$). Service quality, purchase convenience, purchase risk, and immediate possession showed no influences on both channels.

For smartphones products. Regarding search stage, The results of searching smartphone behavior on these two channels showed that search convenience ($\beta=.412$, $Z=1.985$, $p<0.05$) significantly increased customers tendency to search online, but tangibles ($\beta=.175$, $Z=2.361$, $p<0.05$) still significantly affected them to search offline. Meanwhile, information availability, media richness, and enjoyment had no significant influences.

Regarding purchasing stage. The results of purchasing smartphone revealed that **purchase risks** ($\beta=.289$, $Z=2.548$, $p<0.05$) significantly affect customers to purchase offline. However, service quality, product variety, purchase convenience, price and promotion, and immediate possession had no influences on both channel.

Conclusion and Implications

O2O marketing is a widely discussed topic among marketers and provides channels for them to communicate with customers. Based on literature review, we successfully develop the measures for adopting O2O marketing model.

Through exploratory factor analysis, we extracted five factors: information availability, search convenience, media richness, enjoyment, and tangibles for search

behavior, and six factors : service quality, purchase convenience, purchase risk, price and promotion, product variety, and immediate possession for purchase behavior on offline and online channels.

We then used probit regression to examine the relationship among the channel adoption factor, search channel, and purchase channel. In the offline channel, we determined that tangibles matched our theoretical derivation, but enjoyment, media richness, and service quality were not significant. In addition, we determined that purchase convenience was not significant.

Regarding apparel, customers were most concerned about whether they could touch the product; thus, the customers tended to use the offline channel to search for goods. In the purchase process, customers reported that the offline channel can provide product variety, reduce purchase risk, and immediate possession. Hence, they would make their final purchase offline. By contrast, the online channel can provide additional information on price and promotion. Thus, if the apparel industry provided additional promotion in the online channel and provided consumers with a physical store to try on clothes, it would attract more consumers to purchase products

Regarding smartphones, customers also considered tangible products more, and thus tended to use the offline channel to search for products. By contrast, online stores can provide relevant product information more quickly; thus, customers tend to search through the online store. Regarding purchase behavior, customers were more concerned about purchase risk; thus, they tended to visit a physical store to purchase products because that could reduce customer purchase risk. Thus, in the mobile phone industry, businesses can provide additional information to consumers on the online channel and provide customers with an opportunity to try products to attract customers to purchase goods.

Finally, this study confirmed the relationship between the channel adoption behavior and channel adoption factor in the search for and purchase process. Based on our findings, marketers could learn how to apply the resources on both channels to develop a better O2O marketing strategy, in order to provide the most efficient way for transactions by integrating online and offline channels. This understanding can be useful for developing marketing plans. Different channels and stimuli that help attract customers to search for and purchase goods must be considered.

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Bridge the Gap of Overlooked Loopholes in Societal Structures

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Abstract

This paper was intended to raise awareness of imbalance between mental and material growth which led to the existing gaps in the economic inequality and resulted in damaging the societal structure. This meant that some entrepreneurs in the country uninsured and the problems only come to light when it is too late as they believe only in money possession and physical comfort than spiritual values, the adverse selection and moral hazard affected mental pictures of economic with special force, the social consequences and external costs of mental concerned economics are formidable. Mental revolution had been made for several attempts during the past democratic period, dating from 1932, but only succeeded in perfunctory effort.

The researchers conducted social impact assessment using needs assessment as tools of qualitative applied research proposed to describe a social phenomenon. The time-series longitudinal research examined the same type of information collected on a group of non probability purpose sampling across multiple time periods. Data triangulation and Social Return on Investment had been established for validity check, measuring and accounting for concept of value.

The research findings suggested the imbalance between mental and material growth affected the existing gaps, in the economic inequality and resulted in damaging the societal structure, were unanimously accepted. Self and social awareness processes influenced by the emergence of new institutions to address long-standing problems in the public, private and people sectors with paradigm shifting roles are essential for revival and enhance the entrepreneurship of society.

Keywords: Mental revolution, Paradigm Shifting Role.

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Introduction

For centuries, historical and cultural background indicated instigating social change in Thai society in terms of material growth were much more ahead of mental growth in almost every aspect. Loopholes broaden out into persistent criticism owing to accumulate effects of economical thinking, competitive thinking, and some others which were so-called agitated paradigm. In paying back in own coin, meritorious action in giving or generosity has become an important prerequisite for a revival of societal balance of thinking.

An imbalance between mental and material growth which led to the existing gaps in the economic inequality and resulted in damaging the societal structure meant that some entrepreneurs in the country uninsured and the problems only come to light when it is too late as they belief only in money possession and physical comfort than spiritual values, the adverse selection and moral hazard affected mental pictures of economic with special force, the social consequences and external costs of mental concerned economics are formidable.

Lack of ethical paradigm, however, empty handed migrants has become the obvious example, they neither recognized nor had a smattering of historical, cultural and committed forebears. Their lives were very hard they had to struggle on for independence, well-being, and prosperity regardless of the consequences. Thai society had shown the adverse selection of paradigm, growing level of material represent a serious mental hazard to the societal members.

The migratory economic effects widespread varied throughout the country and affect societal structures as whole, sending countries may experience not only short term gains and losses but also stand to gain over the longer term. On the one hand, the temporary worker programs in receiving countries helped to address skills shortage, and on the other hand, they may decrease domestic wages and add to public welfare burden. The economic effects of migration for both sending and receiving countries may also vary depending on who is moving, specifically with respect to migrant workers' skill levels. Mass emigration from neighboring sending countries affected the short-term economic benefit which was found in remittances. Significantly, the figures only account for funds sent through the formal channels, so the amount of remittances is likely much larger than the numbers suggested. Remittances are more stable and predictable as compared to other financial flows and, more importantly, they are counter-cyclical providing buffer against economic shocks. In conflict or post-conflict situations, remittances can be crucial to survival, sustenance, rehabilitation, and reconstruction. In providing primarily for household livelihoods, remittances are spent on general consumption items in local communities that contribute to local economies by supporting small businesses. A fair share of these expenditures is directed to the construction of homes, health care and education, alongside savings in financial institutions, thereby generating employment in these critical services sectors. Moreover, in contributing to foreign exchange earnings, remittances can spur economic growth by improving sending countries' creditworthiness and expanding their access to international capital markets. (UNCTAD, 2011)

The serious consequences, not a coincidence, the well-trained and educated individuals to emigration was inevitably and unintentionally loss. For developed countries which are often on the receiving end of migration trends, the positive economic gains from immigration are largely resulted. However, the effects of immigration have also been the cause for much debate and not all people believed that high levels of immigration are economically beneficial.

Moreover - anyone suffering from a running stomach is never afraid of the dark - the widespread of corporate loopholes was wide misconception as to what exactly are "tax loopholes." people view tax loopholes as gaps in the law that corporations have taken advantage of for years.

Large corporations and multi-nationals are not the only ones benefiting from such corporate tax loopholes. The graduated corporate income loophole benefits individuals that own small corporations. Even if all loopholes were eliminated, the government would not be able to raise public revenue because taxpayers likely would change their behavior to avoid higher levies. Furthermore, more than simply raising taxes on the "rich," closing loopholes could negatively impact the middle class and poor, as reducing tax expenditures will not raise nearly the revenue needed for sufficient deficit reduction without increasing taxes on the middle class significantly. Closing all loopholes may not raise the desired revenue, and worse, could motivate people to simply adjust their finances to avoid higher taxes and hurt the overall economy in the long run.

Among those of environmentally material growth, corruption was one of serious problems in many Asian countries especially ASEAN, judging from their ranking and scores on Transparency International's Corruption Perceptions Index (CPI). Corruption remained a serious problem in Thailand and its origins can be traced back to the Ayutthaya period in the second half of the 14th.century. Corruption became a national problem after World War II and the first anti-corruption law was enacted in 1945. (Lee Sang-hwan, 2004).

It has joined hands with the Thailand Development Research Institute to carry out research on the state of preparation of institutions in basic, vocational and higher education in Thailand and compare that to Singapore, Malaysia, the Philippines and Indonesia.

Despite there was hoping to encourage such commitment on the part of Paradigm Shifting that the ASEAN should adopted, the Readiness Assessments in terms of these preconditions, concluded that the political arrangement of Thai government reflected in the provision of inadequate and impartial enforcement of the comprehensive anti-corruption laws. (Quah. J.S.T., 2007)

Corruption seemed, cannot only be eradicated but also became causal relationship between why and how to revive the societal structures in terms of true happiness society, happiness which means a relative feeling and can be determined by the person who owns and feels this emotion, happiness which has not made from money or material objects, happiness which has not eventually end as the temporary spectacular achievement on itself. (Quah. J.S.T., 2007). Most of people don't pay

attention to the political ethic of the politician and they give the priority to money. These problems cause corruption and prevent Thai politics from development.

Open-mindedness and understanding on what has really happened in Thailand has long been endless issues, recently and particularly become the deadlock problem. Most of Thai People are supposed have better understanding on the situation of Thailand, in the same way as each country may have its own protocol in responding to such situation. In Thailand at the time being, however, people have the choice, they can be whatever they like and if they are happy, it's ok for everyone because it's all that matters, they were receptive to new and different opinions and ideas, if those opinions facilitated the beneficent power growth. Open-mindedness, in the sense of this paper is the willingness to not only at least consider that other people might have something of value to say but also means that the individual has enough humility to admit to themselves that they do not have all the answers. The benefits of open-mindedness include:

- Honestly live in society even the most of wealthy or intellectual arrogances will have moments of clarity when they are full of doubt and uncertainty. The individual who is able to admit that they do not know something will only be ignorant until they are given an answer. Those who do not admit their ignorance remain that way indefinitely.
- Having chances to have fun and make new and exciting discoveries and experience in being closed-minded that limits opportunities in life.
- Open-mindedness is about propriety, not just accepting what other people have to say. It is about listening and thinking what is being said with the understanding about the possibility of other opinions could be right.
- Being open-minded individuals have to leave their belief only in money possession and physical comfort occasionally and try new things even when there is a great temptation to refuse.

It eventually came to a mutual beneficial if people deliberately put themselves in a position where their current opinions and views are challenged. If their beliefs are correct then there can be no threat from these opposing views.

So, it is the responsibility of Thailand to continue creating understanding among the compatriots, while revive the imbalance growth between a high level of investment, which focused mainly only in fallacious happiness, and a low level of ethical integrity development caused a country suffered from a bad equilibrium which could be so-called "a poverty trap situation" followed by inadequate infrastructure, high social overhead capital and coordination failure which could impede the long-term growth and development of a country as a whole.

Despite this kind of temporary spectacular was definitely occupied mind and pleased senses of societal members, there are still managed alternatives to get the best resolution. These problems and many others reflect a general lack of substantive knowledge about qualitative thinking led to serious abuses and misuses of paradigmatic problems resolutions. It is, therefore, time to rectify past problems and to address realistic issues related to qualitative thinking in order to move forward new and important discoveries in different disciplines.

There remained, however, a number of critical issues and problems related to the misuse of qualitative thinking and a lack of knowledge about the purposes, goals, and proper uses of the qualitative paradigm of living. In response of rapid environmentally material growth, social equilibrium were likely reversed the trend, the fact of perverted realism in the senses of parsimony, sometimes, may clearly take a perverted delight in watching others suffer. In spite of such many efforts in reviving severely damage, it seemed to pervert and affect societal members in a way that make them think and act in immoral or unacceptable manners. To establish the credibility and accuracy of findings become the challenges of this research.

To avoid the worst of these impacts, this research findings suggested the imbalance between mental and material growth affected the existing gaps, in the economic inequality and resulted in damaging the societal structure, were unanimously accepted.

Self and social awareness processes influenced by the emergence of new institutions to address long-standing problems in the public, private and people sectors with paradigm shifting roles are essential for revival and enhance the entrepreneurship of society.

To raise awareness of imbalance between mental and material growth which led to the existing gaps in the economic inequality and resulted in damaging the societal structure, is the aim of this paper. And the conceptual framework was to use self and social awareness processes influenced by the emergence of new institutions to address long-standing problems in the public, private and people sectors with paradigm shifting roles are essential for revival and enhance the entrepreneurship of society. 'Loka-dhamma', Theory about eight things which are called worldly conditions, since they arise in connection with worldly life, namely: gain and loss, fame and obscurity, happiness and misery, praise and blame, were applied.

Beings living in this world are all subject to the natural law - lokadhamma. There are altogether eight natural laws that follow a being like us and including arahat, just like a shadow, all the time. (Maha Thera Nyanatiloka,1952), (Phra Brahmaganabhorn P.A. Payutto, 2006)

The Eight Natural Laws:

1. Labha: Gain,
2. Alabha: Loss
3. Yasa: Fame; Rank; Dignity,
4. Ayasa: Obscurity,
5. Pasamsa: Praise,
6. Ninda: Blame; abusive gossip,
7. Sukha: Happiness, and
8. Dukkha: Pain; Misery

All beings are subject to: deserve and disqualify.

All projectiles have a “parabolic” flight path, Galileo theory were also applied. Over two millenniums, Galileo observation, eventually advocated Worldly Vicissitudes: “The path of any projectile is a parabola”

A projectile is an object in free fall: subject to gravity and air resistance.

With no air resistance, the path followed by a projectile will be parabolic.

However, horizontal velocity is constant throughout flight.

The horizontal displacement, or range of a projectile, is the main performance index in many cases.

If air resistance is considered to be negligible, there is no net force in the horizontal direction.

What is most important? What about angle of release? When height of release is 0 m, optimal angle for maximum d_x (Sustainable Distance) is 45°

Horizontal Velocity: So, $d_x = V_x \times t$, allows us to calculate horizontal range for a projectile, if we know the horizontal velocity and air time. First, what affects horizontal velocity?

Flight Time: Next, what affects flight time? (Two Primary Factors)

1. Vertical speed at release: affected by angle of release and applied force
2. Height of release (if takeoff height = landing height, then $t_{UP} = t_{DOWN}$)

All projectiles have a “**parabolic**” flight path. **Trajectory** = the flight path of a projectile. The trajectory of a projectile consists of a **vertical** and **horizontal** component.

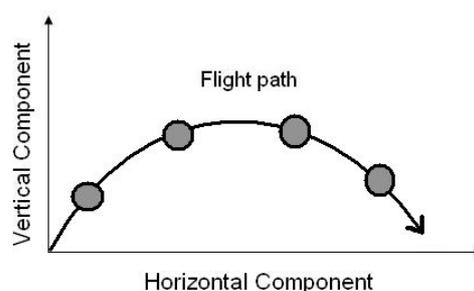


Figure: **Parabolic**” flight path. **Trajectory**

Vertical Component - gives the projectile *height*. Example: If you throw a ball straight up into the air its motion is only vertical.

Horizontal Component - gives the projectile *distance*. Example: A throw from the boundary to the wicket keeper in cricket has a horizontal component as well as a vertical component. It moves along as well as up.

Factors affecting trajectory: Regardless of the type of object that is being released, or by what means it is being projected, they are all governed by 6 basic principles: (Barrett S. R. , 2010)

1. Gravity:
2. Air resistance:
3. Speed of release: Volition
4. Angle of release:
5. Height of release:
6. Spin:

The conclusion of parabolic flight path trajectory falls into two statements:

1. “Optimal angle for maximum projectile distance (Sustainable Distance) is 45°.
2. “The steeper angle of release the shorter projectile distance” (Equilibrium ‘calm state of mind’ of gain and loss).

These two statements advocated the natural law – lokadhamma and imply the next Sufficiency Theory.

There are roughly two philosophical literatures on “happiness,” each corresponding to a different sense of the term. One uses ‘happiness’ as a value term, roughly synonymous with well-being or flourishing. The other body of work uses the word as a purely descriptive psychological term, akin to ‘depression’ or ‘tranquility’.

The causal questions effusively came in view of dilemmas; Are the wealthy members of society usually happier than the poor? What of rich versus poor countries – are the more developed nations typically happier? As a country’s income grows during the course of economic development, does human happiness advance – does economic growth improve the human lot? Is there evidence that economic growth is positively associated with social welfare, i.e., human happiness? Eventually, the research question fell into two aspects; how the society needed to be revived and enhanced? And, how the gap of overlooked loopholes in societal structures can be plugged or bridged?

The theory of development which influenced the world from the mid-1940s to the 1970s, viewed the problem of less developed countries stemming from low capital and resource misallocation. Economists during this period believed that development was equivalent to a growth process that required high capital and resource reallocation from low-productivity agricultural sectors to high-productivity manufacturing sectors. However, there was a problem of capital accumulation in less developed countries - people were too poor to save. It was thought that foreign aid, together with the right combination of savings and investment, would solve the capital accumulation problem.

The phase of development theory, after the glory days of State-led development, stressing capital accumulation and structural change, viewed the problems of underdevelopment as resulting from overly active government. Therefore, sustaining growth and stability required that government interventions - which included price distortions in the domestic factors of production and commodity markets, and barriers to international trade - be removed. The economy would then achieve efficient

movement of resources among sectors, appropriate technology adoption, and an increase in capital accumulation.

The closely related principle of comparative advantage holds that under free trade, an agent will produce more of and consume less of a good for which he has a comparative advantage, while competitive advantage arise when an organization develops an attribute or combination of attributes that allows it to outperform its competitors. Competitive advantage seeks to address some of the criticisms of comparative advantage. Comparative advantage, can lead countries to specialize in exporting primary goods and raw materials that trap countries in low-wage economies due to terms of trade. Competitive advantage attempts to correct for this issue by stressing maximizing scale economies in goods and services that garner premium prices (Stutz and Warf 2009).

On the list of countries by exports, Thailand was on 23 while farming in-season and double-crop rice field were essential to keep exporting rank. This false assumption, however, motivated greed and eventually caused inevitably severe damage called Thailand Submerged 2011.

In the preceding decades, the intensity of people participation in most activities concerned with how the society needed to be revived and enhanced, how the gap of overlooked loopholes in societal structures can be plugged or bridged. After conducted Data Triangulation which involved using different sources of information in order to increase the validity of this study - in extension, these sources are likely to be participants and societal members - and Social Return on Investment (SROI) as an accurately outcome-based measurement in helping societal members to understand and quantify the social, environmental and economic value they are reviving. During our in-depth interviewed to probe within society, in the meantime, helped them to understand the range of societal existing and potential competencies and actions. Our original both close and open-ended questions focused on “examples of” and “ideas” from the interviewees. However, we found that the results were often subjective and vague.

Conclusion

This paper, however, was initially designed as Applied-Qualitative-Evaluation research, the combination of applied theories implemented to the research methodology, eventually resulted in three folds. The findings and results are:

1. Paradigm shift from materialism to spiritual values;
2. From profitable money possession and physical comfort to beliefs in spiritual values; and
3. Readiness for presenting excellent values for their society.

Materialism to Spiritual Values

The elements of transformational change in social mobility affect particularly relevant to sustainability which are congruent with sustainable survival of society, as follows:

1. The Sustainability Leadership means “individuals who are compelled to make a difference by deepening their awareness of themselves in relation to the world around them. In doing so, they adopt new ways of seeing, thinking and interacting that result in innovative, sustainable solutions.”

2. The societal members’ opinion were unanimously accepted the sustainability leadership as an inspiration for Sustainable Survival of Society.

3. At an early date, the common future could be grounded in equitable and sustainable societal development, with the explicit goal of expanding people’s freedoms and choices without compromising those of generations to come, and the opportunity to do that is seized by sustainable leaders

From Profitable to Beliefs in Spiritual Values

Societal members are understand and finding more happiness than profits alone. Spiritual values embraced in societal context include integrity, trustworthiness, respect, and account-ability. Money eventually became the single bottom line which was increasingly a thing of the past. The word spirituality emphasizes how values are applied and embodied, in combination with Sufficiency Theory, drawn them back to the balanced development strategy for the nation so as to modernize in line with the forces of globalization while shielding against inevitable shocks and excesses that arise. These societal concepts and behaviors are indispensable to cope appropriately with the critical challenges arising from extensive and rapid socio-economic, environmental and cultural changes occurring as a result of globalization.

Readiness for presenting excellent values in their society

The solution of spiritual value lied in the principle of core value which involves creating economic value in a way that *also* creates societal value by addressing its needs and challenges. In contemporary capitalist society, the core value of moneymaking eventually went hand in hand with the glorification of material consumption. The free flow of capital and goods will be equated with the lofty ideal of human freedom, and material acquisition will be portrayed as a basic human right, increasingly even as an obligation. Spiritual value, finally presented socially responsible in how it impacts the environment, serves the society or helps create a better world.

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***Social Media Censorship Policy and Law: Balancing
Good Governance and National Security***

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Abstract

Social media has grown in number and influence, there has been an increase in political participation around the world. On the other hand, Thailand, Computer Crime Act of 2007 is a piece of legislation that has had a significant and negative impact on freedom of Expression on the Internet since it came into force in July 2007. Thus, Thai government is facing a serious challenge in good governance and national security.

On the other hand, cyber-crime, cyber-terrorism, and tradition terrorism are using a new way to damage and destroy infrastructure also trade and investment. Therefore, to help Thai government balancing good governance and national security at the same time, this analysis examines four policy alternatives: (1) the status quo policy, (2) cooperation with trusted Non-Government Organization (NGOs), (3) amendment computer crime act, and (4) government participates in social media.

All of four alternatives are assessed in terms of their ability to meet the following four goals: improve good governance (primarily on government transparency); improve democracy (maximize to civil and political participation); improve national security (emphasizes on peaceful strategy); and cost-effective (minimize cost on social media and internet censorship). On the basis of this assessment, the concludes that Thai government should participates in social media by using communication platforms such as Facebook, Tweeter, YouTube, and Line which are the best solution for improve good governance especially in transparency and maintain national security as well. Also, it will help Thai government more accountability and makes people participates in political which will improve democracy. Therefore, Thai government can balance their good governance and national security in the same time.

Keywords: Social Media Censorship, Policy, Good Governance, National Security

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Introduction

Social media are more than just a buzzword or an interesting phenomenon to our teenagers. They are a way of life. Researches show that active participation on sites like Facebook, communicating via texting and chat programs, and creating blogs are everyday occurrences for new era of mankind communication. Moreover, social media has grown in number and influence, there has been an increase in political participation around the world for example, Arab spring, Occupied Wall Street, and Thai people factions' conflict. However, in Thailand, the government has authority and power to control information and communication by using censorship policy and law. It claims to protect national security issues, but it creates controversial issues especially on good governance and democracy.

On the other hand, Thailand, Computer Crime Act of 2007 is a piece of legislation that has had a significant and negative impact on freedom of Expression on the Internet since it came into force in July 2007. Thus, with this law and policy, Thai government is facing a serious challenge in good governance for manages and develops country. On the other hand, cyber-crime, cyber terrorism, and tradition terrorism are using a new way to damage and destroy infrastructure also trade and investment. The terrorism has been moved downward from middle-east to Southeast Asian especially in Indonesia, Malaysia, and Southern of Thailand. Moreover, Thailand social media and internet censorship is being implemented using two methods. One, the Thai police has placed an online roadblock to about 32,500 websites which permanently prevents such sites from being viewed by Net users in the country and two, the Communications Authority of Thailand has additionally filtered an undisclosed number of websites right at the country's Internet gateway. To censor a website, the Ministry of Information and Communication Technology sends a request to each of the 50 or so non-profit and commercial ISPs in the country.

Any Internet services provider that fail to blacklist a requested website will be reprimanded by the government via cancellation of licenses or restriction on bandwidth capacity. For fear of sanctions, local ISPs strictly abide by Thailand Internet censorship. Just three years ago, the country's communications ministry requested for approximately 2,500 websites to be blocked. A year after that, the number of blocked websites increased to more than 13,000 which represents over 500% rise in blacklisted sites. Today, the number of websites censored by the ministry through local ISPs is largely unknown.

The reason for blocking websites is for national security which disclosed to the public. Many Internet users feel that the rules regarding Thailand Internet censorship are mainly based on the government's security and stability. Thai government has also spent millions of dollars for an Internet gateway system that will block any harsh comments on the country's supreme ruler. The same system can also be used to blacklist sites owned by terrorists and those that deal in pornography. It must be emphasized, though, that all the steps taken by Thai government to censor inappropriate websites are all within the bounds of the local laws. As a matter of fact, blocking certain websites is aimed at safeguarding the privacy of millions of Internet users in the country. Moreover, social media has been restricted and censored ever more severely since Thailand faced unrest resulting from political conflict between many different groups. During this political crisis, the correct role of the Thai state is

to protect rights and liberties for people to access news and information and express opinions because it is a critical time when the public needs to receive information from a variety of sources in order to be able to assess the situation both in terms of the safety of themselves, their property, and society, and political matters.

Therefore, to help Thai government balancing good governance and national security at the same time, this analysis examines four policy alternatives: (1) the status quo policy, (2) cooperation with trusted Non-Government Organization (NGOs), (3) amendment computer crime act, and (4) government participates in social media. All of four alternatives are assessed in terms of their ability to meet the following four goals: improve good governance (primarily on government transparency); improve democracy (maximize to civil and political participation); improve national security (emphasizes on peaceful strategy); and cost-effective (minimize cost on social media and internet censorship). On the basis of this assessment, the concludes that Thai government should participates in social media by using communication platforms such as Facebook, Tweeter, YouTube, and Line which are the best solution for improve good governance especially in transparency and maintain national security as well.

Also, it will help Thai government more accountability and makes people participates in political which will improve democracy. The adoption of deregulation to trusted NGOs also has the potential to improve significantly the efficiency and accountability of government. While it would probably not be as efficient and appropriate as the preferred alternative, it is probably more insecure that cybercrime, cyber terrorism, and tradition terrorism can link or hack the NGOs websites and creates miss information or frauds reports. Moreover, Thai government participates in social media would ensure efficient trust information source and reduce cost in cyber security that people can share and receive a correct information. This alternative could also be designed and implemented so that national security improved as well as good governance.

Thai Government and Censorship Policy

There is a long history of Censorship in Thailand. Harassment, manipulation, and strict control of political news was common under the Thaksin government (2001–2006), restrictions and media harassment worsened after a military junta overthrew the Thaksin government in a 2006 coup and increased until present. Thailand ranked 59th out of 167 countries in 2004 and then fell to 107th out of 167 countries in 2005 in the worldwide Press Freedom Index from Reporters Without Borders. Thailand's ranking fell to 153rd out of 178 in 2010 and rose to 137th out of 179 in 2011-2012.

Therefore, consequence of Thailand's Computer Crime Act of 2007 has been criticized for being overbroad and for granting authorities too much discretion in prosecuting Thai citizens and online service providers. However, the Computer Crime Act (CCA) suffers from many defects such as vague, overbroad, and overly punitive provisions. Moreover, it could inhibits Thai service providers from offering Web 2.0 services and harm Thailand's global economic competitiveness and downgrade of good governance in the Information Age.

Social Media

Research shows that active participation on sites like Facebook, communicating via texting and chat programs, and creating blogs are everyday occurrences for new era of mankind communication. As well as in Thailand, political unrest and conflict between “Red Shirts” and “Yellow Shirts” have been recurrent events when the Red Shirt crisis that plunged Bangkok into violence in April and May 2010 was a catalyst for the rise of social media particularly Twitter, Facebook, and YouTube. Moreover, the numbers tell a story from both sides. Facebook’s growth resulting from January 2009, there were 250,000 Facebook members in Thailand by April 6, 2010 until May 21 it was 3.1 million.

This was an important phenomenon which 500,000 people added in less than six weeks by September, it was more than 5 million people subscribed (Carthew, 2010). On the other hand, according to Congressional Research Service (CRS, 2008) the report to US congress said it is clear that terrorist groups are using computers and the Internet to further goals associated with spreading terrorism. This can be seen in the way that extremists are creating and using numerous Internet websites for recruitment and fund raising activities, and for Jihad training purposes. It is possible that as criminals and terrorist groups explore more ways to work together, a new type of threat may emerge where extremists gain access to the powerful network tools now used by cybercriminals to steal personal information, or to disrupt computer systems that support services through the Internet.

Therefore, to improve democracy and national security in Thailand, government must look at this potential and promotes social media which brings people to help government monitors rather than censor or block websites.

Good Governance

A Thai academician advocated that the term good governance was used to replace modernization of the public administration because the World Bank (WB), first used the term in 1989, wanted to address the problem of public administrative corruption in developing countries but was unwilling to use the word corruption as such because it is a negative word and might offend governments of countries which the WB works with. In the WB report Sub-Sahara: From Crisis to Sustainable Growth, good governance is referred to good management of government mechanisms in administering social and economic resources for development. Later UNDP elaborated the meaning of good governance by addressing what is bad governance. Bad governance was defined to include failures by government to provide good and efficient public services.

In private sector, the issue of corporate governance has also become vital in respond to the financial crisis in 1997 towards economic recovery and a more sustainable development. The Asian Development Bank reported in 1999 that the crisis in Southeast Asian countries, including South Korea, was caused by a failure in implementing corporate governance. They were (1) a high concentration of company ownership, for instance, 57 %; (2) ineffective mechanisms of Board of Directors supervision; (3) inefficiency and in-transparency of the procedures for acquiring company control; (4) external funding domination of a company’s source of funds,

i.e., bank loans; and (5) external funding was not accompanied by adequate creditor supervision. Hence, good corporate governance is therefore associated with well-functioning, competitive corporate finance market, solid legal protection for outside investors, both for creditors and shareholders, and outside shareholders being able to influence director and management behavior.

National Security

The process of Thailand's national security policy making and implementing has historically been dominated by a small elite. Thai core values began to take root in the mid-19th century when the King and aristocracy established the concept of nation, religion, and kingship in the national consciousness. Under the domination of the military and the bureaucracy, Thai conceptions of security were influenced by militaristic-authoritarian ideology. Since the 1990s there has been a significant change in national security policy making. The process of security policy making has moved from military leaders to a group of authorities, which consists of the head of state, military leaders and civilian leaders in related fields. The security making group, which was formed as a committee, is known as the National Security Council.

They attempted to systematically define and narrow the concept of security by focusing on five specific dimensions: political security, economic security, social and psychological security, military security and science and technological security. Nowadays Thailand's National Security Council, which is chaired by the Prime Minister, is responsible for the security policy making process by looking at external threats and internal issues. At the present time, in the absence of immediate external aggression, they are concerned about local and regional issues such as borders, maritime claims, drug trafficking and resources.

Also the new threat is cybercrime and terrorism, Thailand's cybercrime ranking in the Asia Pacific region has risen due to an increase in the online population, while the global underground economy continues growing without any impact from the global economy, according to a new Symantec Internet Security Threat Report, which highlights key trends in cybercrime in 2009. The attackers are leveraging the abundance of personal information openly available on social networking sites to synthesis socially-engineered attacks on key individuals within targeted companies. Furthermore, web-based attacks continued to grow unabated. Attackers leverage social engineering techniques to lure unsuspecting users to malicious websites.

Thai media analysts even labeled the alleged bombings and the blacklisted on money-laundering as parts of sinister plans to drag Thailand into counterterrorism networks. To be fair, quite a few, however, realized that with more potential terrorists using Thailand as a haven, it could cause a "risky situation" for the country. Therefore, the dilemma situation is facing to Thai government which needs to change their policy and strategy for balancing security and good governance.

Policy Goals

What policies should Thai government follow to balance good governance and national security in the same time? An answer to this question requires the specification of policy goals that provide an appropriate basis for comparing current

policy with possible alternatives. The preceding discussion of problems inherent in the status quo immediately suggests a number of important goals.

First, social media censorship policy is a potential value for national security and easy to control and manage, because of good governance it is a currently iniquity on Thai government. Thus, a primary goal, therefore, should be good governance of Thai government. The primary measure of the projected impact of each alternative in terms of this goal is transparency. One of the principal ways that the government can improve their accountability is by becoming more transparent that are, offering more information to the public and allow people critical and share their opinion.

Second, it relates to primary goal that democracy it will helps Thai government more good governance according to The National Democracy Indicators (NDI, 2007) is designed to determine how a society is doing in developing as a democracy. It is just one of many tools that can be used to judge a society. The objective of the democracy indicators is to have the participants judge their own democratic institutions to determine where they are strong and where they are weak. Moreover, according to World Democracy Audit ranking Thailand rank 89 out of 150.

Therefore, the empirical data shown that Thai democracy is low level thus, to improve Thai democracy which is a principal ways that Thai government needs to let civil and political participate in social media and internet. Thus, the primary criterion for measuring progress toward this goal is the level of people participation in social media and website block rate.

Third, nation security is one of the policy goals that help Thailand secures from cybercrime, cyber-terrorism, and tradition terrorism. According to Sawatree Suksri, Siriphon Kusonsinwut, and Orapin Yingyongpathana (Report on Thailand's CCA prosecutions and Internet censorship-iLaw, 2001) in Freedom Against Censorship Thailand point out the cybercrime rate has been rising since 2005 from 9 to 185 in 2010. Thus, the primary criterion for measuring progress toward this goal is the degree of cybercrime, cyber-terrorism, and tradition terrorism rate.

Fourth, Costs and benefits of the good governance and national security should be maximizing distributed to Thai people. Thus, cost-effective should be a policy goal. Maximizing requires that government spends their cyber security budget in terms of smallest amount but gain a maximize efficiency. Moreover, minimize cyber security budget will sharply effects to cyber security unit which is the Technology Crime Suppression Division (TCSD). This division is under The Ministry of Information and Communication Technology (MICT). However, as an alternatives policies have implications for government budgeting and expenditures, minimize government budget needs to be concern. According to Ministry of Information and Communication Technology (MICT) budgeting in 2012, cyber security has 32,885 Million Thai Baht (1,096.1 Million US dollars). Therefore, the primary criterion for measuring progress toward this goal is minimizes fiscal year specifically in cyber security.

It is important to note that the goals are often in conflict. For example, while reduce cost on Technology Crime Suppression Division (TCSD) might be made bureaucracy officers works inefficient and inefficiency, it would conflict with the goal of cost-

effective. Therefore, selecting the most beneficial to people or society desirable policy involves making trade-offs among the goal.

Alternative Policies

The analysis presented in the remainder of this report compares the status quo policy to the following three alternatives.

1. Cooperation with trusted Non-Government Organization (NGOs)

This alternative adapted concept from Transparency of Intergovernmental Organizations by Alexandru Grigorescu. His research analyzed the ability of NGOs that provides information and answer question to public which is accountability and transparency. Thailand is one of the countries where NGOs have been playing an important role in the country's economic, social, and political development. Thus, there are a numbers of trusted NGOs is that people can rely on. This is the most important for people can received an official information and correct data from trusted organization besides government released or distributed to public. For examples trusted NGOS in Thailand, Wongsanit Ashram, Duang Prateep Foundation, and Thailand Volunteer Service Foundation (TVS). However, recently and the government did not cooperate with NGOs to distribute information and data. Therefore, with this opportunity this alternative policy will help government improve their good governance.

2. Amendment Computer Crime Act

This alternative largely follows the social media phenomena around the world and social media concept by Antony Mayfield (2008). Social media is as a group of new kinds of online media, which share most or all of the following characteristics: participation, conversation, openness, community, and connectedness also the phenomena around the world such as Arab spring, Occupied Wall Street, and U.S. elections. This empirical evidences that social media is positive tools rather than negative tools. Thus, social media allows government to have a closer, more intimate relationship with people and being authentic in social media really means to be government itself, but with filters.

3. Government participates in social media

This alternative strongly recommend from the most famous empirical phenomena specifically in US. Governments may not be early adopters but the proliferation of social in national media has ramped up its importance for governments around the world. While this initial stance kept politicians on the defensive, enough time has passed that individual politicians and even entire governments are starting to use social media to connect with their communities in new, open ways.

In US case, Social media has a strange role in America as both kingmaker and career wrecker. For every social media success story like President Barack Obama's 2008 grassroots campaign there is another of a career-crippling gaffe, like Weingate, when New York Rep. Anthony Weiner accidentally tweeted a picture of his crotch. Consequently, Social media can help government and government agency promote

government information and services. Moreover, government uses this tool like Facebook, Tweeter, and Youtube to bring people together around government and their agency's work and information. Also social media expand the government's outreach capabilities and improve their ability to interact with and serve the public.

Thus, government participates in social media will ease Thai government more transparency, improve democracy, and gain people allies with government to help national security in cybercrime, cyber-terrorism, and tradition terrorism. In addition, interagency and intergovernmental social media can promote cooperation across government. Internal social media can establish connections across hierarchy and geographically dispersed organizations which will help government collect information and data faster and more accurate to protect and suppress cybercrime, cyber-terrorism, and tradition terrorism. Also it will strongly effect to cost-effective because of government does not have to heavily invest for cyber security, people across the country and boarder will form community to monitor cyber security and share information among them and government. Therefore, government fiscal year will sharply decrease but maximize efficiency on cyber security.

Conclusion, Assessment, and Recommendation

The issues discussed in this section of the report are summarized in a simple matrix (table 1) that presents policy alternatives on one dimension and the goals for assessing them on the other. It should be stressed that these are predictions, based on the empirical data and succeeded sample, of how each of the alternatives would perform in terms of government goals. Of course, the preferred alternative depends on how Thai government weights the goals described above.

Table 1, summarizes the major impacts described in the previous section. It is clear that all three alternatives are superior to the status quo in terms of most all the goals. Government participates in social media is the highest-ranked alternative in terms of good governance because it would result government is more transparency and accountability which is a two ways communication. Government distributes information also communicate directly to people and people can share their opinions or participates with government agencies. Moreover, it will improve democracy which people are more participation and expression their opinions, their voice can count. But it still has a weakness point that Thai government can get fraud information from people who do not like this government and anti-government or trouble makers. It should concerns in political feasibility as well because of opposite political interest group will use this channel to discredit to recent government, thus it needs to filter information to select good information and delete misinformation. Also national security efficiency, because of government and people are sharing information, cooperation which is a nationwide networking and cost savings. Most of this entire benefit of this alternative is government can do right away and it will not create a political conflict. Also government can gain support from people and political stability.

Moreover, to implementation this alternative policy, current Yingluck administration can do right away. To do so, prime minister provides this policy to ministry of ICT to implement it by release government official information then creating two ways communication in bureaucratic official website in social media platform such as Line,

you tube, Tweeter, and Facebook. After that promote civil servants and government agencies use social media to update information or answering question from people. Meanwhile, promote on public broadcast and social media to let people join and share information to help government improve democracy, political stability, and especially national security. Finally, government agencies can collect feedback from people and evaluate people respondent to improve policy.

On the other hand, amendment the computer crime act is a second place but the weakness is it will create a huge political conflict in parliament between Pros side who would like to deregulation this law and Cons side which concerns more security especially from ministry of ICT and TSCD department who is a main player. Moreover, it will cost a lot of money to make a referendum and time consuming. However, in the long run government will improve good governance and democracy which are more transparency and accountability. Because of government disclose information and cooperate with people also national security as well.

In addition, cooperation with trusted NGOs is the third place. Thai government will gain more good governance and democracy because of trusted NGOs will supports government which become alternatives distribution information channels and bridge between government and people. Even though NGOs in Thailand has a long history and it is one of the main player in many dimensions but it will create a conflict between ministry of ICT and TSCD department. Ministry of ICT will reduce their role and especially their annual budgeting also cyber-crime and cyber terrorism committee their crime indirect to government organizations both on cyber and infrastructure via trusted NGOs social media channels.

Finally, it is a close call in choosing among these three alternatives. My recommendation is that the government should adopt government participates in social media. This is, however, a radical departure from status quo, and it would not difficult to implement and it would not be a political conflict rather than another alternative or status quo. Therefore, Thai government can balance their good governance and national security in the same time.

Table 1: A Summary of Balancing Good Governance and National Security Alternatives in Terms of Policy Goals

Goals	Criteria	Policy Alternatives			
		Current Policy: Continued censorship	Cooperation with trusted Non- Government Organization (NGOs)	Amendment Computer Crime Act	Government participates in social media
Good Governance	Government distributes information to the public	Poor- Hi negative respond from people. People cannot receive sufficient information.	Good Hi positive respond from people. People can receive sufficient information via trusted NGOs	Excellent Law and policy disclose make government transparency and promote accountability	Excellent Government engages in social media and it helps government more transparency
Improve Democracy	The level of people participation in social media and website block rate	Poor A number of website block is hi rate but limited people participate in social media	Good Numbers of NGOs website increasing and people participate via social media but the website block rate still high mostly on political	Excellent Government and people cooperate each other. Government will receive public feedback to improve their performance	Good It is a two ways communication but Gov. can get fraud information and website blocks rate are reducing sharply
Improve National Security	The degree of cybercrime and cyber-terrorism rate	Poor Cybercrime rate is hi level	Fair Government gains alliances to share information and reduce cybercrime rate but cyber terrorists can use NGOs social media to commit cyber crime	Excellent Government's improves the quality of information and cybercrime and cyber-terrorism rate will decrease sharply	Excellent Government collaborates with public and private to create network for greater safety cyber security and the crime rate will reduce dramatically
Cost-Effective	Minimize fiscal year specifically in cyber security and reduce poverty	Poor Annual cyber security fiscal is hi and but poverty rate is medium	Good Cyber security annual fiscal will reduce and government can spends the surplus to another program but it will create controversy between TSCD unit and NGOs	Good Time consuming to amendment the law and policy. Also government must spend a lot of money to make a referendum	Excellent The potential for increased efficiency and cost savings. Also reducing poverty rate sharply

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The Financial Constraints and Firm's Profitability: A Case Study of The Indonesian Transportation Companies Listed in Indonesian Stock Exchange

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Abstract

This study attempts to analyze the correlation between financial constraints with the firm profitability through return on asset (ROA), return on equity (ROE) and net profit margin (NPM). The indicators used in determining the financial constraints are cash flow, firm size, dividend payout, interest coverage, debt to capital ratio and long term debt to capital ratio. The data set consists of 26 companies from the transportation industry listed in Indonesian Stock Exchange for the period of 2007-2012. Using panel data regression empirical analysis indicates that debt to capital ratio significantly impact the ROA and ROE; interest coverage is significantly impact the ROE and cash flow as well as firm size are significantly impact PM. This study also finds that dividend payout and long-term debt to capital ratio has no impact to the firm's profitability. The results expected that companies are able to improve the firm's profitability and manage their financial better, so no constraints will arise.

Keywords: Financial Constraints, Profitability, Return on Asset, Return on Equity, Net Profit Margin

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Introduction

The enterprises require a financial support to develop its businesses. Most companies need to take out loans not only to develop its business, but also to pay its debt. A company that is unable to pay its debt is considerable as financially constrained. However, sometimes the cost of the loan itself is not cheap. Based on the review of Bank Indonesia, the benchmark interest rate in Indonesia was last recorded at 7.50% (see figure 1.1). The averaged interest rate in Indonesia is 7.72% from 2005 until 2014 reaching an all time high of 12.75% in December 2005 (Taborda, 2014). The high amount of loan interest rates can be affected by the imperfections in the financial markets. It is surely a disadvantage for a company, because it directly affects the firm's growth.



Figure 1 Indonesian's Interest Rate (July 2012- April 2014)
Source : www.tradingeconomics.com

An obstacle is called a "Constraint" only if it significantly impacts the firm's growth. Ayyagari et al. (2006), found that even though the company reported a lot of obstacles to growth, not all the obstacles are constraining. Several obstacles such as political instability and crime are indirectly affecting the firm growth by the influence on other obstacles, or not at all. Meanwhile, financing obstacles such as interest rate is proved to have the largest direct effect on firm growth.

A constraint is basically a limitation. A financial constraint is the limitation of money, which usually means shortage or lack of money or funds. A financially constrained firm has a wedge between its internal and external cost of capital (Bodnaruk, Loughran, & McDonald, 2013). The sensitivity of cash flow between financial constraints and financial distress is different. A financially distressed firm is indicated by the presence of a negative cash flow, while a financially constrained or unconstrained firm is indicated by the presence of a positive cash flow (Cava, 2005). In addition, constrained firm often requires external finance and tend to have more debt in their capital structure (Botten & Karset, 2010).

Financial constraint is not only experienced by a new business or start-up company. It can be perceived by all levels of business, whether it is small, medium, or even a large business. This happened because financial markets can affect financial constraints. Smaller firms, however, are expected to be more financially constrained. According to Lamont, O Polk, & saa-Requejo (2001), there are 3 indicators affecting financial constraint; the value of the firm, the lower return compared to the unconstrained firm, and returns that are insignificantly more cyclical than the average.

There are various methods to measure financial constraints of a company. Previous studies have suggested many possibilities, including Hadlock & Pierce (2009), who do the research on Kaplan-Zingales (KZ Index). They found that there are only two out of 5 components on KZ Index, which are firm size and age, which are reliably related to financial constraints. Another study, Baños-Caballero, García-Teruel, & Martínez-Solano (2014), expressed that financial constraint can be measured by cash flow, dividend, firm size, tangibility ratio, cost of external financing, interest coverage, and Z-score. In addition to that it also discuss of financial constraints and its relation to several important parts of a company. Those are cash flow sensitivity of cash, investment of cash flow, firm growth, firm value, working capital management, innovation, organizational decisions, stock returns, and corporate performance. However, none discussed the relation between financial constraints and firm's profitability.

Profitability indicates how well the performance of the company over a specific period (Poznanski, Sadownik, & Gannitso, 2013). It is measured with income and expenses come from the activities of the business. To assess the financial health of a business, profitability ratios can be used. Those ratios are net profit margin (NPM), return on assets (ROA) and return on equity (ROE). ROA manages the company assets to generate profit; ROE manages the returned amount of net income to the common stockholder's equity; while NPM measures the percentage of each Rupiah of sales to earn profit. Thus, those three ratios can be used to examine the impact of financial constraints on a firm's profitability.

The transportation industry continues to grow rapidly in recent years, not only for the inland transportation, but also sea and air transportation. Indonesia's sea transport is very important for the economic integration and domestic and foreign trade. It has reached the total domestic movement for about 12 billion/year. The biggest four most used ports in Indonesia, Jakarta (Tanjong Priok), Surabaya (Tanjung Perak), Belawan (Cabang Belabuhan Belawan), and Ujung Pandang, handle most of Indonesia's export and import cargoes (The World Bank Group). On air transportation, Indonesia has become the most promising country in the region. The passenger traffic grew annually on average 7% in 2005 – 2009 (Susantono, 2012). It is because travel by air is the quickest way to get around the country's thousands of islands, and for some areas, the only option. The three biggest airports in Indonesia, Bali (Ngurah Rai airport), Jakarta (Soekarno Hatta airport) and Surabaya (Juanda International Airport) had experienced over capacity of demand. It occurs because of the large amount of demand compared to its existing capacity.

The purpose of this research is to identify which financial constraints measurement is significantly affecting firm's profitability in publicly listed Indonesian transportation companies.

Literature Review

A firm is considered as financially constrained when there is a wedge between the costs of internal and external finance. There are many ways in measuring financial constraint. However, there are 3 ways that is most widely used by researchers. Those are the Kaplan Zingales Index (KZ-Index), Whited Wu Index (WW-Index) and Tobin's Average Q. KZ-Index identify an index of liquidity constraint based on 5

variables: ratio of cash flow to capital; Tobin's average Q; ratio of debt to capital; ratio of dividends to capital; and ratio of cash to capital (Tang & Wei, 2008). WW Index, on the other hand, measure the firm's ability to raise external financing using a set of 6 variables: cash flow; dividend dummy; leverage; total asset; industry sales growth; and firm sales growth (Bodnaruk, Loughran, & McDonald, 2013).

Tobin's average Q is the ratio of the market value of a firm's assets (as measured by the market value of its outstanding stock and debt) to the replacement cost of the firm's assets (Carlton & Perloff, 2000). According to Cava in 2005 had done some research to identify financially constrained firm by looking at the dividend payout ratios, age, firm size, the degree of ownership, industrial group membership, the nature of the bank-firm correlation and the presence of bond rating.

According to Frochoux & Fresard (2004) had developed a new framework by connecting financial constraints to firms demand or liquidity, because they believe that the liquid balance sheets are the important key for investment policies. They assume that firms anticipating financial constraints will save cash to overcome future limited access to external funds. However, increasing cash holdings is costly since it diminishes the possibility for current investment. Accordingly, Almeida et al. (2004) assume a financially unconstrained firm is a firm that has a perfect access to external finance, which is irrelevant for the firm to increase its level of liquidity. On the other hand, they assume that in order to balance current and future valuable investments, financially constrained firms show a systematic propensity to transform cash flow into cash holdings. Referring to the cash flow sensitivity of cash, they argue that looking at the propensity of saving cash out of cash flow provides a valid and theoretically founded measure of financial constraints (Frochoux & Frésard, 2004).

There is no actual standard in determining the size of a firm. However, the firm size can be a measure in some methods, namely through sales, employees, assets, or value added features. Other factors affecting the firm size are war, economic systems, respect for basic property rights, the large number of industries, and the interactions between institutional and technological effects (Bodnaruk, Loughran, & McDonald, 2013).

Firms that face larger markets are large themselves, principally. Bodnaruk, Loughran, & McDonald (2013), did research of firm size across industries among 15 European countries and found some criteria for large firms. At the industry level, firms in the utility sector are large. So is the physical capital intensive industries, high wage industries, industries that require little external financing and industries that do a lot of Research and Development. At the country level, countries with efficient judicial systems and richer countries have larger firms. However, the results show that the average size of firms in industries dependent on external finance is larger in countries with better financial markets, suggesting that financial constraints may also keep firms small.

Crisóstomoa et al. (2012) on their findings of research done in Brazil, show that firm size is effectively an important determinant of firms facing financial constraints. Recently, Hadlock & Pierce (2010) confirm the relevance of firm size as an important predictor of financial constraints and created a financial constraint index based on

firm size and age (SA Index) as discussed in the financial constraint sub-chapter (Crisóstomoa, López-Iturriagab, & Valleladob, 2012).

According to Moyen in 2004 on the research to Fazzari, Hubbard, and Petersen (1988) identified firms with low dividends as “most constrained” and firms with high dividends as “least constrained”. The payout ratio also indicates how well earnings support the dividend payments: the lower the ratio, the more secure the dividend because smaller dividends are easier to pay out than larger dividends. Cava (2005) stated that unconstrained firms have no incentive to cut dividend payments while constrained firms can cut dividends to eliminating the cost of internal funds for profitable investment projects. Therefore, firms that cut their nominal dividend payments in the current or previous period are considered as financially constrained.

Interest coverage determines the debt servicing capacity of a firm insofar as fixed interest on long-term loan is concerned (Khan & Jain, 2008). Since the extent to which the interest covered by the firm’s earning may affect the firm’s profitability, interest coverage can differentiate between financially constrained and unconstrained firms (Maestro, Miguela, & Pindadoa, 2001). The lower the interest coverage ratio, the fewer earnings are available to meet interest payments, which leads to the company’s higher debt burden and a greater possibility of bankruptcy. To reach the safe point, an interest coverage ratio has to show a result above 1.5. If the ratio result is 1.5 or lower, it indicates that the business is having difficulties in generating income to pay its interest obligations.

Both debt to capital ratio and long-term debt to capital ratio are part of leverage ratio, which shown a relationship between creditor’s funds and owner’s capital. Debt to capital ratio measures the relation between total debt (includes both short-term and long-term liabilities, but does not include operating items such as account payable and accruals) with total capital invested in a business. This ratio reveals the percentage of debt holders’ contribution to total fund invested in a business (Sinha, 2009). The lower the debt to capital ratio, the greater the cushion against creditor’s losses in the event of liquidation. Stockholders, on the other hand, may want more leverage because it can magnify expected earnings (Brigham & Houston, 2013). Long-term debt to capital ratio is important in determining the long-term financial strength of a company. It shows the ability of the company to pay the interest regularly as well as replay the instalment of the principal on due dates or in one lump sum at the time of maturity (Khan & Jain, 2008).

Profitability ratios measure the income or operating success of a company for a given period of time. According to Ferrando & Mulier(2013), indicates that more profitable firms are less likely to face actual financing constraints. They found that various measurements related to profitability of a company is more significant and robust in predicting the actual financial constraints encountered by firms than liquidity or leverage ratios. Firms with higher ROE and higher Profit Margin are less likely to have their actual application for external finance rejected. Also, more profitable firms should have easier access to external finance as they generate more cash flow, which increases the likelihood that they will be able to repay their loans.

ROA examines the ability of return generated by the assets of the firm. It is a very useful measurement to compare the performance of companies within industries.

ROA can be measure by dividing net income to average assets of the company. The high return of assets generated implies that the assets of the company are productive and well managed. In contrast, the low ratio compared to industry may mean that competitors have found a way to operate more efficiently (Poznanski & Gannitso, 2013).

ROE is one of the most important ratios to investors. It measures the profitability from the common stockholders' point of view. It indicates how much the stockholders earned for their investment in the company. The level of debt (financial leverage) on the balance sheet has a large impact on this ratio. Debt magnifies the impact of earnings on ROE during both good and bad years. When large differences between ROA and ROE exist, an investor should closely examine the liquidity and financial risk ratios (Bajkowski, 1999).

Methodology

The purpose of this research is to contribute to how the financial constraints influences the firm profitability with reference to Indonesian Transportation Industries. The study illustrates the relationship between financial constraints indicators towards stock price of 26 Indonesian firms listed on Indonesian Stock Exchange (IDX) for a period of 6 years from 2007 to 2012. The section of the article discuss the firms and variable included in the study, the distribution patterns of data and applied statistical technique in investigating the relationship financial constraints and profitability.

1. Data and Sample

The data used in this study was acquired from Indonesian Stock Exchange (IDX), internet and websites of different firms. Data of firms listed on the IDX for the most recent six years formed the basis of calculations starting from 2007 to 2012. The reason for restricting to this period was that the latest data available for the study was available for this period. The sample is based on financial statement of 26 Indonesian Firms, listed on IDX which concentrate on Transportation Firms. The profitability measurement used in this research is ROA, ROE and NPM, while the financial constraints is represented by cash flow, firm size, dividend payout, to total capital, long term debt total capital and interest coverage. In addition to that, the calculation of data is based on average of 6 years.

2. Variables

This study implements the issue identifying key financial constraints variables influencing company profitability of Indonesian firms. Choice of the variables is influenced by the previous study on profitability affected by financial constraints factors.

All the variables stated below have been used to test the hypotheses of this study. They include defendant and independent variables:

The total cash flow is the sum of three cash activities; operating activities (sales of goods and service), investing activities (sale or purchase of an asset) and financing activities (borrowings).

Dividend payout ratio is calculated by dividing the yearly dividend per share to earnings per share or equivalently dividends to net income(Moyen, 2004).

Total asset can be used to evaluate a company and give a sense of the size of the company.

Interest coverage ratio indicates the percentage of earnings available to meet interest payment. It measure the ability of a company in generate income to pay its interest obligations.

Debt to capital ratio measures the relation between total debt (includes both short-term and long-term liabilities, but does not include operating items such as account payable and accruals) with total capital invested in a business(Sinha 2009).

ROA can be measure by dividing net income to average assets of the company(Weygant, Kimmel and Kieso, 2012).

ROE is calculated by dividing net income available to the common stockholder to average common stockholder's equity(Weygant, Kimmel and Kieso, 2012).

Net profit margin is the ratio of net profits/losses for the period with total sales(Weygant, Kimmel and Kieso, 2012).

3. Hypothesis

Since the objective is this study is to examine the relationship between profitability and financial constraints factors, the study makes a set of testable hypotheses (the Null Hypotheses H_0 Versus the Alternative ones H_1)

Hypothesis 1

The first hypothesis of this study is as follows:

H_0 : Cash flow, firm size, dividend payout, interest coverage, debt to capital ratio, and long term debt to capital ratio as a measurement of financial constraint do not affect the firm's ROA.

H_1 : Cash flow, firm size, dividend payout, interest coverage, debt to capital ratio, and long term debt to capital ratio as a measurement of financial constraint affect the firm's ROA.

Hypothesis 2

The Second hypothesis of this study is as follows:

H_0 : Cash flow, firm size, dividend payout, interest coverage, debt to capital ratio, and long term debt to capital ratio as a measurement of financial constraint do not affect the firm's ROE.

H_1 : Cash flow, firm size, dividend payout, interest coverage, debt to capital ratio, and long term debt to capital ratio as a measurement of financial constraint affect the firm's ROE.

Hypothesis 3

The Third hypothesis of this study is as follows:

H_0 : Cash flow, firm size, dividend payout, interest coverage, debt to capital ratio, and long term debt to capital ratio as a measurement of financial constraint do not affect the firm's NPM.

H_1 : Cash flow, firm size, dividend payout, interest coverage, debt to capital ratio, and long term debt to capital ratio as a measurement of financial constraint affect the firm's NPM.

4. Model

The regression model used in this study is the multiple regression model. Multiple regression model is the extended version of the bivariate linear regression (Cooper & Schindler, 2011). It measures the correlation between one dependent variable with many independent variables. The generalized equation due to the incorporation of multiple independent variables is as follows:

$$Y_{i,t} = \beta_0 + \beta_1 X_{1,i,t} + \beta_2 X_{2,i,t} + \beta_3 X_{3,i,t} + \beta_n X_n + \varepsilon$$

Based on this study, however, the multiple regression model is estimated as follows:

1. $ROA_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FS_{i,t} + \beta_3 DP_{i,t} + \beta_4 IC_{i,t} + \beta_5 DTC_{i,t} + \beta_6 LTC_{i,t} + \varepsilon_{i,t}$
2. $ROE_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FS_{i,t} + \beta_3 DP_{i,t} + \beta_4 IC_{i,t} + \beta_5 DTC_{i,t} + \beta_6 LTC_{i,t} + \varepsilon_{i,t}$
3. $NPM_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FS_{i,t} + \beta_3 DP_{i,t} + \beta_4 IC_{i,t} + \beta_5 DTC_{i,t} + \beta_6 LTC_{i,t} + \varepsilon_{i,t}$

Where:

$ROA_{i,t}$	= Return on Asset yearly of company i in year t .
$ROE_{i,t}$	= Return on Equity yearly of company i in year t .
$PM_{i,t}$	= Profit Margin yearly of company i in year t .
β_0	= A constant, the value of Y when X values are zero.
β_n	= The slope of regression surface (represent the regression coefficient associated with each variables).
$CF_{i,t}$	= Cash flow yearly of company i in year t .
$FS_{i,t}$	= Firm Size yearly of company i in year t .
$DP_{i,t}$	= Dividend payout yearly of company i in year t .
$IC_{i,t}$	= Interest coverage yearly of company i in year t .
$D_TC_{i,t}$	= Debt to total capital yearly of company i in year t .
$LD_TC_{i,t}$	= Long term debt to total capital t yearly of company i in year t .
$\varepsilon_{i,t}$	= An error term, normally distributed about a mean of assumed to be 0.

5. Data Analysis

This research provided two data analysis: descriptive and quantitative. The descriptive analysis is to help to describe relevant aspect of phenomena of company performance and provide detailed information about each relevant variables in this research. In quantitative analysis is uses the pooled regression type of panel data. The pooled regression, also called the constant and the coefficients model is one where both intercepts and slopes are constant. Before the regression analysis is conducted the classical assumptions are being tested, Classic Assumption is consists of 4 assumptions. They are normality, multicollinearity, autocorrelation and heterocedasticity assumptions. The model has to pass this assumption to result in unbiased model. Unbiased model is needed to generalize the result beyond the samples and serve wider population. However, if the model violates the assumption,

conclusion still can be made for this sample. It means the research cannot be use for larger population (Field, 2011). Goodness of Fit measures a model validity to explain the phenomenon that becomes purpose of a research. Goodness of Fit is consists of 3 Test, R square, F-test and t-test (Field, 2011). For this purpose of analysis the SPSS 15.1 software was used to analyzse the financial data especially in the case of panel data.

Data and Research Results

1. Descriptive Statistics

The followings are the descriptive statistics results for ROA, ROE and NPM.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	101	-7.50	3.66	-.0209	.85050
D_TC	112	-421.25	933.68	40.1387	108.57663
LTD_TC	106	-421.25	945.27	32.6403	116.47956
CF	89	-2E+012	3E+012	1E+011	5.200E+011
FS	116	-1E+007	2E+007	1636941	3734641.701
DP	62	-5.68	10.44	.0973	1.52288
IC	103	-317.31	458.23	1.4238	65.60022
Valid N (listwise)	35				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROE	80	-12.31	.39	-.2262	1.48815
D_TC	114	-527.15	926.09	30.5799	110.18033
LTD_TC	107	-527.15	939.99	25.7521	117.95004
CF	91	-2E+012	3E+012	7E+010	5.198E+011
FS	118	-1E+007	2E+007	1254183	3519088.091
DP	63	-6.82	10.44	.0722	1.58613
IC	105	-416.53	457.73	-.0340	72.82025
Valid N (listwise)	28				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
NPM	111	-1.61	20.79	.1549	2.01347
D_TC	113	-151.15	953.06	58.7005	106.32000
LTD_TC	107	-151.15	958.73	48.2921	115.70774
CF	90	-8E+011	3E+012	2E+011	5.507E+011
FS	117	-4363863	2E+007	2505411	4635212.704
DP	63	-2.78	10.44	.1559	1.36812
IC	104	-115.59	459.48	5.1207	51.66933
Valid N (listwise)	37				

Table 1: Descriptive Statistics of ROA, ROE and NPM
Source: SPSS

As seen on the table 1, the mean value and standard deviation of 101 observations for the ROA is -0.02% and 0.85%, with the lowest percentage of -7.5% and the highest percentage of 3.66%. The mean value and standard deviation of 80 observations for the ROE is -0.23% and 1.49%, with the lowest percentage of -12.31% and the highest percentage of 0.39%. The mean value and standard deviation of 111 observations for the NPM is 37% and 2.01%, with the lowest percentage of -1.61% and the highest percentage of 20.79%. The value of standard deviation indicates the diversity of the data. If the number of the data is away from 0 or 1, then the data is supposed to be highly variable. On the other hand, if the data approaching 0 then the data does not vary.

2. Assumption Tests

The following data is illustrating the assumption test of normality, multicollinearity, autocorrelation and heteroscedasticity results for ROA, ROE and NPM.

- Return on Asset (ROA)

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		35
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.06970561
Most Extreme Differences	Absolute	.094
	Positive	.087
	Negative	-.094
Kolmogorov-Smirnov Z		.556
Asymp. Sig. (2-tailed)		.917

a. Test distribution is Normal.

b. Calculated from data.

- Return on Equity (ROE)

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		28
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.12032608
Most Extreme Differences	Absolute	.121
	Positive	.121
	Negative	-.111
Kolmogorov-Smirnov Z		.643
Asymp. Sig. (2-tailed)		.803

a. Test distribution is Normal.

b. Calculated from data.

- Profit Margin (NPM)

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		37
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.29034989
Most Extreme Differences	Absolute	.156
	Positive	.102
	Negative	-.156
Kolmogorov-Smirnov Z		.947
Asymp. Sig. (2-tailed)		.332

a. Test distribution is Normal.

b. Calculated from data.

Table 2: Normality Distribution of ROA, ROE and NPM
Source: SPSS

Based on the normality test with the Kolmogorov-Smirnov, the table 2 above shown the same results of ROA, ROE and NPM. They have Asymp. significant value greater than 0.05, which are 0.917, 0.803 and 0.332 . Thus, it can be concluded that the data is normally distributed.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.162	.051		3.181	.004		
	D_TC	-.016	.004	-.1244	-4.102	.001	.202	4.940
	LTD_TC	.004	.003	.331	1.197	.245	.243	4.107
	CF	5.91E-014	.000	.142	.502	.621	.233	4.298
	FS	1.36E-008	.000	.308	.866	.396	.147	6.798
	DP	.005	.011	.056	.398	.695	.925	1.081
	IC	-.003	.002	-.341	-2.268	.034	.824	1.214

a. Dependent Variable: ROE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.030	.019		1.598	.121		
	D_TC	-.001	.000	-.765	-2.931	.007	.354	2.827
	LTD_TC	.000	.000	.337	1.297	.205	.357	2.799
	CF	5.68E-014	.000	.273	.907	.372	.267	3.749
	FS	-4.9E-009	.000	-.229	-.763	.452	.268	3.736
	DP	.001	.007	.036	.228	.821	.982	1.018
	IC	9.87E-005	.001	.016	.105	.917	.983	1.017

a. Dependent Variable: ROA

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.102	.082		1.246	.223		
	D_TC	-.002	.001	-.308	-1.514	.140	.357	2.804
	LTD_TC	.000	.001	-.127	-.632	.532	.363	2.753
	CF	7.89E-013	.000	.693	3.317	.002	.339	2.952
	FS	-8.2E-008	.000	-.773	-3.675	.001	.335	2.988
	DP	.006	.030	.026	.215	.831	.980	1.020
	IC	.009	.007	.174	1.401	.171	.962	1.039

a. Dependent Variable: NPM

Table 3: Results of Multicollinearity of ROA, ROE and NPM
Source: SPSS

According to Table 3: The multicollinearity test, the regression dependant variables are ROA, ROE and NPM. The results of VIF (Variance Inflation Factor) are greater than 0.1 and smaller than 10 for all three dependant variables. Therefore, this regression model is showing that there is no multicollinearity.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.570 ^a	.325	.181	.07681	1.842

a. Predictors: (Constant), IC, D_TC, DP, FS, LTD_TC, CF

b. Dependent Variable: ROA

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781 ^a	.609	.498	.13644	2.063

a. Predictors: (Constant), IC, DP, FS, LTD_TC, CF, D_TC

b. Dependent Variable: ROE

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.746 ^a	.556	.467	.31806	2.368

a. Predictors: (Constant), IC, LTD_TC, DP, CF, D_TC, FS

b. Dependent Variable: NPM

Table 4: Results of Autocorrelation Test of ROA, ROE and NPM
Source: SPSS

According to Table 4: The autocorrelation test model summary for ROA, ROE and NPM the value of Durbin-Watson is 1,842, 2.063 and 2.368 respectively. The result of 'd' value will be compared to the Durbin Watson zone of rejection. Because of the 'd' value of ROA is between the d_u and d_l values, and also the 'd' value of ROE and NPM is between $4-d_u$ and $4-d_l$, means that all the variables are inconclusive or autocorrelation but still tolerable in the regression model.

	ROA	ROE	NPM	
Variable	Sig	Sig	Sig	Results
D_TC	0.477	0.809	0.408	Heteroscedascity is not occur
LTD_TC	0.718	0.282	0.666	Heteroscedascity is not occur
CF	0.974	0.567	0.373	Heteroscedascity is not occur
FS	0.992	0.671	0.288	Heteroscedascity is not occur
DP	0.709	0.295	0.856	Heteroscedascity is not occur
IC	0.599	0.589	0.678	Heteroscedascity is not occur

Table 5: Results of Heteroscedascity Test of ROA, ROE and NPM
Source: SPSS

As seen on the table above, it contains the significance value for each variable. The table indicates the result of the significance value greater than 0.05, which means that there is no heteroscedascity occur in this model.

3. Research Results

$$\text{ROA} = 0.030 + 0.00000000000000568 \text{ CF} - 0.0000000049 \text{ FS} + 0.001 \text{ DP} + 0.0000987 \text{ IC} - 0.001 \text{ D_TC} + 0.000 \text{ LT_DC} + 0.019$$

Variable	Common Effect		H ₀ Results	Description
	Coefficient	Sig.		
C	0.030	0.121	-	-
D_TC	-0.001	0.007***	H ₀ Rejected	Debt to capital ratio is affecting ROA
LTD_TC	0.000	0.205	H ₀ Accepted	Long-term debt to capital ratio is not affecting ROA
CF	5.68e-014	0.372	H ₀ Accepted	Cash flow is not affecting ROA
FS	-4.9e-009	0.452	H ₀ Accepted	Firm size is not affecting ROA
DP	0.001	0.821	H ₀ Accepted	Dividend payout is not affecting ROA
IC	9.87e-005	0.917	H ₀ Accepted	Interest coverage is not affecting ROA
R	0.570			

R Squared	0.325
Adj. R Square	0.181
F-Stat	2.248
Prob. (F-Stat)	0.068*

Table 6: Results of Ordinary Least Squares Regression on ROA

Source: SPSS

*Significant at 10%

**Significant at 5%

***Significant at 1%

According to

Table 6 shows the result of T-test on ROA. It shown that the long term debt to capital ratio, cash flow, firm size, dividend payout and interest coverage variables does not affect ROA. While debt to capital ratio variable has a significant negative effect at 1%. This also means that only debt to capital ratio that is significantly affecting ROA at 1%. The R^2 value of ROA is 0.325. It indicates that the ROA is affected by all of the independent variables of 32.5%. The remaining value that is influenced by other variables is not included in the model. the p-value of ordinary least square ROA is $0.068 < 0.10$, this means that the model can be used in the research. Therefore, the alternative hypothesis(H1) of hypothesis 1 is accepted.

$$ROE = 0.162 + 0.00000000000000591 CF + 0.0000000136 FS + 0.005 DP - 0.003 IC - 0.016 D_TC + 0.004 LTD_DC + 0.051$$

Variable	Common Effect		H ₀ Results	Description
	Coefficient	Sig.		
C	0.162	0.004	-	-
D_TC	-0.016	0.001***	H ₀ Rejected	Debt to capital ratio is affecting ROE
LTD_TC	0.004	0.245	H ₀ Accepted	Long-term debt to capital ratio does not affecting ROE
CF	5.91e-014	0.621	H ₀ Accepted	Cash flow does not affecting ROE
FS	1.36e-008	0.396	H ₀ Accepted	Firm size does not affecting ROE
DP	0.005	0.695	H ₀ Accepted	Dividend payout does not affecting ROE
IC	-0.003	0.034**	H ₀ Rejected	Interest coverage is affecting ROE
R	0.781			
R Squared	0.609			
Adj. R Square	0.498			
F Stat	5.458			
Prob (F Stat)	0.001***			

Table 7: Results of Ordinary Least Squares Regression on ROE

Source: SPSS

*Significant at 10%

**Significant at 5%

***Significant at 1%

Table 7 shows that the long-term debt, cash flow, firm size and dividend payout variables does not affect ROE. The debt to capital ratio and interest coverage variable has a significant negative effect at 1% and 5% respectively. Table above show the results of F-test ordinary least squares for ROE p-value is $0.001 < 0.10$, which mean that H_0 is rejected. The R_2 values of ROE is 0.609. It indicates that the dependent variable is affected by all of the independent variables of 60.9%. Whereas, the remaining value that is influenced by other variables not included in the model. Therefore, the alternative hypothesis of hypothesis 2 is accepted.

$$\text{NPM} = 0.102 + 0.0000000000000789 \text{ CF} - 0.000000082 \text{ FS} + 0.006 \text{ DP} + 0.009 \text{ IC} - 0.002 \text{ D_TC} + 0.000 \text{ LT_DC} + 0.082$$

Variable	Common Effect		H ₀ Results	Description
	Coefficient	Sig.		
C	0.102	0.223	-	-
D_TC	-0.002	0.140	H ₀ Accepted	Debt to capital ratio is not affecting NPM
LTD_TC	0.000	0.532	H ₀ Accepted	Long-term debt to capital ratio is not affecting NPM
CF	7.89e-013	0.002***	H ₀ Rejected	Cash flow is affecting NPM
FS	-8.2e-008	0.001***	H ₀ Rejected	Firm size is affecting NPM
DP	0.006	0.831	H ₀ Accepted	Dividend payout is not affecting NPM
IC	0.009	0.171	H ₀ Accepted	Interest coverage is not affecting NPM
R	0.746			
R Squared	0.556			
Adj. R Square	0.467			
F Stat	6.267			
Prob (F Stat)	0.000***			

Table 8: Results of Ordinary Least Squares Regression on NPM
Source: SPSS

*Significant at 10%

**Significant at 5%

***Significant at 1%

The result of T-test on NPM is shown on the above table. The cash flow has a positive effect, while firm size has a negative effect. Both are affecting at 1% significant level. This means that those variables are significantly affect NPM on the positive and negative relationship at 1%. It is shown that the p-value $0.000 < 0.10$, which means that H_0 is rejected. The R_2 values of NPM is 0.556. It indicates that only 55.6% of the NPM is affected by all variable of the financial constraints. The remaining value

influenced by other variables is not included in the model. Therefore, the alternative hypothesis of hypothesis 3 is accepted.

Conclusion

The ROA is only significantly negative affected by debt to capital ratio at 1% significant level. While, the remaining variables shown no relationship to ROA. The ROE is affected by debt to capital ratio at negative relationship at 1% significant level and negative relationship of interest coverage ratio at 5% significant level. Cash flow and firm size variables are affecting profit margin (NPM). Cash flow is positively impacts the profit margin with 1 percent significance level, while firm size shown a negative relationship and significant impact with 1 percent significance level. Moreover, due to the weak correlation between selected financial constraints with firm's profitability, hence the result of this research is to reject H_0 and approve H_1 for all hypotheses. Also, the data sample used in this study cannot be generalized to any other sample of data. Different samples of data may result in different conclusions.

It is recommended for further study to add indicators such as financial slack, Tobin's average Q, firm age or sensitivity of investment to cash flow as independent variable as well as dependent variables such as stock return, working capital management or cost of capital. Firm size can be viewed as size of industry, place and market categories and probably from total sales, employees or value added features.

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The logo for the International Association of Business and Finance (iafor) is centered on the page. It features the lowercase letters "iafor" in a light blue, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs: a light blue arc on the right and a light red arc on the left, creating a partial ring around the text.



***University Branding and Rural Tourism through the
Interactive Information Kiosk System***

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Abstract

This paper discusses the use of Interactive Information Kiosk System on the development of university-based location in order to enhance tourism for the rural city in Taiwan. The Interactive Information Kiosk System is a touch screen technology relatively new for universities in Taiwan, particularly in remote areas. Further, the Interactive Information Kiosk System is suggested as an effective mechanism in providing update information and drawing attention to users. Place branding and subsequent image-building to a destination tend to be created by means of the Interactive Information Kiosk System. The university may create branding by employing this proposed system. Apart from serving as enhancement in giving out current information to staff and students of the university, the proposed system may attract visitors because of an interactive approach through its touch screen interface. In addition, the Interactive Information Kiosk System may have the potential to strengthen the tourism destination brand for the studied university.

Keywords: place branding, tourism, university, interactive information system

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Introduction

Taiwanese government has been focused on promoting Taiwan as a tourist destination and continues to establish the country as an international tourist destination and will expect the expansion of inbound arrivals at an average annual rate of 5 % over the forecast period 2010 to 2015 (Euromonitor International, 2011). For domestic tourism, Taiwanese consumers have been gradually spending more money on travel and entertainment activities due to the economic recovery from the global financial crisis. According to Tourism Bureau, M.O.T.C. Republic of China Taiwan (2014), a number of inbound Taiwanese tourists increased approximately 10% while the total amount in tourist expenditures grew 5% to reach US\$ 1.23 billion over latest recorded period from 2012 to 2013.

As part of national policy regarding tourism, Taiwanese national government collaborated with regional authorities will continue to promote tourism in order to boost the entire country economy owing to perceived importance as a key income generator to local communities. This notion is confirmed by Cooper, Fletcher, Fyall, Gilbert, and Wanhall (2008) that tourism exponentially increased local economic growth opportunities. Lane (1994) also indicates that rural tourism has often been identified as a vehicle for protecting the countryside resource, enhancing the rural economy and maintaining rural ways of life. In this regard, Taiwanese government has provided assistance to local governments in establishing a comprehensive travel network since 2009 (Lai, 2010). With encouragement from the national government, most local governments actively sought to develop and promote their tourist highlights.

Rural tourism has been recognized as an emergent sector of tourism globally (Oh & Schuett, 2010) and is becoming interestingly topic to investigate (Polo Peña & Frías Jamilena, 2010; Sharpley & Jepson, 2011). Hence, the research objective is deemed to introduce the use of interactive information kiosk system in order to provide updated information about the university announcements and local tourist information.

Place Branding and Image

A brand is particular product, service, person or place, augmented in such a way that the consumer perceives relevant, unique added values to match their needs. Brands convey a variety of meanings including attributes, benefits, culture, personality, and values. Furthermore, brands are market-based assets and therefore intangible assets of enterprises (Kotler & Keller, 2009). Schmitt (1999) suggests a place's brand refers to the sum of perceptions and cognitive associations resulting in memorable experiences linked to a certain place. Branding a place is an essential tool used to differentiate a specific place from competitors, to assist organizations gain sustainable competitive advantage (Grant, 2006; Hall, 2008; Hill & Lederer 2001; Park & Petrick, 2006), and more importantly to create image of the place in order to draw tourists' attention (Medway & Warnaby, 2008). This is consistent with Cai (2002)'s widely accepted definition about place branding as the development of a consistent element mix to identify and differentiate place through positive image building. Ashworth (2009) also asserts that the purpose of place branding is to find out or build some uniqueness different one place from others so as to achieve the competitive advantages. Branding place is the process of building an asset, and therefore place branding is recognized as

significant area of tourism marketing due to the competitive market settings and need for place differentiation (Mak, 2011).

Tourism is recognized as an image-driven industry (Elliot, Papadopoulos, & Kim, 2011). Additionally, image is considered as a key attribute of place branding and has been currently used to refer reputation or character of tourist places or destinations (Smith, 2005). In this regard, the success of tourist destinations resulted from a significant role of image because image serves to represent a simplification of a large number of associations and pieces of information connected with the place and fulfill a fundamental function in the choice process, as tourists generally have a limited knowledge of destinations to which they have not been previously.

According to Day, Skidmore, and Koller (2002), place image represents the sum of beliefs, attitudes and impressions that people have of a place. Selby and Morgan (1996) address that place image in tourism studies is classified into two dimensions: organic and projected. Organic image involves popular culture, the media, literature and education that tourists have been developed through non-tourism sources such as friends' comments, newspaper or television reports and magazine articles. Unlike organic sources, projected image comprises commercial sources such as travel guidebooks and various sources of advertisements that derive from deliberate effort of travel promotion by official tourist organizations.

Place image has also involved with rural tourism business. The use of images is likely to promote a rural tourism destination through providing rural tourists with things to do and attractions to visit and reinforce the contribution made by local traditions and customs in making a tourist's stay memorable (Garrod, Wornell, & Youell, 2006). Wheeler, Frost, and Weiler (2011) also suggested that branding of rural tourism should be driven by political agendas in response to the growing competition between places owing to the economic restructuring of market globally.

In this research, the interactive information kiosk system would be categorized as projected image that help local community to promote rural tourism industry in Taiwan. A key task of place branding is to differentiate a particular offering from other competitors and to create an attractive place image (Medway & Warnaby, 2008), and hence, the interactive information kiosk system set up in the university will make local community more distinguishable, attractive, and memorable among other competitors. This proposed system tends to create its place branding and subsequent image-building.

Conceptual Framework

This study applied a conceptual framework to help build a model that attempts to explain how to utilize the interactive information kiosk system. The interactive information kiosk system acts as a portal for the flow of information from the university information center to the users, who can be direct and indirect. These users are the ones who access the information through storing and inquiring from the kiosk. The users can be tourists, students, faculty or any persons interested in more information about local tourist places and the university. The system possesses functionalities necessary for the requirements intended for its use. The transfer of data is a form of virtual communication from one end-user to another made possible

through the use of the interactive information kiosk system. Successful results are shown by means of qualitative data that is delivered to end-users. The output is a complete and updated post about activities and events fed to the information center. To add more is the reliability of the system which acts as an expert for information query and retrieval functionalities. Figure 1 provides an overview of the conceptual framework.

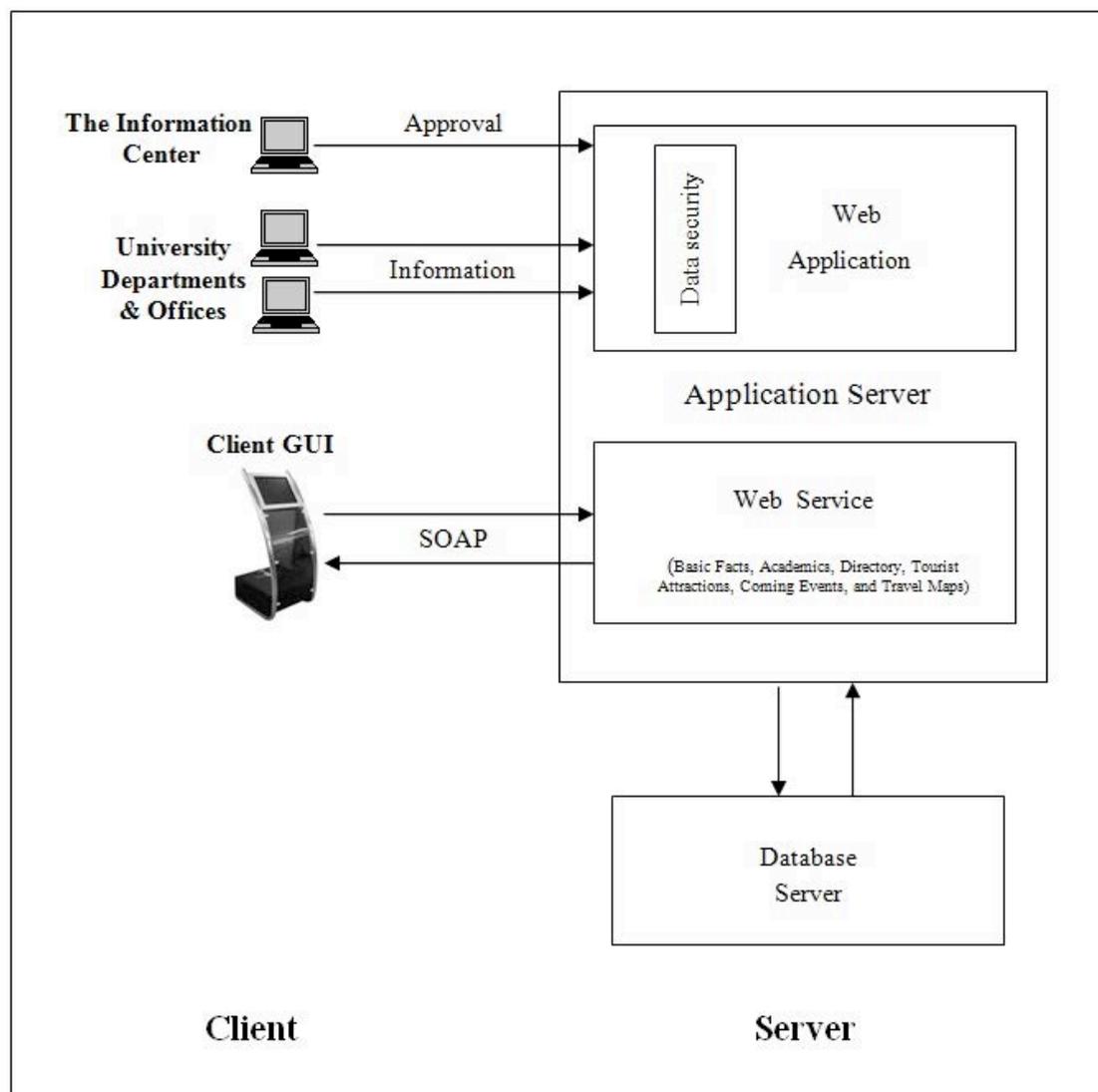


Figure 1: Conceptual framework-Interactive information kiosk system.

Data Security

In order to achieve data security, a method of data encryption and the Adobe Flex Security is utilized in the interactive information kiosk system. Data encryption enables solely information center personnel, through password protection and authorization, to alter or adjust the database. Only the information center can load, change, and delete data from the database, which requires password authentication. For instance, other people may alter the information saved in the system. Users will be asked first to log-in and be prompted by a password. If password is incorrect, they will not be able to load changes on the information saved. In addition, the Adobe Flex

Security model protects both the client and the server. Adobe Flex considers the authorization and authentication of users accessing a server's resources, and Flash Player operating in a sandbox on the client. Authentication and authorization are given greatest importance. Authentication is the process of gathering user credentials and validating them in the system. This requires checking the credentials against a user repository. Authorization is the process of making sure that the authenticated user is allowed to view or access a given resource. If a user is not authorized to view a resource, the container does not allow access. Therefore, the Adobe Flex Security system helps the group in coding the system and manipulating the program easily in order to enhance security for the users of the interactive information kiosk system applicable only to information center personnel who will be directly loading the information.

Instructional Design

The instructional design to be applied in the proposed system originates from the principle of the cognitive theory of multimedia learning (Mayer, 2010). This theory encompasses several principles of learning with multimedia. In multimedia learning, the learner engages in three important cognitive processes: selecting, organizing, and integrating. The multimedia effect is consistent with the cognitive theory of multimedia learning because users who are given multimedia explanations are able to build two different mental representations, a verbal model and a visual model, and build connections between them. This result is consistent with the cognitive theory of multimedia learning because corresponding words and pictures must be in working memory at the same time in order to facilitate the construction of referential links between them. The stated principles are taken into consideration on how the graphical user interface (GUI) of the interactive information kiosk system is designed. Because a simple desktop or laptop is different on a touch screen, a plan must be made to refurbish the layout and GUI of the interactive information kiosk system. The GUI is carefully structured to guarantee user-friendliness, understandability, and ease of use.

Service-oriented Architecture Protocol

Service-oriented architecture protocol (SOAP) is a system used for exchanging XML-based messages over computer networks, normally using HTTP/HTTPS. SOAP forms the foundational layer of the Web services stack, providing a basic messaging framework on which more abstract layers can build. SOAP has several different types of messaging patterns, but by far the most common is the remote procedure call pattern, in which one network node (the client) sends a request message to another node (the server), and the server immediately sends a response message to the client. The use of SOAP in the proposed system is to be the client messaging framework. This can be seen in the conceptual framework wherein SOAP will be the messaging protocol of sending and receiving information at the client side. The use of SOAP will give the information dissemination functions greater flexibility and reusability. The interactive information kiosk system's common functions can be used easily and interchangeably.

Web Service

Web service is an interface for service-oriented architecture, in which Web-based applications dynamically interact with other Web applications using open standards that include XML running over HTTP, UDDI, and SOAP. Web Service is a software

system designed to support interoperable machine-to-machine interaction over a network. SOAP provides the definition of the XML-based format that can be used for exchanging structured and typed information between a Web-service client and a Web-service server. The use of the Web service relates to the client-server architecture of the interactive information kiosk system. Information query and retrieval is done with ease through the use of this service. Web service will be used to exchange data between the client and the server side. In this kind of controlled environment, the agreement on the data being passed through the Web service is easily obtained.

Application Server

An application server is a software engine that delivers applications to client computers or devices. In addition, an application server handles most, if not all, of the business logic and data access of the application. The main benefit of an application server is the ease of application development. Since applications need not be programmed, these applications are assembled from building blocks provided by the application server. The application server will be used in the implementation of the proposed interactive information kiosk system. The application server in the client/server environment will provide processing between the user's machine and the database management system.

Database Server

A database server is a computer in a local area network dedicated to database storage and retrieval and holds the database management system and other databases. Upon the requests from the client machines, this machine searches the database for selected records and passes them back over the network. The database server in the proposed system can be in the form of a computer unit with features and specifications that meets the requirements for installing the Windows Server. This will be used for storage of information as well as information retrieval.

Client-server Architecture

Client-server architecture introduces a database server to replace the file server. Using a relational database management system, user queries could be answered directly. The client-server architecture reduces network traffic by providing a query response rather than a total file transfer and improves multi-user updating through a GUI front end to a shared database. The client-server software architecture model distinguishes client systems from server systems. A client software process may initiate a communication session, while the server waits for requests from any client. The client-server architecture will be used in the implementation of the interactive information kiosk system. Rather than by approaching individual kiosks, the information center will have its own server which can load, change, or delete the information to be displayed by each kiosk.

Shortest Path

The problem of finding shortest paths in a graph has a surprising variety of applications. The most obvious applications arise in transportation or communications, such as finding the best route to drive between destinations. The shortest path algorithm is used in the proposed system to find a variety of ways or paths in order to arrive at a certain destination; wherein for every origin and destination which will be only one shortest path possible.

Methodology

In developing the system, a rapid application development (RAD) was employed. The RAD is a team-based technique that speeds up information system development and produces a functioning information system. Further, the RAD is a complete methodology to information systems development, with a four-phase life cycle, which covers a complete life cycle from beginning to delivery and additionally parallels the traditional system development life cycle phases (Shelly, Cashman, & Rosenblatt, 2008), as described below.

Requirements Gathering and Planning

In the very first part of conducting the research, the team consulted the information center through its staff for the necessary requirements needed for the system. The problems encountered by the information center were gathered in this phase. The team observed that a touch-screen, stand-alone kiosk, cables and wires, and central processing unit (CPU) were necessary for implementation. The team used data-gathering methods such as personal interviews and observation. Brainstorming was also conducted and regular meetings of the team were done to further analyze if the system were possible and feasible.

Design and Implementation

Based on the requirements gathered, the team carefully planned and started considering the features of the system. Models were created representing the entire system process. The team first constructed the flow of the proposed system using a data flow diagram in order to have a better understanding of how the system should work. An entity-relationship diagram was used to design the database structure, and a functional diagram was used to determine the different modules to be included in the system. The basic layout of the interface or the GUI was created in this phase.

Construction and Development

During this phase, the team started the programming phase hand-in-hand with technologies released by Adobe Systems for the development and deployment of cross-platform rich internet applications. The team began the development of the MXML, XML-based user interface markup language to lay out the interface of applications. The system was open to more user feedback to check system faults and shortages as well as to check that requirements were being met to improve the system before continuing to the final phase. Feedback that was given by the users made the group go back to the design and implementation phase in order to consider the specified comments and suggestions.

Introducing the System

After all the testing has been completed, the interactive information kiosk system will be introduced to the users. The system will be deployed in the university and will be made available for the benefit of both the direct and indirect users such as the tourists, students, faculty staff, and other interested persons.

To be concluded, the RAD is the most appropriate approach for this proposed system due to its advantages of high interactive and low complexity. In other words, the RAD projects are recommended to be undertaken on applications that are highly interactive, have a clearly defined user group, and are not computationally complex.

The System

The interactive information kiosk system is a stand-alone terminal display designed to provide information about the university and local tourist information to its users. Unlike traditional input devices such as keyboard or mouse, the information can be viewed by using only the touch of a finger. By using the touch screen interface, users will feel at ease due to fast accessibility and the touch screen interface will minimize latency or delay. The interactive information kiosk system will provide more updated, consistent, secured, and reliable information. This will help eliminate problems and misunderstandings regarding slow information delivery.

The default screen that displays whenever the interactive information kiosk system is idle serves as the system's main menu. This main window includes scrolling announcements and access to the following functions: Basic Facts, Academics, Directory, Tourist Attractions, Coming Events, and Travel Maps. These functions are briefly described in the following paragraphs.

Basic Facts: This function displays the university's vision, mission, and philosophy. In the subject of tourism, this menu contains tourist destination history, geography, and climate.

Academics: This function allows users to navigate through the different academic programs of the university including academic departments, graduate schools, institutions, and university policies. This menu includes the submenus such as admission requirements to the university, tuition, and payment for local students and foreign students.

Directory: This function is used for viewing the contact details and information of all the colleges and offices of the university. The information includes the landlines, trunk lines and/or email addresses.

Tourist Attractions: This function allows users to view and navigate through a variety of tourist locations. This menu includes the submenus such as tourist activities and restaurants.

Coming Events: This function is used for viewing a number of events and festivals throughout the countryside during the year. Events listed in this menu are always updated in dates, venues, and details.

Travel Maps: This function allows the user to select the origin and destination within the university or tourist places and computes the shortest path for the given points.

Discussion and Conclusion

The proposed system introduces the multimedia and interactive information in locally-based sphere to benefit the rural tourism industry in Taiwan. The interactive information kiosk system uses a touch-screen interface to display and provide information about the university and regional tourist places to its users. The tourists will have an alternative to receive updated and current tourist messages via the kiosk system when they arrive even after the information center operating hours. Even

though today tourists habitually browse information regarding places to visit via the Internet beforehand, details of information in the Internet are sometimes sketchy. The interactive information kiosk system is designed for multiple-user purpose to be viewed by the users every time as information is newly posted in the system and kiosks are located in designated areas that can always be reached by users anytime.

Furthermore, tourist guide booklets, brochures, and promotional leaflets providing in the tourist information center are frequently not most current or latest due to the limitation of printing process. Seeing this need, the interactive information kiosk system gives a solution for an updated and interactive approach to information input and retrieval, serving the university and the local community through its touch-screen interface and local area network capability. Therefore, in order to replace the conventional practice in information dissemination, this study presents an interactive kiosk system that provides information access via electronic methods. The interactive information kiosk system may serve as an expert system for information query and retrieval. Additionally, the system in this study can also be regarded as an effective mechanism for rural tourism in attracting tourists to experience a new technology in a university site because this system has not previously been utilized among the universities in Taiwan for the locally-based tourism purpose.

For the benefits of university, the university's students, staff, and other users can search required information at anytime although the university information center is closed for the time being. Students also can make use of the system by enabling them to know more about the university's announcements posted by the university information center, which makes them well-informed. Potential students who visit the university site can benefit from the system to encourage them to enroll, and the system will serve as a gateway for them to gain more interest about the university. The university administration can also benefit from the system to disseminate information and provide data for students such as enrollment, payment, and other procedures and policies. Faculty staff can also view updated information on new university policies, events, and holidays. Finally, the staff of the information center can benefit from the system through an organized way of storing the files for announcements and securing these files through database storage.

The interactive information kiosk system may help create regional place branding and image-building as well as university reputation. Universities such as Harvard University and University of Cambridge fortunately have long legendary history so that this helps promote a number of tourists to visit their campus sites. However, for a newly-founded university, uniqueness should be created in order to enhance the university reputation. The university reputation is likely to enhance progressively and publicly since tourists from other places will recognize the university when they explore tourist information from this kiosk located at the campus.

Therefore, the ease of use, interactivity, and flexibility of this system should evoke tourist's attention in gaining innovative travelling experiences and eventually improve the perceived image of the rural tourism destination. Last but not least, this research presents an initiative for locally level tourism planning and development using the interactive information kiosk system in university-based location. In addition, local authorities can not only improve the quality of rural tourism service, but also reduce

cost for tourist information dissemination. Once this proposed system is implemented, potential benefits to the entire community may arise.



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Mapping the Regional Potentials of Public Private Partnership in West Java Province, Indonesia

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Abstract

Mapping regional potentials is attractive to study, among others as a material in developing a partnership between the government and private sector. What is mapping regional potentials ? What are its goals, and what is its status ? The questions were dealt with in the current paper. It contained on Mapping the Regional Potentials of Public Private Partnership in West Java Province, Indonesia. The paper was composed of three parts : first, Introduction, discussing the importance of mapping the regional potentials and the strategic role of such mapping for Public Private Partnership. Second, discussion, discussing the regional potentials in 27 sub-districts of West Java Province as a reference in developing regional partnerships between West Java Province and both Municipalities/District/Provinces domestically and abroad in form of sister city/twin city and private sector in order to resolve any problems and enhance the welfare of West Java Province citizens. And Third, Conclusion. It is hoped that the materials presented in the paper may generate a deeper understanding on Mapping the Regional Potentials of Public Private Partnership in West Java Province, Indonesia.

Keywords : *Public, Private, Partnership*

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Part I. Introduction

Mapping regional potentials is carried out to identify a regional's comparative advantage going to the creation of competitiveness and designing a plan and setting a regional developmental strategy for economic growth, high investment and competitiveness. The potential mapping can provide a direction and policy to be made in the development of regional potential to be more focused and having a firm basis. The regional development is a utilization of resources owned for enhancing society's welfare really, both in income, employment opportunity, business field, access to policy-making, having competitiveness, and the enhancement of human development index (Governmental Regulations of Indonesian Republic Number 8 of 2008 Chapter I Article I).

The approach of Public Private Partnership has been much conducted in infrastructural development in various countries. Several variants in the definition of public private partnership, among other things, are Bult-Spiering and Dewulf, 2006 :

1. Public Private Partnership is a management reformation when the functions of government and bureaucracy experience a change and lighting from their interactions with professional management that is usually owned by private sector.
2. Public Private Partnership is a cooperation in an institutional affiliation from public sector and private sector cooperating together for achieving a certain target when the both parties assume an investment risk on the basis of profit and cost sharing they bear.
3. Public Private Partnership is cooperation between public and private yielding products and services with the risks, costs, and profits they bear together based on the resulting value-added.

The strategic role of mapping regional potentials for *public private partnership* is to support the optimizing of the attainment of regional development objectives more comprehensively by providing an opportunity for the private sector participating in the financing, design, construction as well as operations and maintenance to the public sector's projects and programs. With the presence of mapping regional potentials, the regional government will be more easily and readily for determining the opportunities that may be utilized/developed in creating the economic growth, bridging the private sector to be engaged in the infrastructural development by offering guaranties, incentives and financial returns for the investment conducted, the society's income growth as well as providing an easiness in establishing what is most potential point to develop and having a high value-added, with complete information so that the failure in managing the potential available can be minimized or even avoided, including the activities of exploitation excessively that may disturb the environmental balance.

Based on the background above, there are two questions: How is Mapping regional potentials of public private partnership in West Java Province? How is the Criteria of Cooperation Success between Governments of Cities/Regencies and the Cities/Regencies/Provinces, both domestic and foreign, in the forms of sister city/twin city as well as with Public Private Partnership?

Part II. Discussion

Mapping the regional potentials of Public Private Partnership in West Java Province

Geographically, Province of West Java lies between 5°50' - 7°50' South Latitude and 104°48' - 108°48' East longitude; it is bounded :

- on the north by Java Sea and Special Region of Jakarta
- on the east by Province of Central Java
- on the south by Indonesian Ocean and
- on the west by Province of Banten

The strategic geographic position of Jawa Barat Province has many advantages for this regional, especially from transportation and communication point of view . The north part of West Java is flat land area, while hilly area with a few shores in the south and mountainous area in the central part. Apart from that, Jawa Barat has fertile area which comes from volcanic deposit and that possesses many rivers across so that the most of land are suitable for agriculture. Therefore, this area is intended as National Food Stock Area. Based on the Governmental Regulations of West Java Province Number 22 of 2010 concerning the Regional Space Arrangement Plan of West Java Province in the period 2009 – 2029, it has been described a superior sector developed in each Development Region as follows :

Regional Superior Sector		
No	Areas	Main Activities
I	Bogor, Depok, Bekasi, Cianjur	Tourism, manufacture industry, fishery, trade, service, mining, agribusiness and agro tourist.
II	Purwakarta, Subang, Karawang	Agriculture, plantation, forestry, animal husbandry, fishery, marine business, processing industry, tourism and mining.
III	Sukabumi	Agribusiness, animal husbandry, torism, and marine business.
IV	Cirebon, Indramayu, Majalengka, Kuningan, Sumedang	Agribusiness, agro industry, fishery, mining and tourism.
V	Tasikmalaya, Garut, Ciamis, Banjar	Agriculture, plantation, caught fishery, tourism, processing industry, handicraft industry and mineral mining.
VI	Sukabumi, Cianjur	Animal husbandry, agriculture, paltation, caught fishery, tourism.
VII	Special Areas of Bandung Basin	Agriculture, horticulture, non-polluting industry, creative industry, service trade, tourism and plantation, by enhancing the management of character development of cross-regency/city sharing collectively the role of building and accelerating the realization of PKN Kawasan Perkotaan Bandung Raya.

Source : Finance Ministry, 2012.

Area of Food

The agriculture in West Java Province has generally a large and varied potential, and supported by an agro-ecosystem condition according to the development of agricultural commodities meaning comprehensively: food plant, livestock, fishes, and forests. West Java is as a producer for 40 (forty) commodities of agribusinesses that is largest in Indonesia, particularly paddy commodity contributing 18% to national paddy production. The agricultural sector has also a high labor absorption level: the average 2.65 percent of working population, notwithstanding the percentage of absorption tends to decline. However, the relationship of agricultural subsystems and other sectors has not yet fully indicated a synergism in the regional, regional and national scales. This is reflected from the development of agro-industry that has been not yet optimal in its processing and marketing. The development in a sector manner in the agricultural system as well as non-readiness in dealing with a global competition is an obstacle that is still faced by the agricultural sector. West Java has a potential for the marine economic and fishery development, primarily in the development of caught fishery business at south beach, marine cultivation business, marine biotechnology, as well as various services for marine environment. But the conditions and potentials of large fishery and marine resources have been not yet followed by a good development of business and fishery and marine businesses.

Area of Energy

The region of West Java Province has potentials for various kinds of the renewed and non-renewed natural resources. The potential of non-renewed natural resources are, among other things, oil and natural gas. At national level, West Java contributes about 4% to the national natural oil production and about 11% to national gas production produced from 58 Migas (oil and natural gas) fields, located largely at the north coastal area of West Java. While for the renewed resources, West Java has the potential of geothermal resource about 6,101 MW or 21.7% of the total Indonesian geothermal potential. Until to 2007, about 2.81% of national energy yielded from the geothermal resource has been supplied by the geothermal generating located at West Java. While for the national energy supply stemming from PLTA, West Java contributed about 46.21%. The other non-renewed resource is the mining resource consisting of 40 kinds and dispersed at 16 regencies, and largely dispersed in southern West Java. West Java Province stored the geothermal potential as 6.06 MW comprising 40 manifestation points. Currently the total installed new capacity is by 1,057 MW. In West Java Province there were 7 (seven) Working Area Mining WKP, consisting of 4 (four) WKP of geothermal resource that has been established before the rise of The Law Number 27/2003: WKP Cibereum Parabakti, WKP Pangalengan, WKP Kamojang-Darajat and WKP Karaha Cakrabuana and 3 (three) WKP Panas Bumi that has been established after the rise of The Law Number 27/2003: WKP Tangkuban Perahu, WKP Tampomas and WKP Cisolok Cisukarame. In addition, there were also 2 (two) geothermal efforts in a small scale: the areas of Cibuni and Clater, Tangkuban Perahu. At the present PLTA that has produced in West Java Province is Chevron G. Salak, Ltd having capacity of 375 MW, Star Energy Geothermal, Ltd SEGL, Wayang Windu at capacity of 227 MW, PT Pertamina Geothermal Energy PGE in Kamojang with the capacity of 200 MW and the last Chevron Geothermal Indonesia, Ltd CGI in Darajat with the capacity of 255 MW. The total entire geothermal that has been produced is by 1,057 MW.

Area of Infrastructure

The chance of public private partnership in the infrastructure sector that has been in West Java Province are, among other things, roads, bridges, ports, airport, waste processing, and industry. Currently there were three priorities of infrastructural development that have been attempted: Meat Trade Center of industrial facility in Bandung Regency; the Development of Organic Fertilizer Plant in Bandung Regency, as well as Clean Water Facility Development in Indramayu Regency. The investment level of facilities and infrastructures supporting the marine business as well as the productions of fishery and marine resources are still far from the available potential. On the other hand, the weak conditions of cultivators and fishermen as producers caused the less developed activities and management of the processing industries for the fishery and marine outcomes. The aspects of transportation infrastructures consist of land, air and marine transportations. In the aspect of land transportation, one of indicators in the level of road-infrastructure handling success is the enhanced levels of the road steadiness and condition. In the period of 2003-2007, the level of provincial road network steadiness across 21.18 km has been enhanced from 85.17% to 87.31%. with the steadiness level of 87.31%, 64.36% of the provincial road network length was in a moderate condition. This was caused by the expired age of road plan in largely provincial road portion such that the condition of road structure become to be unstable. The low level of this road steadiness was also caused by the high frequency of natural disaster as well as traffic loads that often exceed the heaviest axis capacity (MST) standard. In addition, the lack of toll-road network, as well as the entire not-yet-integrated road networks in West Java as well, including toll-road network system, caused the low quality and coverage of the road network infrastructure service in West Java. West Java Province has a high concentration level for manufacture, including among other things: electronics, leather industry, food processing, textile, furniture and plane industry. The region of West Java still become the center of modern textile industry and national garment, different from other areas becoming the center of traditional textile industry. The main textile export is about 55.45% of total West Java's export, the others are steel iron, foot base, furniture, rattan, electronics, plane components and the like. West Java Province has various supporting facilities and infrastructures among other things the area of Gobel industry located at Cibitung-Bekasi; Bekasi International Industrial Estate at Cikarang; East Jakarta industrial Park at Lemahabang-Bekasi; and Jababeka Industrial Estate at Cikarang-Bekasi, as well as having Astanajayapura Harbour, Pangandaran Harbour, Gebang Harbour, Special Pertamina Balongan Harbour and Indramayu Harbour.

The presence of Airbus A320 plane owned by Air Asia company at Husein Sastranegara Airport is a large jump in encouraging the movement of the current of goods and people from and to West Java, particularly Bandung City. As main destination city, Bandung City will become access for businessmen and tourists enjoying the natural beauty and potential of West Java. Certainly in the future it must be accompanied by the development of infrastructures and transportation mode successfully again. Among other things to encourage the Development of Kertajati Majalengka Airport and the revitalization of Nusawiru Ciamis Airport.

The infrastructures and transportation hold an important role in the development and movement of economy in the entire area. So that the demand will be the availability of the better infrastructures and transportation become a necessity. Moreover, the advancement of the two proportionate directly with the level of economic progress in

the area. In order to support the growth of the current of goods and people as well as service industry, The Government of West Java Province encourages the availability of transportation infrastructures sufficiently, among other things, doing efforts in the development of toll-road Tol Cileunyi-Sumedang-Dawuan (Cisumdawu), Tol Soreang-Pasir Koja (Soroja), and Bandung Intra Urban Toll Road (BIUTR) or known with Toll inside Bandung City. All of that are used to enhance the acceleration of the economic movement of West Java. The plan of Kertajadi Airport development, revitalization of Nusawiru Airport increasingly facilitates the acceleration of the current of goods, people and services in West Java.

Bandung City still gets a best evaluation in the area of telecommunication and information infrastructures such as in the result of the evaluation of telecommunication and information infrastructures dimension in PeGI 2010. Ciamis Regency and Bogor City experienced the enhancement of the development of telecommunication and information infrastructures that is very rapid. In the result of PeGI 2010 the two obtained the evaluation of lowest infrastructure dimension but nominated into 5 bigs in the area of telecommunication and information infrastructures.

The Criteria of Cooperation Success between Government of Regency/City and Regency/City/Province, both domestically and internationally in the form of sister city/twin city and public private partnership

Globalization and decentralization are a main strength in the world in the last two decades and have caused the regional government generally to be more focused on international relation, Viller (2005). Based on the data of United Cities and Regional Growth (UCGL, 2004) it shows that the enhancement of the number of partnerships , projects, and programs of cities facility to do a cooperation is predicted to achieve 70% of the entire cities in the world. The emergence of these globalization and international regime has eroded the difference between the domestic- and foreign affairs and changed the sharing of responsibilities between central government (country) and regional government (Keating, 1999). In Indonesia, decentralization policy for last 10 years covered in The Law Number 32 of 2004 concerning Regional Government increasingly encourages the linkage of cooperation inter areas both nationally and internationally because in the middle of the limitedness owned by each area, the policy has challenged the regional government to be more responsive to the society's needs and to provide a chance of participation to the society (Bergh, 2004).

The criteria of the success of sister city have been obtained based on the evaluation-related literature study (Dunn, 1998) and the success of sister city in various countries: the research by UNDP, the research of study analysis of the sister city criteria of South Africa by Villers (2009), research by Gomes-Casseres (1998) concerning the success of individual partnership , the analysis of the case study of Yokohama and Penang by Tjandradewi and Marcotullio (2009), and research by SCI (2003) as an international association of sister city.

From the result of literature study, the success criteria is divided into two: performance criteria, and effectiveness criteria. The performance criteria is viewed from input indicator, process and cooperation output. Whereas the effectiveness criteria is the result wished has been achieved from the cooperation (Dunn, 18). The

input is a demand and support required for process at later further delivering output/product of policy. It consists of four sub-indicators: 1) firm leadership; 2) regional characteristic; 3) available resources; 4) national policy and supporting province.

The processes are management measures related to the basis of policy-making. It consists of four sub-indicators: 1) reciprocal relation occurs; 2) routine and two-way communication; 3) involving other stakeholders; and 4) doing innovation. Whereas the output is a response to the input yielded through a process. It consists of one sub-indicator: cooperation agreement. This is important to regard the vision obviously, the accuracy in the scope of cooperation, objectives and aims that not only go to one party, and it has been agreed a cooperation priority accompanied with the budget of resources. All of that have been covered in the written agreement usually in the form of MOU. The agreement is necessarily formulated and then signed by the two parties.

The outcome is a follow-up or implementation of the policy output that has been made previously. After Villers (2009), the implementation is important because all evaluations to the plan that has been agreed have been conducted successfully until now or not. This indicator is used to measure the effectiveness of cooperation becoming one of criteria of cooperation success.

Part III. Conclusion

Mapping regional potentials is carried out to identify a regional's comparative advantage going to the creation of competitiveness and designing a plan and setting a regional developmental strategy for economic growth, high investment and competitiveness. The strategic role of mapping regional potentials for *public private partnership* is to support the optimizing of the attainment of regional development objectives more comprehensively by providing an opportunity for the private sector participating in the financing, design, construction as well as operations and maintenance to the public sector's projects and programs.

The agriculture in West Java Province has generally a large and varied potential, and supported by an agro-ecosystem condition according to the development of agricultural commodities meaning comprehensively: food plant, livestock, fishes, and forests. At national level, West Java contributes about 4% to the national natural oil production and about 11% to national gas production produced from 58 Migas (oil and natural gas) fields, located largely at the north coastal area of West Java. The chance of public private partnership in the infrastructure sector that has been in West Java Province are, among other things, roads, bridges, ports, airport, waste processing, and industry.

The success criteria is divided into two : performance criteria, and effectiveness criteria. The performance criteria is viewed from input indicator, process and cooperation output. Whereas the effectiveness criteria is the result wished has been achieved from the cooperation

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*Japanese Subs for Australia? Developments in Australian Defence
Procurement/Japanese Defence Export Policy*

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Abstract

The Abbott Liberal-National Party (LNP) Coalition government of Australia is currently in search of a replacement for the troubled Collins-class conventional submarine fleet of the Royal Australian Navy (RAN). Coincidentally, defence ties between Australia and Japan have become ever closer in recent times, particularly under the respective conservative governments of Prime Ministers Tony Abbott and Shinzo Abe. Following the signing of a Defence Technology Sharing Agreement *last July*, *there is an increasing prospect that Japanese Soryu-class submarines may be exported to Australia in future.*

The defence technology sharing accord between Australia and Japan complements the Free Trade Agreement (FTA) also recently secured between the two countries, demonstrating their deepening trade and security relations. The sale of *Soryu* submarines to Australia would be the first major combat weapons systems export for Japan in its postwar history, as the Abe Liberal Democratic Party (LDP) government eases the restrictions on defence exports maintained by previous Japanese governments. These moves also complement the decision by the Abe Cabinet to reinterpret Japan's constitution, to allow its Self Defense Forces (SDF) to engage in collective self-defence actions with friendly states, which would certainly include Australia.

Buying submarines from Japan would be the single most expensive military procurement in Australian history, and break an election promise to continue the manufacture of submarines in Australia. If it goes ahead, this decision will have important implications for the domestic politics of both countries, and for the strategic geopolitics of the region.

Keywords: Defence Procurement, Defence Exports, Australia-Japan Relations, Asia-Pacific Geopolitics, Foreign Policy

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Introduction

The Abbott Liberal-National Party (LNP) Coalition government of Australia is currently in search of a replacement for the controversial Collins-class conventional submarine fleet of the Royal Australian Navy (RAN). Coincidentally, defence ties between Australia and Japan have become ever closer in recent times, particularly under the respective conservative governments of Prime Ministers Tony Abbott and Shinzo Abe. Following the signing of the *Agreement between the Government of Australia and the Government of Japan Concerning the Transfer of Defence Equipment and Technology in July 2014*, prospects are increasing that Japanese *Soryu*-class submarines may be exported to Australia in future.

Buying submarines from Japan would be the most expensive single military procurement in Australian history, and would break an election promise by the LNP to continue the manufacture of submarines in Australia. The issue has thus already generated considerable political conserversy. If it goes ahead, this decision will have important implications for the domestic politics of both Australia and Japan, and for the strategic geopolitics of the region. Before exploring these ramifications further, the historical background of the procurement of submarines for the RAN will be examined.

History of the RAN Submarine Fleet

Following the foundation of the RAN in 1911, two 'E-class' submarines, *HMAS AE1* and *AE2*, were added to the complement of the new British-supplied Australian fleet in 1914, just before the breakout of the First World War. The *AE1* was lost on September 14th 1914 with all hands, when she disappeared during a patrol off the Duke of York Islands, during the campaign to take German New Guinea (Foster, 1977: 19-20).

The *AE2* participated in the beginning of the Gallipoli campaign in April 1915, managing to penetrate the Dardanelles and disrupt Turkish shipping. However, she was soon damaged by Turkish defences, and was scuttled by her crew, who were captured. These two actions therefore brought an early end to Australia's fledging wartime submarine fleet; the *AE1* and *AE2* were the only vessels lost in action by the RAN during the Great War (AWM, 2014). To replace the lost submarine fleet, Britain supplied five 'J-class' boats postwar, deployed between 1919 and 1924, before they were scrapped to save costs (RAN, 2013).

Australia found itself under threat from the submarines of the Imperial Japanese Navy (IJN), most famously an attack by midget submarines on Sydney Harbour (and at Newcastle) in May-June 1942 (Ham, 2010: 289). 23 allied ships were sunk in Australian waters in 1942-43 due to the IJN's anti-shipping campaign. The RAN did not operate any submarines during the Second World War. However, the United States (US) Navy based a large number of boats at Australian ports, particularly Brisbane and Fremantle, as part of its highly successful campaign to blockade Japan (Ryan, 2013: 70-71).

During the Cold War, with Australia involved at the height of the Vietnam War, the Australian government decided to reintroduce the Submarine Service of the RAN,

again supplied by Britain. Six 'O-class' boats were ordered, and eventually deployed between 1967 and 2000 (Johnman & Murphy, 2003:166, 174-176). The *Oberon*-class submarines were fitted with very quiet diesel-electric engines, and were later fitted with US-supplied weapons systems, including the Harpoon anti-ship missile. As well as their main deterrence role of potentially interdicting enemy shipping and maintaining naval superiority in the approaches to Australia, the O-class boats conducted surveillance and intelligence gathering patrols in East Asian and Southeast Asian waters (SIA, 2014).

The Collins Class Saga

The procurement project to replace the O-class boats followed the defence policy concept of improving defence self-reliance, developed under the Hawke Labor government. This had the aim of reducing Australia's reliance on foreign-supplied military equipment and weapons systems, while strengthening the base of the domestic manufacturing industry. Maintaining such an industry thus brought political as well as strategic and economic advantages, allowing governments to publicise their role in promoting Australian manufacturing jobs. In pursuit of this goal as the Cold War wound down, in 1987 the Australian Submarine Corporation (ASC) was established in Adelaide, South Australia (SA), as a government-owned corporation (Fruhling, 2014: 541).

The design selected to replace the O-Class was termed the *Collins* Class, designed by Swedish company Kockums, to be constructed by the ASC. The Collins was the second-largest conventional boat at the time, with a crew complement of 58, a range of 11,500 nautical miles, and an endurance of 70 days. Construction of the Collins began in 1990, with the first boat delivered in 1996 (under the Howard Coalition government). The final sixth boat was delivered in 2003, at a final cost of \$5.071 billion, making it one of the most expensive Australian defence procurement projects. The Collins class is due to continue service until 2025, necessitating the current search for its replacement (Davies, 2007: 65,67).

However, the Collins class project soon became plagued with technical faults, which led to delivery delays, and damaged the reputation of the ASC. There were faults in the US-designed *Rockwell* combat system software, defects in the hull's welding, persistent engine failures, and most worrying for a submarine, a high noise signature. Repairing these faults saw each boat being delivered well behind schedule, ranging between 18 and 41 months late. Crewing the boats has also been a constant problem, with a shortage of trained crews, reflecting the higher standards required and more difficult conditions endured in the Submarine Service, long considered an elite arm of the RAN. The lack of available personnel meant that only three boats out of six could be fully manned at a time, with only two boats fully operational at a time on average. Nevertheless, once its problems were finally rectified, the Collins proved to be a highly capable diesel-electric submarine, enabling the RAN to have a long distance patrol capability of up to at least a month on station (Harrap, 2012).

In 2009, the Rudd Labor government issued its Defence White Paper, outlining plans to acquire twelve submarines to replace the Collins (Crane, 2011:70). This highly ambitious and expensive goal of doubling the RAN's submarine fleet was confirmed in the follow-up 2013 Defence White Paper. While not yet embarking on a tender

process to select a replacement design, the Labor Party committed to continuing domestic construction of the replacement submarines by the ASC (MfoD, 2013).

Australia-Japan Security Cooperation

The election of the Abbott LNP Coalition government in 2013 has seen a major policy shift in the replacement process for the Collins, with the prospect of submarines being bought directly from Japan emerging as the most likely option to be pursued. This potential development has emerged as part of the growing trend of closer defence and security cooperation between Japan and Australia in recent times, a generally bipartisan policy which has been boosted even further by the Abbott government.

Following the beginning of cooperation between Australia and Japan in United Nations Peacekeeping Operations in the 1990s, the Trilateral Strategic Dialogue (TSD) talks between Japan, Australia, and their mutual core ally the US were first held at the senior official level in 2002. This was upgraded to ministerial level TSD meetings in 2006, and leaders' meetings from 2009. The Japan-Australia Joint Declaration on Security Cooperation (JDSC) was then signed in March 2007, followed by regular '2+2' talks between defence and foreign ministers (Walton, 2012: 22-23). The Acquisition and Cross-Servicing Agreement (ACSA) was signed between Australia and Japan in May 2010, further increasing the level of defence and security cooperation, which by this stage included regular joint military exchanges and exercises, particularly in maritime operations (Tow, 2012 : 152). The Information Security Agreement (ISA) followed in May 2012, upgrading intelligence sharing and cooperation between the two countries (Anno, 2012: 53-54).

Diplomatic, trade and security ties between Australia and Japan then deepened ever further, following the election of conservative governments in both countries: Shinzo Abe returned as Prime Minister in December 2012, leading the LDP, and Tony Abbott in Australia from September 2013. Abbott's visit to Japan in April 2014 finally saw the conclusion of a Free Trade Agreement (FTA), the Japan-Australia Economic Partnership Agreement (EPA), which saw a partial reduction in a range of tariffs. The EPA was complemented by a concurrent Defence Technology Sharing Treaty, confirmed during Abe's reciprocal visit to Australia in July 2014 (DFAT, 2014).

***Soryu* For Australia?**

The way was therefore opened up to potentially allow Australia to purchase Japanese military equipment, including Japan's latest model submarine, the *Soryu* class. The *Soryu* (*Blue Dragon*) is considered one of the most advanced conventional boats in the world, with five in service with the Japanese Maritime Self-Defense Force (MSDF) since 2009, and five more planned (out of a total submarine fleet of 18 boats). It has a complement of 65, with its range and endurance still classified, but estimated to be greater than that of the *Collins*. The lithium-ion battery-driven propulsion system is of particularly exceptional pioneering quality, allowing a greater operational range than standard diesel-electric propulsion. The *Soryu* is jointly manufactured by Mitsubishi Heavy Industries and Kawakasi Shipbuilding Corporation in Kobe (Ryan, 2012: 27-28).

Should the Coalition government proceed with the purchase of the *Soryu*, this would break a 2013 election campaign promise, made by then Defence spokesperson Senator David Johnston, that submarines would continue to be constructed in Australia. Upon election, the Abbott LNP government stated that the decision on which model to replace the Collins could take up to 18 months, and has so far yet to be confirmed (Barns-Jenkins, 2014).

As well as the *Soryu*, potential tenders for local construction by the ASC could possibly come for European models, from Sweden, France, Germany or Spain. The ‘nuclear option’, of purchasing American nuclear-powered submarines is not really viable, despite the strategic advantages this could bring; apart from the expense of purchase, maintenance would have to be done in the US, given the lack of facilities to service nuclear reactors in Australia. Overshadowing these obstacles, having nuclear submarines in the RAN’s fleet would be too politically controversial (Radford, 2013).

The purchase of Japanese submarines would probably be the cheapest option, estimated at around \$20 billion, instead of potentially up to \$36 billion, if an overseas tender is locally constructed; even so, it would still be the most expensive single military purchase in Australian history. Japan therefore remains the mostly likely favoured option for the Abbott government, for economic, as well as geostrategic and alliance reasons (Herman, 2014).

Any decision to purchase submarines directly from Japan, instead of producing them locally, would confirm the trend of the overall decline in Australian manufacturing, with subsequent job losses; an inevitable development without ongoing government subsidies. The ASC would then have to shift to maintenance, and surface warship construction, to remain viable. The question remains whether the domestic shipbuilding industry of Australia is ultimately economically unviable in the long-term, as has proved the case with the (multinational-owned) car industry (Cowan, 2014).

Domestic Australian Political Implications

An inquiry into the prospective Japanese submarine purchase was held by the Australian Senate in October-November 2014, hearing statements from various interested parties. The ASC claimed that overseas sourcing of submarines would be an overall economic loss to Australia’s GDP in the long term, eventually undermining any short-term savings that might otherwise be made. The majority report, made by non-Government Senators, ultimately recommended that submarine construction remain in Australia, after a competitive tender process. The dissident minority report, by government Senators, called to keep the *Soryu* option open (Senate, 2014: 34-35, 81-84).

The Japanese option has thus always been strongly resisted by the Federal Opposition’s Australian Labor Party (ALP), and its traditional support base in the trade union movement, particularly the Australian Manufacturing Workers’ Union (AMWU), whose members are most numerous employed by the ASC. Reflecting the divisions this issue has opened up within the Coalition, Liberal MPs based in South Australia have also been pressing for the Australian option to be pursued, citing the benefits that infrastructure investment will deliver in the long-term, offsetting

higher initial construction costs compared to a direct overseas purchase. Also, local servicing would provide greater strategic security, reducing dependence on offshore supply and maintenance (Siegel, 2014).

For his part, Prime Minister Abbott has stated that he wants the ‘very best’ submarines, ‘at the best possible price’, where the country of origin should not have priority over quality and cost; indicating favouritism towards Japan. This favourable direction was given further weight during a visit to Japan by then Defence Minister Senator David Johnston in October 2014, where a formal request was made for Japan to cooperate with Australia on a range of military technology, potentially including submarines. Former Japanese Defense Minister Akinori Eto reciprocated this request, claiming that Japan wished to proceed further in deepening its overall defence and security cooperation with Australia, as it was a ‘special relationship’, needing ‘special support’ (Carney, 2014).

Following this trip, Johnston said there was no progress on overseas tenders for locally produced submarines, indicating that the release of the next Defence White Paper due in 2015 would confirm the decision for the *Collins*’ replacement. However, Johnston’s position was severely weakened after making a gaffe during a Senate Question Time, when he declared he would not trust the ASC ‘to build a canoe’! (Norman, 2014)

While Johnston quickly apologised for this statement, claiming it was merely a ‘rhetorical flourish’, it was a likely contributing factor towards a defeat for the Coalition in a by-election for the South Australian parliament soon after; this result secured majority State government for the ALP. Johnston was further undermined by admissions he had not attended meetings of the National Security Committee, as he ‘had nothing to offer’. Details were also leaked of expensive dining bills incurred by his office at taxpayers’ expense, while the Abbott government was pledging deep cuts to the Federal budget, including subinflationary increases to the real wage levels of Australian Defence Force personnel (a decision later overturned, under pressure from the public and minority party Senators) (Taylor, 2014). Pressure on the Abbott government has particularly come from South Australian Independent Senator Nick Xenophon, who is demanding an open tender to ensure local production of European models. Xenophon has effectively accused Abbott of already making a deal with Abe, which would be a violation of the open tender process, as well as breaking the 2013 election promise guaranteeing local production of submarines (Kerin, 2014).

Treasurer Joe Hockey has declared an open tender will not happen, because there is ‘no time’; a remarkable statement, given how tenders are usually such a long, drawn-out and carefully-considered process. Hockey’s claim for the necessity of a truncated tender decision has been contradicted by the AMWU, the Australian Industry Group (the major manufacturing industry lobby group), and other defence industry commentators. In order to buttress their case for local production, they have raised doubts that the larger *Soryu* is not the most suitable for Australian conditions, with the smaller European boats being more preferable for the continuing mission of the RAN’s Submarine Service; maintaining an interdiction capacity in the approaches to Australia’s sea lanes, and covert reconnaissance and intelligence gathering in Southeast Asian waters. European manufacturers have also maintained their tenders would be price competitive with the Japanese (APDR, 2014).

Being consistently behind in opinion polls, particularly after the poorly-received and unpopular Federal budget, in an attempt at a political circuitbreaker, Abbott carried out his first Cabinet reshuffle on December 21, 2014. Johnston was unsurprisingly dumped, given his poor handling of the submarine issue, and his lacklustre performance overall, ending his ministerial career. Former Social Security Minister Kevin Andrews now holds the Defence portfolio; considered a hard-right social conservative, Andrews has already made an embarrassing start, with revelations of past admissions he had 'no interest' in defence affairs (Aston, 2014). The appointment of Andrews as Defence Minister is not likely to change the preference for Japan to supply submarines, as the process is generally considered as being driven by the Prime Minister's Office, with Prime Minister Abbott having a close interest in continuing to deepen Australia's security relationship with Japan, aided by his personal friendship with Prime Minister Abe (Woodley, 2014).

The Labor Opposition is likely to continue to try to block any decision to purchase the *Soryus*, by legislative means if possible. Labor has so far used the Senate's processes to attempt to force the government to accept an open tender. If the ALP and the minor parties and Independents are able to legislate for a tender in the Senate, Abbott might then be forced to resubmit legislation in the Lower House of Representatives, in order to continue with a truncated tender process which could quickly allow the *Soryu* purchase to go ahead. Should the ALP return to government following national elections due in 2016, Labor would also likely break any contracted agreement the Abbott LNP government makes with Japan. This political uncertainty could be enough to put the *Soryu* purchase in doubt (News Ltd, 2014).

Political Implications for Japan and the Region

The potential sale of *Soryus* to Australia also has great significance for Japanese politics and foreign policy. Securing the sale would be the first postwar export of a major combat weapons system by Japan, confirming its shift towards a more active role in international security affairs. The long-held 'Three Principles' restrictions on military exports, self-imposed due to the pacifist Article 9 clause of the constitution, started to ease under the previous Democratic Party of Japan government; these have further loosened under Abe's LDP government. Sales of defence equipment, particularly technology transfers such as advanced sensors and communication components, have already been made to the US and UK (BBC, 2014). After decades of supplying the SDF as their sole customer, Japanese weapons manufacturers have been longing to expand their share of the global arms market (McNeill, 2014).

Easing defence exports is merely part of Shinzo Abe's overall direction towards allowing more active deployment of the SDF. His avowed policy of reinterpreting the constitution to allow Japan to participate in collective self-defence with allied countries has already been approved by Cabinet, and has been claimed as part of the LDP's ruling mandate, re-confirmed by winning the early snap election recently held on December 14, 2014. However, public opinion in Japan remains dubious about proceeding down such a path of an expanded overseas role for the SDF, and also about any related increase in military exports (Mainichi, 2014).

This more assertive Japanese defence and foreign policy is firmly supported by Japan's primary ally (and mutual ally of Australia) the US, which is encouraging the

sale of *Soryus* to Australia. Closer security ties between Australia and Japan complements the American goal of a 'pivot' of the majority of its armed forces being deployed to the Asia-Pacific region, to ensure ongoing regional hegemony. Such cooperation has already been seen in development and servicing agreements for the multi-national F-35 Joint Strike Fighter (JSF) project (despite concerns over the JSF's cost overruns and capability), confirmed in the latest leaders' meeting of the TSD, on the sidelines of the last G20 Leaders' Summit in Brisbane (Nikkei, 2014).

There are also concerns that Japan's potential entry into the international market for advanced weapons systems will only fuel the increasing conventional arms race under way in the Asia-Pacific region (Bateman, 2011: 73-77). From the perspective of Japan, the US, security partners including Australia, and ASEAN states such as the Philippines, Singapore and Vietnam, an expanding SDF and Japanese defence export industry would contribute to countering the rapid military buildup of China's People's Liberation Army, whose Naval branch includes a 71-strong submarine fleet. North Korea has also launched its first ballistic missile submarine, raising fears about escalating proliferation of its nuclear weapons. (Business Spectator, 2014).

Conclusions

The potential export of Japanese submarines to Australia therefore has extremely important implications, for Australian and Japanese domestic politics, as well as for strategic stability in the Asia-Pacific region as a whole. If it goes ahead, the sale of *Soryus* to Australia would be first major weapons systems export from Japan since the Second World War. Such a move is defended by allies of Japan, particularly the US and Australia, as improving general security cooperation and the interoperable capabilities of their armed forces, which will deliver greater regional security overall.

However, this view discounts the potential for an escalating arms race ultimately undermining the peace and stability of the Asia-Pacific. It also raises important questions over the political integrity of the Abe and Abbott governments, if they proceed with a defence procurement policy which clearly violates the wishes of their respective electorates, and undermines the general public interest.

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Is There a Liability of Japaneseess in Least Developed and Developing Economies: A Study of the Japanese FDI in The Middle East and Africa

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Abstract

Given the insularity of Japan and its institutional, economic and cultural framework uniqueness, we postulate the hypothesis that the '*liability of Japaneseess*' will likely hinder the Japanese firms' ability to internationalize in settings drastically different from those found in Japan.

An econometric analysis of the host countries' economic, institutional, cultural and experiential variables was carried out in this paper to assess their impact on the Japanese Foreign Direct Investments inflows. Using the gravity equation of trade, we estimate to which extent the Economic Distance, the Economic Freedom Distance, the Cultural Distance, and the Experiential Learning Effect (main variables) impact the Japanese outbound FDIs in 31 least developed and developing countries (LDDCs) of the Middle East and Africa between 2003 and 2012.

Results suggest that the Economic Distance and the Economic Freedom Distance have negative impacts on the Japanese FDIs inflows in these countries. The Cultural Distance did not show notable negative impacts on the Japanese FDIs levels in these countries. Contrary to previous research findings, host country experience did not show any significance in the increase of JFDIs inflows over time contradicting the Japanese experiential learning argument in these two regions (unlike in developed markets).

Confirming previous research findings, control variables such as the natural resource endowment of the host country did not show empirical support nor did the geographic distance or the openness of a country to FDIs.

Keywords: Japanese Foreign Direct Investments, FDI, The Middle and Africa, The Liability of Japaneseess.

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Introduction

Previous research on FDI and institutions were mainly focused on studying the impact of good institutions on FDI inflows (Bénassy-Quéré, Coupet & Mayer, 2007). However and until recently, the impact of the institutional and economic distances (differences) between the source country and the host country of investment have received little attention in the FDI literature. Cultural or psychic distance in the other hand received a broader attention from the international business scholars.

Recent attempts such as Demirbag et al., (2011), Tsang & Yip (2007) empirically studying two key concepts of the new institutional economics, namely the economic distance and the economic freedom distance showed promising results in terms of explaining the survival rate of companies in distant settings from the firm's home market.

We build the following hypothesis on the argument that differences in terms of economic development, quality of institutions and cultural values between the home and the host market will likely have an important impact on the FDIs. The notion of distance could be particularly salient in the context of Japanese firms, given the insularity of Japan and its unique institutional, economic and cultural framework. We postulate therefore the hypothesis that what we call in this article the '*liability of japaneseness*' will likely hinder the Japanese firms' ability to internationalize in settings drastically different from those found in Japan. The *liability of japaneseness* could be defined as a set of institutional, economic, organizational and psychological barriers impeding the Japanese companies' adaptation process to Developing and Least Developed Economies (DLDEs) characterized by extreme business environments.

The overall objective of this research is to test whether the liability of Japaneseness will deter the Japanese companies from investing in the DLDEs of the Middle East and Africa, and also investigate the Japanese FDIs determinants in these regions of the globe.

Hypothesis development

Hypothesis 1: *The higher the economic distance between Japan and the host country, the less FDIs are expected to occur*

Hypothesis 2: *The higher the Economic Freedom Distance between Japan and the host country, the less FDIs are expected to occur because of higher institutional hazard*

Hypothesis 3: *The higher the Cultural Distance between Japan and the host country, the less FDIs are expected to occur*

Hypothesis 4: *the more experience a Japanese Foreign Investor will accumulate in a country, the more it will further invest in that country*

Hypothesis 5: *the farther the host of FDI is from Japan, the less FDI are expected to occur due to the high transaction cost incurred with the increasing distance*

Hypothesis 6: *Population is expected to have a positive impact on Japanese FDIs providing more market opportunities*

Hypothesis 7: *The natural resources endowment of a country is expected to attract more Japanese FDIs for strategic resources seeking reasons*

Hypothesis 8: *Market openness will have a positive impact on Japanese FDI providing an open and market economy investment opportunities*

Hypothesis 9: *Economic instability will deter Japanese investments because of the risk avoidance characteristics of the Japanese firms*

Hypothesis 10: *Political instability will deter Japanese investments because of the risk avoidance characteristics of the Japanese firms*

Variables description, operationalization and expected signs

Table 1: The determinants of Japanese's FDI

Variables	Explanation	Type of variable	Expected Sign	Data Source
FDI	Annual Japan's outward FDI flows to host country	Dependent Variable	n/a	Japanese Ministry of Finance and JETRO
Economic Distance (ED)	Difference in level of development between Japan and country I: Calculated as $LN(GDP PC_j) - LN(GDP PC_i)$	Independent variable	-	World Bank Development Indicators following Tsang & Yip, 2007; Demirbag et al., 2011
Economic Freedom Distance (EFD)	Difference in the economic freedom (EF) between Japan and country I: Calculated as $LN(EF_j) - LN(EF_i)$	Independent variable	-	Wall Street Journal Economic Freedom of countries index: 0 lowest, 100 Highest; following Demirbag et al., 2011

Experience (Exp)	Experience in number of years of operations since the first recorded investment occurred	Independent variable	+	JETRO	
Cultural Distance (CD)	Difference in national culture between Japan and country I	Independent variable	-	Adapted from Voyer and Beamish, Hotsfede/Kogut and Sigh: 1 closest, 12 farthest	
Geographic Distance (GeoDis)	Distance in KM between Tokyo and The Capital City of Country I	Control variable	-	Geobytes	
Natural Resources (NatRes)	Endowment Of country I in Natural Resources	Control variable	+	World Development Indicators	Bank
Population (Pop)	Population by country (market size)	Control variable	+	World Development Indicators	Bank
FDI Openness (Open)	Openness of country I to inward FDI	Control variable	+	World Development Indicators	Bank
Inflation (Inf)	Inflation rate per country	Control variable	-	World Bank	
RISK (Risk)	Political, economic and financial risk of country I	Control variable	-	The PRS group indicators for international country risk	

Data and sample

We test our hypothesis on a database retrieved from the Japanese Ministry of Finance and the Japan External Trade Organization (JETRO) pertaining to the recorded Japanese Outward Foreign Direct Investments worldwide between 2003 and 2012. The sample is derived from 9 annual reports between 2004 and 2012 from the Japanese Ministry of Finance complemented with two databases from the JETRO in the period 1964-2004 and 2005-2013.

It is worth noting that we removed from the final sample countries that offered during the period under study abnormal investment conditions; namely countries considered by the OECD or equivalent organisms as Tax Heavens. Hence, Seychelles, Mauritius, Liberia and Iraq were removed from our final sample. Iraq was also removed because although it had Japanese FDI stocks before 2002, in the period under study, it had no significant recorded Japanese FDI flows.

The final sample was comprised of 31 developing and Least Developed countries in the Middle East and Africa. These are all the countries in the area where Japan had significant FDIs during the past 10 years (2003-2012):

Algeria, Cameroon, Egypt, Ghana, Kenya, Libya, Madagascar, Mauritania, Morocco, Mozambique, Namibia, Niger, Nigeria, Senegal, South Africa, Tanzania, Tunisia, Uganda, Zambia, Bahrain, Iran, Jordan, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates.

Empirical specification

Based on the above discussion and previous empirical studies, we use a log linearized form of the gravity equation. The Gravity Equation is the most widely used model in economics to assess product, services and financial flows between countries. It allows to accurately predicting trade flows between two nations. The flows of product and services according to this model are likely to gravitate around countries with stronger pulling forces, just like gravity forces (Anderson, 1979; Bergstrand, 1985; Bergstrand, 1989; Helpman & Krugman, 1985).

Following previous empirical research methodology on FDI, the data was transformed into natural logarithm as non-linearities in the relationships is expected (e.g. Buckley 2007).

Log Linear Empirical specification:

$$LN(FDI) = \alpha_1 + \beta_1 LN(ED) + \beta_2 LN(EFD) + \beta_3 LN(CD) + \beta_4 LN(EXP) + \beta_5 LN(GeoDis) + \beta_6 LN(Pop) + \beta_7 LN(Nat.Res) + \beta_8 LN(Open) + \beta_9 LN(Risk) + \beta_{10} LN(Infl) + \epsilon_i$$

Since some observations included negative values and 0 pairs, transformation to Natural Logarithm was impossible to perform; We had to apply first the following formula to the dependent variable (FDI annual flows) before transformation¹:

¹ Busse, M., & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. European journal of political economy, 23(2), 397-415.

$$y = \ln(x + \sqrt{x^2 + 1})$$

Estimation method

Ordinary Least Square (OLS) was used to estimate the model. Regressions were run using STATA 13. Regression 1 in table 2 reports the results on the 31 countries, while regressions 2 and 3 were run respectively by splitting the main sample into 2 sub-samples separating the Middle East/North African (MENA) regions from the Sub-Saharan Africa regions. We separated these two groups of countries because the MENA region is likely to exhibit stark differences with the Sub Saharian African region because of Social, cultural, economic, historical, language and religious reasons.

Table 2: Regressions' results

Variables	(Regression 1)	(Regression 2)	(Regression 3)
	Ln (FDI)	Ln (FDI) MENA	Ln (FDI) Sub- Saharan Africa
Ln (ED)	-0.554** (0.225)	-0.540 (0.369)	-1.050*** (0.323)
Ln (EFD)	-3.381*** (1.212)	-3.631* (1.989)	-3.380 (2.194)
Ln(CD)	-4.041 (2.395)	-4.338 (2.539)	-12.21* (6.122)
Ln (Exp)	-0.158 (0.191)	-0.292 (0.432)	0.294 (0.543)
Ln (GeoDis)	0.738 (1.308)	0.252 (1.995)	-6.596* (3.087)
Ln (Pop)	0.782*** (0.243)	0.959** (0.368)	0.255 (0.150)
Ln (NatRes)	0.105 (0.146)	0.340 (0.239)	0.101 (0.204)
Ln (Open)	0.110	0.206	-0.0136

	(0.116)	(0.140)	(0.186)
Ln (Inf)	0.0236	0.00952	-0.0410
	(0.140)	(0.228)	(0.146)
Ln (Risk)	-0.413	0.144	-1.370
	(0.912)	(2.794)	(0.892)
Constant	2.578	7.253	91.35***
	(11.49)	(18.11)	(29.65)
Observations	300	170	130
R-squared	0.224	0.211	0.356

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 3: Correlation matrix

	LN(FDI)	LN(ED)	LN(EFD)	LN(CD)	LN(Exp)	LN(GeoDis)	LN(Pop)	LN(NatRes)	LN(Open)	LN(Inf)	LN(Risk)
LN(FDI)	1										
LN(ED)	-0.22858	1									
LN(EFD)	-0.12436	0.23906	1								
LN(CD)	-0.36419	0.596033	0.210681	1							
LN(Exp)	0.146352	-0.01663	-0.28869	-0.20399	1						
LN(GeoDis)	-0.19386	0.56502	0.133503	0.576239	-0.21133	1					
LN(Pop)	0.18258	0.503595	0.348764	-0.03643	0.287663	0.071527	1				
LN(NatRes)	0.069123	-0.44109	0.177408	-0.05299	-0.11174	-0.29154	-0.2140745	1			
LN(Open)	-0.02887	0.196771	-0.00965	0.139913	-0.01999	0.19939	-0.0517976	-0.1364736	1		
LN(Inf)	0.07889	0.202973	0.140099	-0.0596	0.1147	0.009013	0.3449135	0.00335119	0.145445	1	
LN(Risk)	0.132421	-0.64714	-0.38391	-0.46136	0.102285	-0.54723	-0.3936874	0.04981964	-0.02601	-0.08138	1

Discussion

Hypothesis 1 regarding the impact of the economic distance on Japanese FDIs was found significant (at the p<0.01 and p<0.05 levels) and negatively signed across regressions 1 and 3 (table 2) and was therefore accepted. The economic distance between Japan and the host country of investment seem to play an important role in the investment decision made by Japanese foreign investors. The higher the economic distance between Japan and the host country of investment, the less outbound FDIs will occur.

Regarding hypothesis 2, economic freedom distance shows significance across 2 regressions with a negative sign. We therefore accept hypothesis 2 and deduce that economic freedom distance is an important factor in the FDI allocation decision for Japanese corporations. Countries with low economic freedom will deter Japanese investments. Regarding the Sub-Saharan Africa sample, the reason why it was not found significant is because these countries exhibit very low overall levels of economic freedom not allowing for an accurate measurement. Hypothesis 2 was therefore accepted.

As for Hypothesis 3 pertaining to the Japanese FDI and cultural distance, it showed significance only across one regressions out of 3. Hypothesis 3 was not therefore accepted. The cultural difference per se does not seem to play a determinant role in Japanese FDI's decision in the Middle East and African region; but rather, the overall economic development and institutional quality of the host country have a more important impact on the investment decision made by Japanese operators.

Hypothesis 4 is probably the most striking one as it contradicts most of the literature on Japanese firms, both in the international business and knowledge management field. While we were expecting that experience and learning would be a factor that allows the increase of Japanese FDI overtime, all the regressions carried out did not reach the significance levels. Japanese firms in the Middle East and Africa do not seem to increase their investments over time by increasing country specific knowledge. These results starkly contradict previous research findings that states that Japanese firms learn and incrementally increase their commitment while investing in a country. This might stem from the Japanese risk aversion and tendency to avoid private and institutional risk.

Regarding the control variables, only population was found significant. The absolute size of the market seems to influence the Japanese FDI allocation decision. Large markets seem to attract Japanese firms confirming the market seeking internationalization argument found in previous literature. This allows accepting hypothesis 6.

Conversely, geographic distance, natural resource endowment, FDI openness, inflation, and overall country risk do not seem to influence positively or negatively Japanese FDI's. These results are in line with previous literature on Japanese FDI and allow therefore to reject hypothesis 5, 7, 8, 9 and 10. Japanese firms do not favor countries with high endowment in terms of natural resource. This finding is quite counterintuitive given the scarcity of natural resources in Japan.

Conclusion

The empirical analysis results from this article indicate that among the main independent variable used in the model, the Economic Distance (ED) and the Economic Freedom Distance have a strong negative impact on the Japanese FDI's decision. Both the overall economic development level of a host market and the quality of institutions will severely hinder the Japanese ability to invest in a country.

These two findings tend to confirm the *Liability of Japanese* argument put forward in our research. Japanese firms because of their unique economic and institutional framework will refrain from investing in settings drastically different from those found in Japan.

The cultural difference argument however does not find empirical support. That is, Japanese investors will be hindered by the Economic Distance and the Economic Freedom distance but not much so by the cultural distance. The cultural difference on its own does not deter the Japanese investors from investing in a country.

The Experiential Learning variable results are probably the most important finding of this article. Contradicting previous research on the 1) Japanese gradual internationalization process following the Upssala model; 2) And to some extent the knowledge creation (and use) theory put forward by Nonaka & Takeuchi (1995). In the context of developing and least developed countries knowledge operations, Japanese firms do not seem to exhibit any sort of absorptive capacities or experiential learning over time regarding how to operate in difficult business setting. Although Japanese firms started investing as early as in the 1960s in the Middle East and Africa, they do not seem to put into use this long experience to increase their commitment.

This might stem from the lack of global mindset and the notorious risk avoidance (aversion) that are deeply rooted in the Japanese corporate culture, and in the Japanese society in a more general manner. These could also be explained by the fact that the Japanese society in general, views Africa and the Middle East as very far away, exotic, and often unsafe places.

The logo for the International Association of Business Schools (iafor) is centered on the page. It consists of the lowercase letters "iafor" in a light blue, sans-serif font. The text is surrounded by a large, faint, circular graphic element composed of several overlapping, curved lines in shades of blue and red, creating a sense of motion or a globe.

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***Technical Efficiency of Micro and Community Enterprises:
Evidence from Dok-Kham-Tai District, Phayao, Thailand***

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Abstract

This study is to find what are key factors contributing efficiency of the Dok-Kham-Tai community enterprises. In order to meet this objective question, first, Data Environment Technique (DEA) is applied to calculate the community enterprise efficiency scores. Then, the calculated efficiency scores will be linked and explained by financial and non-financial factors. According to this study, the first stage of DEA calculation shows the efficiencies of Dok-Kham-Tai enterprises are relatively low which is around 0.01 to 0.30. In the second stage, it finds that financial and non-financial factors are both equally important in stimulating the Dok-Kham-Tai enterprise efficiency. Regarding to the financial factors, even though capital per worker is significant and positively relates to the enterprise efficiency, the output per worker turns out to be negatively significant. This negative sign implies, to raise the efficiency, the Dok-Kham-Tai community enterprises need to expand their production possibly in order to get benefit of economy of scale. On the other hand, non-financial factors which are political relationship and gender, female leader, are found to significantly contribute the enterprises' technical efficiency.

Keywords: Efficiency, Community Enterprises, Thailand

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Introduction

Small and Medium Enterprises (SMEs) have an important role in the Thai Economy as its outputs accounts for around 34 percent of the Thai industrial gross domestic products (GDP) and shares around of 67 percent of the Thai industrial employment (Thassannabanjong, *et al*, 2009). However, the report by the Department of Industrial Promotion, Thailand, (2014) shows there is a slow growth of new SMEs registered in last few years. Even though there are 59,499 new registered SMEs, 11,040 SMEs have shut down their businesses which are accounted for 18.40 percent of new registered SMEs in the same year (Office of SMEs Promotion, 2014). Because the SMEs are important to the Thai economy, especially in term of employment, the Thai government has been worried about the slow growth of new registered SMEs and wants to know what causes them to be out of their businesses. The Thai government, therefore, assigns all the universities in Thailand, including the University of Phayao (UP), to study and to answer these questions. As this paper is a part of the project funded by the University of Phayao and Thai Research Fund (TRF), who takes full responsibility with these concerns from the Thai government to study what determines local SMEs' efficiency surrounding the areas where UP is located. As the faculty of Management and Information Sciences (MIS)¹ is part of the UP and has responsibility in Dok-Kham-Tai area, this study, therefore, aims to study what determines efficiency of small and community enterprises in Dok-Kham-Tai district, Phayao, Thailand.

Based on the theory, there are two main factors determining firm efficiency which are financial and non-financial factors (Taticchi *et al*, 2010). Studies show that the financial factors are important in determining firm efficiency (Amornkitvikai and Harvie, 2010; Phan, 2004). However, these factors could not explain all changes in firms' efficiency (Vatcharatham, 2004). Especially in SMEs, non-financial factors such as human capitals and support provided by government seem to be more influential to their success than they are to the larger firms.

Even though studies relating to SMEs efficiency have been conducted in Thailand, they only report which SME or industry has higher efficiency without any explanation of what contribute to its efficiency (Meingchom, 2007; Vatcharatham, 2004). In addition, they use only descriptive statistics which has limitation and has less reliable results. Moreover, studies have been conducted putting not much interest on non-financial factors. Therefore, this study purposes to study what non-financial factors determine local community efficiency besides financial factors in Dok-Kham-Tai District, Phayao province. Besides the financial factors, this study expects non-financial factors to play important role in determining the local community efficiency.

Theory and Literature Review

Theory

DEA (Data Environmental Analysis) is a standard technique and has been developed to study efficiency by comparing an amount of output and inputs used. At the same amount of input used, firms which have higher output would show that they have a higher efficiency (Coelli *et al*, 1998). Generally, the technical efficiency can be

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organized into two categories; (i) technical efficiency and (ii) allocative efficiency. The technical efficiency means a firm can produce highest output from its limited input while the locative efficiency means the good ability of firm in re-allocating their inputs at various prices (Coelli, 1997; Farrell, 1957). To measure efficiency, Fare and Grosskopf (1985) and Lovell (1994) first apply the concept of production possibility frontiers (PPF) and this methodology has been developed into two main techniques called (i) Data Envelopment Analysis (DEA) and (ii) Stochastic Frontiers Analysis (SFA)². Both techniques are based on the linear programming concepts in which they try to maximize output under labor and capital constrains, and under the assumption that production function is a constant return to scale (Coelli and Perelman, 1996; Hanhiran, 2014). In order to understand the difference between these terms, it is useful to consider the production process in which a single input (x) is to produce a single output (y). In Figure 1 the line OF' represents a production frontier that defines an association between input and output. The production frontier indicates the maximum output achievable from each input level. This reflects the current state of technology in an industry. If the firm operates on the frontier it is technically efficient. However, if the firm operates below the frontier it is not technically efficient. Point A in Figure 1 represents an inefficient point whereas points B and C represent efficient points. A firm that operates at point A is inefficient but it can increase output to the level associated with point B without requiring more inputs, or it can produce the same level of output utilizing less input by producing at point C (Coelli *et al.*, 2005).

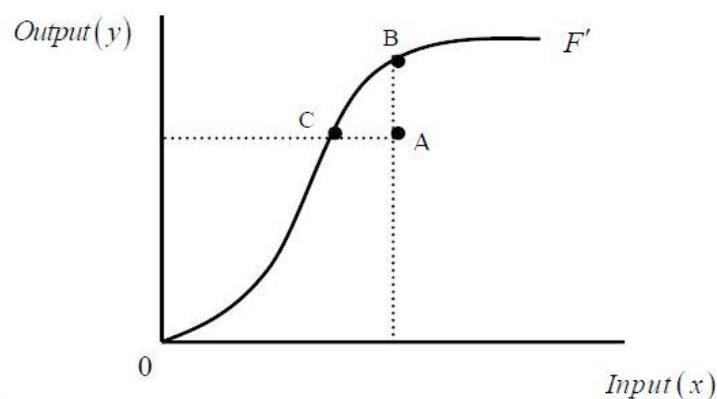


Figure 1³: Production Frontier and Technical Efficiency

Literature Review

Palee *et.al.*, (2007) study the technical efficiency in producing sticky rice in Chiang Mai province by using 2000/2001 data. There are 100 observations collected from farmers in Hang-Dong, and San-Pa-Tong districts. Using SFA and DEA, they find that average value of calculated efficiency is 0.71. And, 60 percent of farmers in this area are found to have high efficiency between 0.7001-0.8000. Around 20, 13 and 7 percent of farmers have calculated efficiency scores around 0.5001-0.7000, 0.8001-1.000, 0.3001-0.5000, respectively. In addition, this study shows that the efficiency is mainly determined by farmers' experience and their production skills. In order to

² The SFA technique will not be used in this study.

³ Coelli *et al.* (2005, p 4)

increase the efficiency, training, therefore, is important to improve their skill in growing rice in the areas of the study. In addition, they explain that consultants are important, expected to help the farmers while facing production problems in order to raise their efficiency.

Meingchom (2550) studies what factors relate to industrial efficiency. In her study, she focuses on the small and medium in 4 sub- industrial sectors based on the ISIC (International Standard Industrial Classification) which are 2511, 2519, 2520 and 2610. The efficiency is calculated from total asset and labour cost, comparing to their outputs. This study finds that the average efficiency is around 0.174-0.642 which is relatively low. The low efficiency is caused mainly by a poor management and too much inputs/inventory carrying.

Wiboonchutikula (2002) investigates trends in the SME sector in Thailand, focusing on employment, export ability and subcontracting activity. The data used in this study is from industrial census data conducted by the National Statistical Office (NSO) of Thailand in 1997. The author utilizes the technical efficiency and total factor productivity (TFP) as the measure to analyze the productivity of SMEs. The translog frontier production function is used to estimate technical efficiency indices. This study shows that over the period 1987-1996, the SME share of overall employment has declined from 60 percent to 52 percent. This can particularly be noticed for the small firm category, which is for firms with less than 10 employees. This perspective is explored further by considering small firm employment shares in three sub-periods with varying overall economic growth rates. It shows that when overall economic growth is high the share of small firms seems to contract, possibly because the several small firms turn to medium sized and others separate because the owners can discover more remunerative works in larger firms. However, during the slower growth rate periods the proportion of employment in the small firms tends to increase, because the larger firms may hire less new employees or downsize or lay off employees

Arunsawadiwong (2007) studies productivity trends in the Thai manufacturing sector. The author employs a stochastic frontier analysis (SFA) to measure the pre and post financial crisis technical efficiency levels of the Thai manufacturing sector. The periods for estimations can be divided into two sub-periods, (i) pre-crisis during 1990 to 1996 and (ii) post crisis during 1997-2002. The results show that the overall efficiency of the manufacturing sector improved in the post crisis period, compared with the pre crisis period. In the post crisis period, the technical efficiency is found to change from year to year. This indicates that the manufacturing sector becomes more attentive in improving its efficiency, as compared with the pre crisis period that experiences no obvious technical efficiency improvement. The findings indicate that a structural shift in the Thai manufacturing sector occurs, from being labour intensive in the pre crisis period to being capital intensive in the post crisis period. The level of productivity improves in the post-crisis period when compared to the pre-crisis level. The low productive investment level in the pre-crisis period is recognized as the main factor that lead to a decline in the efficiency of the manufacturing sector. It is concluded that this low productivity level causes a decline in Thai manufacturing sector competitiveness.

Data and Methodology

Data

The community entrepreneurs' data used in this study come from the survey conducted in 2014 in Dok-Kham-Tai District, Phayao, Thailand. The local community enterprises' data such as type of industry, addresses and owners are provided by Dok-Kham-Tai Community Development Department which takes full responsibility in taking care of the local community enterprises. In this study, the author tries to correct the data from all registered firms in Dok-Kham-Tai. Totally, there are 70 registered community enterprises. However, the data of only 31 firms can be reached. As the local community enterprises run their business with poorly financial and data record, therefore, is roughly estimated and provided by community enterprises' leaders. To avoid unreliability of statistical estimation in this study, Bootstrapping is brought into this study. This technique is normally applied when a number of observations are relatively low.

Methodologies

Methodologies used in this study are called "Two Stage DEA (Data Environment Analysis: DEA)". Therefore, to obtain the result to answer the hypotheses in this study, there are two steps. First, an efficiency will be calculated based on revenue, capital and workers employed in those firms. The calculated technical efficiency is between 0.00-1.00 in which 0 = least efficiency while 1 = highest efficiency. Second, after the calculated efficiency for each firm is achieved, they will be regressed on financial and non-financial factors. As the dependent variable has value between 0 and 1, Tobit Regression will be applied. The result from this second stage will be useful and used to answer the objectives of this study. DEA and Tobit Regression model can be shown in the following sections.

Model Specification

Tobit Model is to find the relationship between a dependent variable and explanatory variables whether significantly relates. The Tobit model is normally applied when the dependent variable has value between 0 and 1. As DEA technical efficiency calculated (DEA) is a number between 0 and 1, the Tobit model is the most appropriate model for this study. In this study, Calculated DEA will be assumed to depend on the financial and non-financial variables which can be shown as following,

$$DEA_j = \alpha + \beta_i X_{ij} + \gamma Z_{ij} + \varepsilon_i \quad (1)$$

Where DEA_j = Technical efficiency calculated from the first stage which are between 0 and 1, industry j

α = Constant value

β = X_{ij} coefficients

X_{ij} = financial factors which are output per workers, output-capital ratio and capital-worker ratio

γ = Z_{ij} coefficients

Z_{ij} = Non-financial factors which are industries, locations, leader characteristics such as gender,

education, training, political relationship and government's supports

Empirical Results

Technical Efficiency

From the DEA analysis, the local community enterprises' efficiency can be obtained and shown in Table 1. Even though the technical efficiency scores vary across community enterprises in this study, the food and textile industries are found to be most effective, having technical efficiency score at level 1, following by a cosmetic industry.

Observations	Ranking	Technical Efficiency	Industry
19	1	1.000	food
30	1	1.000	textile
12	3	0.337	food
23	4	0.282	textile
10	5	0.242	cosmetic
2	6	0.237	food

Note: Values in the tables are from calculation

Table 1 : Calculated Technical Efficiency of Local Community Enterprises in Dok-Kham-Tai District, Phayao

Over all, this study finds that the technical efficiency of local community enterprises in Dok-Kham-Tai district is relatively low. The average value is only 0.2. In the next section, this study will link the calculated technical efficiency to be explained by the financial and non-financial factors. It is expected to help in answering the main purpose of this study what determines the technical efficiency of local community enterprises in Dok-Kham-Tai district.

Empirical Results from the Tobit Regression

Table 2 shows the Spearman correlation between independent variables in this study. It is found that correlations among independent variables in this study are relatively low. Therefore, multicollinearity between variables is not problems in this study.

Variables	OPW	KPW	OPK	Age	Politic	Experience	Gender
OPW	1.00						
KPW	0.37 (0.05)	1.00					
OPK	0.23 (0.24)	-0.70 (0.00)	1.00				
Age	0.13 (0.49)	0.14 (0.47)	-0.01 (0.94)	1.00			
Politic	-0.01 (0.93)	-0.19 (0.33)	0.13 (0.51)	0.04 (0.82)	1.00		

Experience	0.09 (0.64)	0.17 (0.39)	-0.01 (0.95)	0.18 (0.36)	-0.76 (0.00)	1.00	
Gender	0.20 (0.32)	0.23 (0.24)	-0.12 (0.55)	0.43 (0.02)	0.21 (0.28)	-0.05 (0.79)	1.00

Table 2: Spearman Correlation

Note: A number in the blanket show level of significance.

The result from Tobit regression can be shown in question 2. Regarding to the financial factors, it shows that OPW significantly determines DEA. However, it has a negative relationship which means if holding other variables constant and if OPW increases a percent, DEA will decrease around 32.09 percent. Simple explanation is that if the local entrepreneurs try to raise output relative to workers, it will cause them to be less efficiency. On the other hand, if KPW and OPK increase one percent, the efficiency will increase by 32 percent. The former means capital is the main factor contributing local efficiency while the later means, if they use their capital to produce more product, the efficiency will increase.

$$\begin{aligned}
 \text{DEA} = & \mathbf{0.0007(\text{AGE})} - \mathbf{0.293 (\text{Man})}^{**} - \mathbf{32.0944(\ln\text{OPW})}^* + \mathbf{32.0991(\ln\text{KPW})}^* \\
 & (0.0007)^4 \quad (0.1270) \quad (18.3374) \quad (18.3640) \\
 & + \mathbf{32.0205\ln(\text{OPK})}^* + \mathbf{0.4286 (\text{Politic})}^* + \mathbf{0.3803 (\text{Experience})} \quad (2) \\
 & (18.3448) \quad (0.2672) \quad (0.2792)
 \end{aligned}$$

Regarding to the non-financial factor, gender of the leader are significant affecting enterprise efficiency. In this study, gender is a dummy variable in which male = 1, female = 0. According to equation 2, male leader will cause a local enterprise to have 0.293 efficiency score lower than female leader does. Then, the enterprises which have political relationship (Politic variable) are also significantly contributing the local community enterprise efficiency. The enterprises which have political relationship are expected to gain helps such as marketing supports, funding and training, and to have the higher efficiency. However, age of the leader and experience of the leader seems to have no effect local community enterprise's efficiency as they were expected.

Conclusion

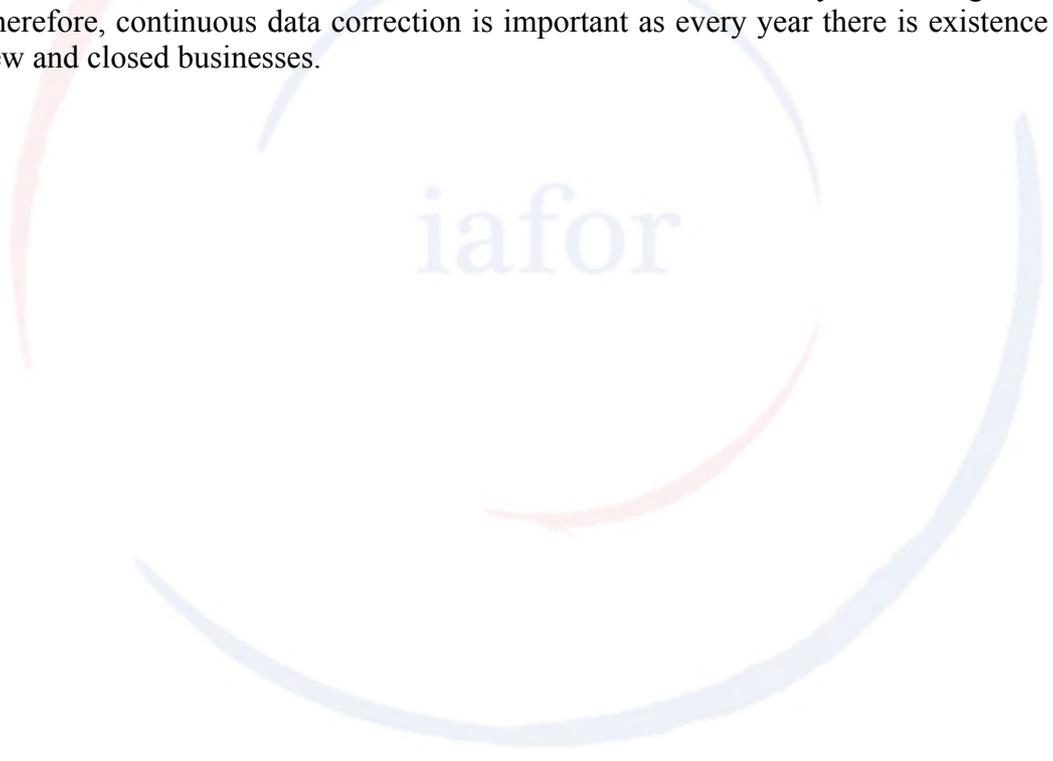
According to this study, in the first stage, it finds that Food and Beverage firms in Dok-Kham-Tai are the most effective business. Then, there are Craft, Textile, Cosmetic industries, respectively. Over all, the local community enterprises have low efficiency with average value around 0.20. In the second stage, technical efficiency calculated from DEA method which is used as dependent variable is linked to explain by financial factors and non-financial factors by applying Tobit Regression. It finds that the financial factors significantly determined the local community enterprises' efficiency. Besides, the non-financial factors which are gender, political relationship, are also found to be important. Increasing output relative to employment is surprisingly found to reduce local community efficiency. This is caused by that they do not have benefit from economy of scale. So, the expansion of production will help

⁴ Number in the blanket show bootstrap standard error.

them to be more effective and raise the efficiency. However, increasing output relative to capital and increasing capital relatively employment is found to increase the local community efficiency. So, raising output by more utilizing capital is essential, helping the local community enterprises to increase the efficiency.

Non-financial factors which are political relationship and gender are found to have significant in determining local community efficiency. Regarding to the political relationship which is found significant, the explanation for this is that local political institutions or local government organizations have provided the local enterprises, marketing support, funding and training. Therefore, enterprises with political relationship tend to have higher efficiency.

Besides, a female leader is found to contribute higher efficiency to the local community enterprises than a male leader do. This might relate to type of local businesses themselves which mainly are feminine business such as food, textile cosmetic businesses, for example. They are likely complement to women, rather than men. For the further study, the ambition which tries to explain what causes them to shut themselves down and out of their business becomes very interesting issues. Therefore, continuous data correction is important as every year there is existence of new and closed businesses.

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Designing a Creative Tourism Supply Network: Experiential Perspectives

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The Asian Conference on Business and Public Policy 2014
Official Conference Proceedings

Abstract

Tourism development involves examining and designing supply network so that tourism value can be delivered to the tourists. Creative tourism supply has special characteristics compared to other types of tourism in terms of key resources, processes, and deliverable. It is more likely that experiential perspectives play an important role in designing its supply infrastructure and network in field of service operations. This paper illustrates how an analysis of experiences can be linked to the design of supply infrastructure and network, particularly in creative tourism context, by examining which service agents have an association with the degree of creative tourism experiences tourists receive from their travel.

Keywords: Supply network design, Creative tourism, Experiential-based, Service design, Tourism development.

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Introduction

Creative tourism supply network can be different from other types of tourism. It is typically that creative tourism attractions are in distances or in rural areas in which indigenous knowledge and culture can be authentically experienced. In developing creative tourism, especially in developing countries of which tourism infrastructure is mainly provided to and from the mass tourism areas. Thus, in order to link those tourists and infrastructure to the community it requires an establishment of various supply components to accommodate and facilitate the flow of people, physical items, and information. Traditional supply chain design will employ value system perspectives to identify and evaluate the requirements and formulate supply chain strategies. It is the fact that one of criteria mainly considered is service level and tourist satisfaction outcomes. However, in the context of creative tourism, it is difficult to state that those measures are sufficient to reflect the success of creative tourism. By its nature, experiences are what matters to the creative tourism tourists. Perhaps, although good hospitality and services may be provided, the tourists may not be fulfilled in terms of authentic experiences they have during their travel. It can happen as experiences are not clear or not being delivered properly then creative tourism goal will be dismissed. In this study, experiential perspectives is taken into account in designing creative tourism supply network by examining which service agents have an association with the degree of creative tourism experiences tourists receive from their travel. Once key agents are acknowledged, an establishment of tourism infrastructure and network for community's creative tourism can be identified and prioritized for further uses in the next stages of supply network design and service design.

Literature review

Creative tourism

Serial reproduction of culture is a situation in which many tourist destinations have been made to create their tourism. It is very important to move away from this conventional value creation approach, especially when creative tourism is looking for. Mostly, traditional tourism value is given by means of core tourism activities such as accommodation, dining, traveling, and leisure activities in accordance with value chain structure of the destinations [Flagestad and Hope, 2001 and Dwyer et al., 2009]. It is known that this approach is suitable for cultural tourism in which cultural places are mainly of interest and sight-seeing is key roles of tourists. In post-modernism, there is tendency that the tourists need to learn and have more understanding about both traditional and modern culture in specific places they visit (Stamboulis and Skayannis, 2003). This leads to an emphasis on "tourism experiences" in addition to tourism structure when to create new tourism destinations.

Creative Tourism Supply Network Design: Experiential Perspectives

Creative tourism is developed by relying on how network of producers and consumers is understood and exploited (Baggio et al., 2010, Richards and Wilson, 2006). The established network between producers and consumers must be formed and creativity outcomes must be provided. In the literatures, creativity outcomes from creative tourism are evaluated from the aspects of service offerings and tourists. The former includes experiential or emotional value, multisensory stimulation of senses, varieties of heritage or related activities, and kind of activity. The latter is processes and post-

experiential transformations including revision and learning, socialization and community, experiential authenticity, i.e. individual and personal revision of activities and experiences commodified, and degree of participation in creative activities (Messineo, 2012). It is likely that these measures seems not to help designers much during designing the network but rather helpful to assess the service design consequences. The point is that it is not yet dealt with service providers or service agents. In service design literatures, co-creation system is created by service designers. They identify the links between producers and consumers by examining how they encounter, what kinds of value/experience generates among them, and how value/experience is produced and consumed. Without knowing them, the network between producers and consumers cannot be drawn.

As there are many service agents in tourism, the designers should have insight about which service agents have an association with the degree of creative tourism experiences tourists receive from their travel. It would be beneficial to as-is and to-be design process since it can reduce complexity in network design and improve visibility of co-creation system design.

Methodology

To facilitate the network design and co-creation system design, service designers can collect and analyze empirical data of how service agents and tourists encounter, what kinds of value/experience generates among them, and how value/experience is produced and consumed. The results can reflect existing situations of tourism so that service designers can be used it as starting points in designing creative tourism supply network and its related co-creation system.

Service agents in this study consist of six main types including environment; staffs; local people; media; activities by community; and activities by government and private sector. These agents are perceived being key producers of creative tourism experiences. The study collects information from the tourists about service agents who provide them the services and experiences; and degree of creative tourism experiences they receive. The total respondents of 60 people were sampled equally within two selected tourism places of Bangkok community, Ta Tien, which are Ta Tien Market and Wat Pho. The degree of creative tourism experiences are grouped into three levels including sensing, learning, and creative level. Likert scale of 1-5 are used to indicate the degree of experiences (1 is the lowest and 5 is the highest). The questionnaire data were analyzed by using Kruskal-Wallis test. Table 1 shows a set of creative tourism experiences questions in the questionnaire.

Table 1: The questions of creative tourism experiences

Level	Q1	Q2	Q3
Creative/ Learning/ Sensing	At the service point(s), which degree of tourism experience you receive from service provider(s)	Together with your own knowledge and experience, which degree of tourism experience you receive from service provider(s)	During moving around the place, which degree of tourism experience you receive from service provider(s)

Results and discussion

The statistical analysis shows how tourists and service agents encounter (Table 2). At Ta Tien market, tourists gain experiences through environment, local people, and staffs. Media and activities do not play an important role in providing experiences to the tourists. This can reflect to what experiences tourists can have at the place; sensing from excursion and learning from conversation. In the mean times, tourists at Wat Pho gain experiences mainly through media, staffs, local people, and environment. Activities are found to be minority for tourist’s experiences at Wat Pho. Only sensing and learning level of creative tourism are achieved here just as Ta Tien Market (Figure 1).

Table 2: Descriptive analysis of key service agents at Ta Tien market and Wat Pho

Place	Agent	Proportion
Ta Tien market	Environment	0.621
	Staffs	0.483
	Local people	0.586
	Media	0.448
	Activities by community	0.414
	Activities by government and private sector	0.207
Wat Pho	Environment	0.517
	Staffs	0.621
	Local people	0.586
	Media	0.690
	Activities by community	0.483
	Activities by government and private sector	0.276

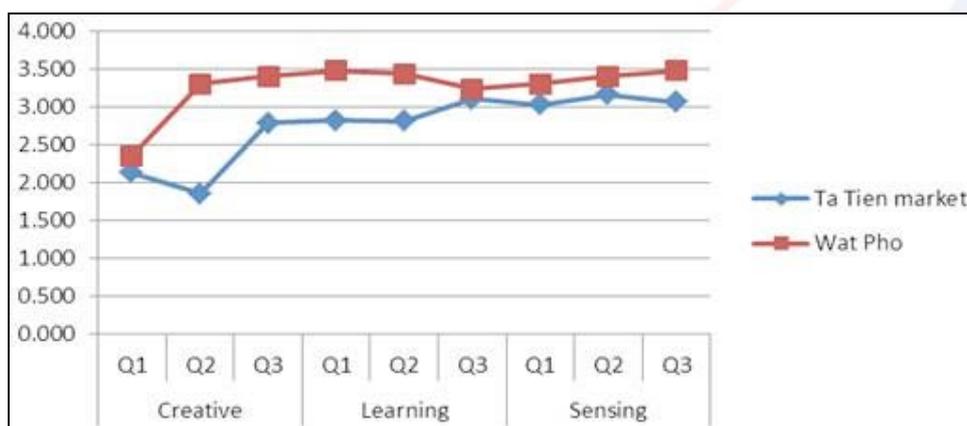


Figure 1: Degree of creative tourism experiences

This can imply that Ta Tien community does not currently offer creative tourism as the experiences or tourism values they gain are mainly provided by producers. In other words, tourists have low degree in participation and co-creation. Figure 2 presents snapshot of Ta Tien and Wat Pho.



Figure 2: Snapshot of (a) Ta Tien Market and (b) Wat Pho

In order to specify which service agents are critical to tourism experience level, the Kruskal-Wallis test of experience level of each service agent was conducted. The results are shown in Figure 3. The results show that, unlike environment agent, one of staffs, local people, and media significantly contribute to different level of experiences. This can point out which agents should be focused on when creative tourism needs to achieve its goals. Based on the results, developing creative tourism for Ta Tien community should start with staffs, local people, and media as key service agents. Supply network and co-creation system between these agents and tourists must be emphasized on. The examples of supply network and co-creation system design for Ta Tien market and Wat Pho can be described here.

Agents	H	df	p-value
Staffs	5.685	2	0.05*
Local people	8.351	2	0.015*
Media	5.009	2	0.081**

*significant level at 0.05

**significant level at 0.1

Figure 3: Kruskal-Wallis test results

People and media are significant supply in creative tourism. It should be built formal and informal communication channel for tourists and staffs as well as local people to interact. For instances, assigning community-owned representatives to tell stories about the history and culture of the places, allowing local people interact more with tourists via group welcoming, touring, and talking. They can enhance co-creation between tourists, local people and staffs and increase an involvement of local people in creative tourism activities. Features of media can be developed to the next level in order to encourage the tourists to learn and to be more creative during their visit. For instances, having a touch screen monitor with a set of questions about places, history, and culture of Wat Pho for the tourists to enjoy after they walk and see various interesting points around the temple. In overall, it can improve experiences and value for the tourists, which also encompass the objectives of creative tourism. Additionally, the service design approach can be more exploited for tourism purposes with clearer views of the designers.

Conclusion

Creative tourism supply network seems to be more complex than traditional tourism one. It has to deal with experiential perspectives of the tourists. The goal of creative tourism supply network design is to understand how service agents and tourists encounter, what kinds of value/experience generates among them, and how value/experience is produced and consumed. Consequently, co-creation system between tourists and service providers can be developed. In this paper, it illustrates how an analysis of experiences can be linked to the design of supply infrastructure and network in creative tourism context of Ta Tien community. By examining which service agents have an association with the degree of creative tourism experiences tourists receive from their travel, it can be used as starting point prior to the service design process. The service designers can ensure which service linkages should be considered. It can reduce complexity in network design and improve visibility of co-creation system design.

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***Regional Income Inequality and Well-Being:
A Case Study in the Northeast of Thailand***

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Abstract

The regional income inequality has played an important role in shaping economy, society and politics in Thailand. This issue is difficult to be eliminated within the short period. Evidently, the poverty problem has been diminishing, but unbalance distribution has prevailed. In term of statistical reports, it is usually revealed by dividing people into groups by regions. People who live in the Northeastern region have been considered as the lower income group comparing to people in other regions. Many policy makers have tried to solve inequality and poverty problem with the aim to increase people's income in terms of money.

However, money income is not sole indicator of the good quality of life or well-being although some people often use it to measure people's well-being. As a result of the field survey, the Northeastern people who have low income such as the farmer group are obviously embedded by high life satisfaction. Though low money income, they can live with the good quality of life due to self-sufficiency and sufficiency economy.

The policy development in order to improve people's quality of life and well-being should not only concentrate on trackling income inequality or the income gap among regions. The policy that people need is not the transitory effect policies for the short-term but they need the policy that effectively elevate their quality of life and ultimately lead to well-being in the long term.

Keywords: Income Inequality, Regional Inequality, Well-Being

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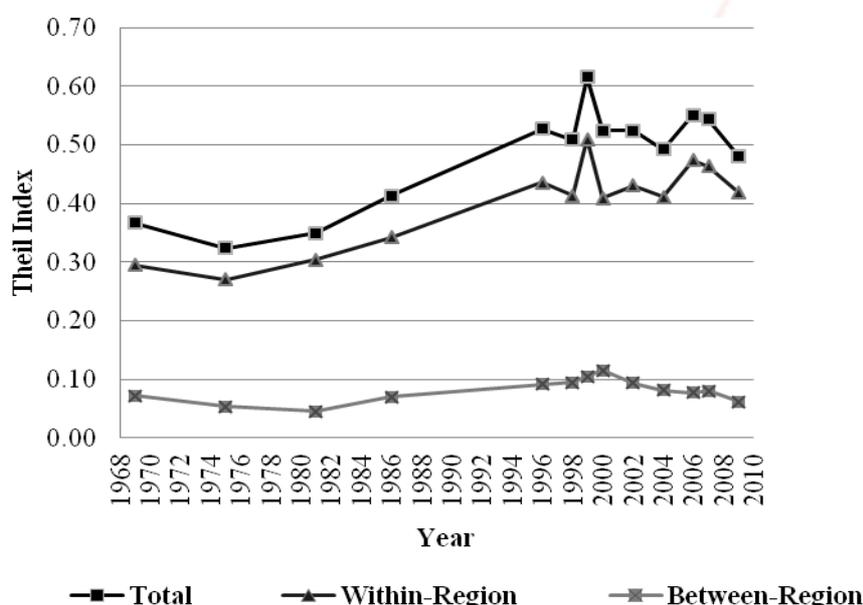
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1. Introduction

When income inequality is analyzed in order to alleviate the inequality and poverty issues, a country is usually divided into two or more sectors such as rural/urban areas, Bangkok and other regions in the case of Thailand, which implies that some sectors or regions have lower average income especially the Northeastern region that has been reported and considered as the poorest and therefore that people in the Northeastern region tend to be classified as “poor” in terms of money income. This kind of analysis may be useful if they are used correctly to improve the life of the less advantaged people. But they are sometimes used for misleading purposes such as political purposes to intensify the gap or misinterpretation of inequality in a country and sometimes resulted in giving precedence to ineffectively implemented policies.

The poverty incidence has shown the signal of diminishing as reported by the Office of the National Economic and Social Development Board (In the estimate, the poor is defined as person having consumption expenditure lower than poverty line). However, the Northeastern region had highest numbers of the poor, approximately 44.5 percent of the poor in the whole country. Furthermore, most of the poor are people living in rural area, 67.6 percent of the total (NESDB, 2012).

In term of relative poverty which refers to the inadequate distribution of income. The decomposition analysis of Theil Index by region which can be decomposed of within-region inequality and between-regions inequality reveals that the income inequality between regions may not be such an important focal problem of income inequality as is always assumed in Thailand (Figure 1). A problem of inequality issue in Thailand that should be more concerned is inequality within the region when we mention the “poorest” region.



Source: Charoenphandhu and Ikemoto (2012)

Figure 1: Decomposition of Inequality between Regions

In term of well-being, it is a broad evaluation of people's quality of life, although money income is the simple indicator applied to assess well-being. Income in-kind is also a key element for people's life and well-being, for example, some people or farmers have home-grown vegetables for their household consumption without the need to purchase from the market.

Moreover, the idea of the Sufficiency Economy which was proposed by The King Rama 9 of Thailand has begun to play a crucial role in Thai society after the economic crisis in 1997 as a way to solve the problems of the Thai economy which depended too much on the bubble economy in the pre-crisis period. The philosophy of Sufficiency Economy aims at not only self-sufficiency but also independent life, and it is not only for farmers but also for other people in the society who can adopt this philosophy in their life. Based on the philosophy of Sufficiency Economy, His Majesty the King proposed the New Theory of agriculture as the most distinct and concrete example of the application of the Sufficiency Economy to the agricultural sector. It aims at sustainability by dividing the agricultural land of a farm household into four parts; namely (1) rice cultivation; (2) fruit and perennial trees, vegetables, field crops and herbs; (3) pond; and (4) accommodation and animal husbandry, with a ratio of 30:30:30:10 so that farmers can obtain enough foods without depending on purchased inputs such as fertilizer and insecticide (Chaipattana Foundation, 2014).

Therefore, this study analyzes rate of money income dependence and proposes the self-sufficiency index in term of income in-kind dependency with an aim to employ to be an estimator for quality of life that beyond money income. Moreover, it is beneficial to conduct field survey in the Northeastern region to understand people in the local area in order to fulfill in the part that cannot be captured by only statistical analysis. With an insight on research findings, policy maker can improve the policies to solve the inequality and poverty problem appropriately and enhance well-being effectively.

2. Methodology and Data

This research consists of two parts of analysis. The first part is based on secondary data of the Socio-Economic Survey (SES) in 2011 compiled by the National Statistical Office of Thailand (NSO). The data is used to estimate the Self-Sufficiency Index which is proposed by examining the proportion of income in-kind of the monthly current household income per capita by regions. This is a method to find how much household in each region depend on self-sufficiency with income in-kind, and money income which can be analyzed as the following equations.

Quality of life on Money Income Dependence:

$$\Omega = \frac{\mu}{\phi}$$

Self-Sufficiency Index:

$$\delta = \frac{\gamma}{\phi}$$

or
$$\delta = 1 - \Omega$$

Where

Ω = Rate of dependence on money income

μ = Monthly money income per capita

ϕ = Monthly current income per capita

δ = Self-sufficiency index

γ = Monthly income in-kind per capita

The self-sufficiency index can be between 0 to 1. The complete self-sufficiency is obtained if the index equals to 1. The higher number means more self-sufficiency.

In addition, the SES data of the Northeastern region is analyzed in detail. Cross tabulation analysis is employed to analyze the monthly current household income per capita by source of income (monthly current income consists of money income and income in-kind) and characteristics of household i.e. socio-economic class, age of household head, household size, and gender of household head.

Furthermore, the SES data of the Northeastern region is divided into 2 groups; under the poverty line and over the poverty line, using the poverty line calculated by NESDB at 2,415 Baht/person/month as of 2011. Both groups are more classified into 2 categories by administrative areas; municipal and non-municipal areas. Cross tabulation analysis is employed to analyze household to estimate the percentage of household depending on self-sufficiency which based on income in-kind more than money income and percentage of household which depend on money income more than income in-kind.

The second part of this research is based on primary data from in-depth interviews conducted in the Northeastern region of Thailand of a total of 111 respondents including the two farmer groups in Kalasin Province which are accounted as two of three groups that Provincial Administration Office of Kalasin has recognized as strong self-sufficient groups. The SWOT analysis is carried out to assess strengths, weaknesses, opportunities and threats of the surveyed local community in order to create tangible strategy to elevate local people's well-being.

3. Research Results

3.1 Quality of Life on Self-Sufficiency and Money Income Dependence

The results in the Figure 2 show that households depend their quality of life and well-being on money income in higher proportion than income in-kind of the monthly current income on average in every region. Households in the Northern region have the highest Self-Sufficiency Index that based on income in-kind among the households in all other regions with the Self-Sufficiency Index at 0.1496. The Northeastern region is the second highest with the Self-Sufficiency Index at 0.1479. The Self-Sufficiency Index of the Central region, Bangkok and the Southern region come after the Northeastern region with the rate of 0.1326, 0.1197 and 0.0978 respectively.

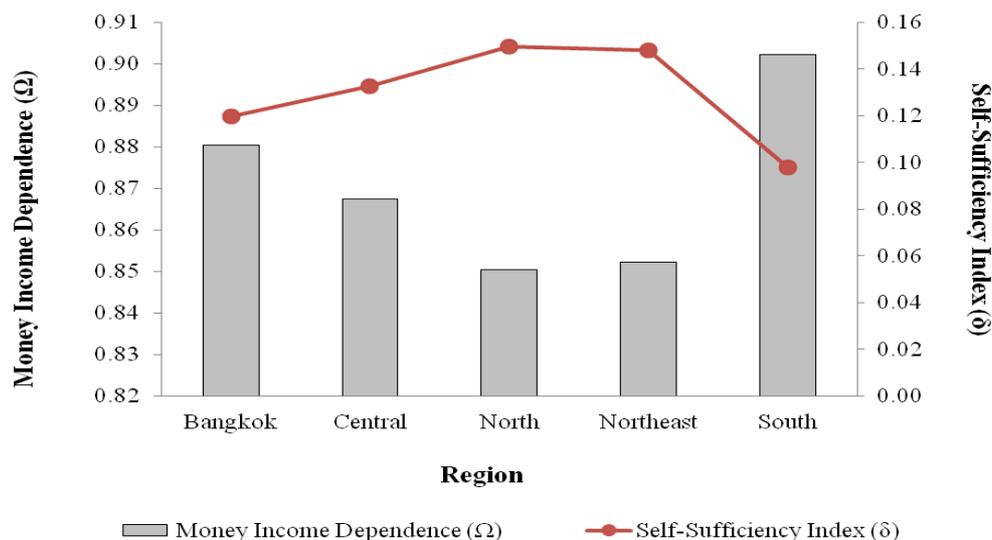


Figure 2: Self-Sufficiency and Money Income Dependence by Region

The results of analysis on monthly current household income per capita by source of income and characteristics of household in the Northeastern region are shown in Table 1-4. For the socio-economic class of household (Table 1), the professional, technical and managerial households have the highest monthly current income per capita 16,467.88 baht on average. Main source of income is money income up to 15,149.92 baht which includes money income from wages and salaries 8,620.70 Baht. In terms of income in-kind which can be categorized as income from rental estimated of free-occupied house, unpaid of goods and services and unpaid of food and beverages, the rental estimated of free-occupied house of this group is quite high (approximately 925.20 baht) but income from unpaid of food and beverages is low (approximately 254.81 baht). The group of farm operator who mainly owning land earns the highest income per capita from unpaid of food and beverages about 585.58 baht on average which could refer to their higher food security comparing to other groups.

Table 1: Monthly Income per Capita by Source of Income and Socio-Economic Class, Northeastern Region

Unit: Thai Baht

Source of Income (per Capita)	Socio-Economic Class							
	Farm Operator Who Mainly Owning Land	Farm Operator Who Mainly Renting Land/Occupied Free	Fishing, Forestry, Hunting, Agricultural Services	Entrepreneurs, Trade, Industry and Service	Professional, Technical and Managerial	Laborers	Other Employees	Economically Inactive
Monthly Current Income	4,725.26	4,291.26	3,553.29	12,770.77	16,467.88	3,734.35	6,010.28	8,407.15
Money Income	3,597.50	3,489.69	2,683.89	11,672.62	15,149.92	2,926.77	5,052.84	6,556.05
Wages and Salaries	269.51	431.73	133.87	540.59	8,620.70	2,411.78	4,332.40	607.67
Net profit from business	143.95	135.23	89.03	10,574.31	5,476.01	80.02	187.95	373.70
Net profit from farming	2,719.80	2,473.47	2,232.85	145.74	127.81	123.71	144.95	325.80
Pensions/annuities, other assistance	5.65	0	0	64.51	221.20	0	34.13	862.48
Work compensations or terminated payment	0	0	0	0.47	0	0	3.41	1.50
Money assistance from other people outside household	277.29	318.90	154.67	182.53	275.78	201.39	232.55	1,474.29
Elderly and disability assistance from government, and other organizations	169.59	129.70	65.00	76.37	72.68	107.12	70.26	247.27
Rent of properties	9.04	0	7.18	52.78	62.35	0.17	10.88	1,278.44
Saving interests, shares, bonds, and stocks	2.67	0.67	1.28	28.95	286.39	2.57	36.11	1,137.55
Interests of individual lending	0	0	0	6.35	7.02	0.01	0.20	247.34
Income In-kind	1,127.76	801.57	869.40	1,098.15	1,317.95	807.58	957.43	1,851.10
Rental estimated of free- occupied house	422.16	280.70	425.64	649.83	925.20	382.48	510.31	1,031.37
Unpaid of goods and services	120.02	78.83	87.93	100.53	137.94	80.80	138.17	328.02
Unpaid of food and beverages	585.58	442.03	355.83	347.79	254.81	344.31	308.96	491.72

Table 2: Monthly Income per Capita by Source of Income and Age of Household Head, Northeastern Region

Source of Income (per Capita)	Age of Household Head					Unit: Thai Baht
	Under 20	20-29	30-39	40-49	50-59	
Monthly Current Income	9,814.49	8,653.19	8,614.57	10,772.57	7,208.39	4,367.13
Money Income	8,548.77	7,598.85	7,499.12	9,454.50	5,962.38	3,107.39
<i>Wages and Salaries</i>	5,014.76	4,222.45	3,541.01	5,263.23	1,557.54	912.81
<i>Net profit from business</i>	2,172.46	2,402.80	2,567.74	2,042.48	1,282.74	602.86
<i>Net profit from farming</i>	190.41	414.60	637.72	859.71	688.37	273.59
<i>Pensions/annuities, other assistance</i>	28.91	27.70	39.55	260.63	1,128.61	351.12
<i>Work compensations or terminated payment</i>	0	0.25	1.27	4.46	0	0.12
<i>Money assistance from other people outside household</i>	1,035.60	435.56	503.04	736.53	941.28	656.16
<i>Elderly and disability assistance from government. and other organizations</i>	93.29	36.33	64.50	76.35	234.91	259.95
<i>Rent of properties</i>	0	7.18	34.11	51.70	52.53	29.38
<i>Saving interests, shares, bonds, and stocks</i>	13.34	45.78	93.71	154.32	73.07	21.08
<i>Interests of individual lending</i>	0	6.20	16.46	5.07	3.32	0.32
Income In-kind	1,265.72	1,054.34	1,115.45	1,318.07	1,246.01	1,259.75
<i>Rental estimated of free-occupied house</i>	617.83	570.59	598.57	717.32	652.37	508.51
<i>Unpaid of goods and services</i>	254.84	169.28	133.76	180.98	142.36	209.97
<i>Unpaid of food and beverages</i>	393.06	314.47	383.12	419.77	451.29	541.26

Table 3: Monthly Income per Capita by Source of Income and Household Size, Northeastern Region

Source of Income (per Capita)	Household Size											
	1	2	3	4	5	6	7	8	9	10	11	12
Monthly Current Income	13,811	10,521	7,345	6,505	5,195	4,621	4,031	3,931	4,274	4,538	3,489	2,174
Money Income	11,344	9,093	6,301	5,627	4,441	3,945	3,425	3,359	3,721	4,219	3,029	1,807
<i>Wages and Salaries</i>	6,222	3,939	2,707	2,432	1,798	1,482	1,535	1,347	1,899	1,397	1,868	867
<i>Net profit from business</i>	2,274	2,121	1,806	1,793	1,216	1,293	904	818	779	2,097	947	659
<i>Net profit from farming</i>	341	751	687	667	574	558	449	463	301	291	70	89
<i>Pensions/annuities, other assistance</i>	551	822	226	175	288	167	160	43	389	314	0	0
<i>Work compensations or terminated payment</i>	0	0	4	0	2	0	0	1	0	0	0	0
<i>Money assistance from other people outside household</i>	1,505	1,038	665	386	402	256	257	524	221	75	0	47
<i>Elderly and disability assistance from government, and other organizations</i>	219	185	118	94	110	109	83	91	81	45	144	144
<i>Rent of properties</i>	52	82	32	31	19	39	18	31	31	0	0	0
<i>Saving interests, shares, bonds, and stocks</i>	172	147	50	41	31	42	19	40	20	0	0	1
<i>Interests of individual lending</i>	8	9	6	9	2	0	0	0	0	0	0	0
Income In-kind	2,468	1,428	1,045	878	755	676	606	572	553	319	460	368
<i>Rental estimated of free-occupied house</i>	1,398	775	520	420	321	287	254	231	185	219	221	115
<i>Unpaid of goods and services</i>	461	184	130	109	96	61	52	64	59	2	68	39
<i>Unpaid of food and beverages</i>	609	468	394	349	338	328	300	277	310	99	171	214

Unit: Thai Baht

Table 4: Monthly Income per Capita by Source of Income and Gender of Household Head, Northeastern Region

Unit: Thai Baht

Source of Income (per Capita)	Gender	
	Male	Female
Monthly Current Income	8,490.76	8,428.66
Money Income	7,311.49	7,040.88
<i>Wages and Salaries</i>	3,379.49	3,070.41
<i>Net profit from business</i>	1,960.25	1,724.67
<i>Net profit from farming</i>	748.25	377.62
<i>Pensions/annuities, other assistance</i>	408.19	399.07
<i>Work compensations or terminated payment</i>	0.37	2.69
<i>Money assistance from other people outside household</i>	548.66	1,162.74
<i>Elderly and disability assistance from government, and other organizations</i>	135.08	154.07
<i>Rent of properties</i>	39.97	55.00
<i>Saving interests, shares, bonds, and stocks</i>	83.00	91.57
<i>Interests of individual lending</i>	8.23	3.05
Income In-kind	1,179.27	1,387.78
<i>Rental estimated of free-occupied house</i>	592.39	758.69
<i>Unpaid of goods and services</i>	162.54	209.22
<i>Unpaid of food and beverages</i>	424.34	419.86

For the age of household head category (Table 2), the households of household head in the age group of 40 to 49 years have the highest money income per capita approximately 9,454.50 Baht. The households of household head in the age of over 59 years have the lowest money income, but highest income in-kind from unpaid of food and beverages of 541.26 Baht on average.

For the household size category (Table 3), the small household size tends to earn higher income than large household size both in terms of money income and income in-kind. For the gender of household head category (Table 4), there is not much discrepancy in amount of income both money income and income in-kind between households with male or female household head.

In addition, there is 16.61 percent of households in the Northeast accounted in the poor group which under the poverty line (2,415 Baht/month/person, 2011). Among the households that have monthly current income less than poverty line, in municipal area, there is 76.87 percent of households have money income more than income in-kind while 23.13 percent have money income less than income in-kind (Table 5). For non-municipal area, 29.72 percent of households have proportion of income in-kind more than money income. On the contrary, households with average current income (money income and income in-kind) per capita over the poverty line, there is only 5.6 percent earn income in-kind more than money income for the household in the municipal area.

Table 5: Percentage of Household Comparing the Source of Income by Administrative Area

<i>Income</i>	Unit: Percent	
	Administrative Area	
	Municipal	Non-municipal
<i>Monthly current income less than poverty line</i>		
Money income>Income in-kind	76.87	70.28
Money income<Income in-kind	23.13	29.72
<i>Monthly current income equal to or more than poverty line</i>		
Money income>Income in-kind	94.39	26.66
Money income<Income in-kind	5.6	73.34

3.2 SWOT Analysis from In-Depth Interviews in the Northeastern Region

As the information from the interviews, the positive and negative aspects from internal and external factors are categorized into the strengths, weaknesses, opportunities and threats of the local community and people in the Northeastern region as shown in Table 6.

Table 6: SWOT Analysis from In-Depth Interviews

	Positive	Negative
Internal	<p>Strengths</p> <ul style="list-style-type: none"> • Solidarity among people in the community • Adoption of Sufficiency Economy • Attempt to self-sufficiency • Life satisfaction • Enough land for farm expansion • Multi crop • Knowhow of traditional agricultural method 	<p>Weaknesses</p> <ul style="list-style-type: none"> ○ Low capital, information, knowledge and modern technology ○ Misapplication of the government's services/supports ○ Lack of motivation of some people ○ Narrow channels of product distribution

External	<p>Opportunities</p> <ul style="list-style-type: none"> ✓ Increasing in demand of organic products and health concern ✓ Market development for agricultural products ✓ Main target for poverty alleviation policies ✓ Encouragement of sustainable development and living ✓ Knowledge exchange with other community ✓ Trend of multiple cropping system/integrated farming 	<p>Threats</p> <ul style="list-style-type: none"> ➤ Lack of water supply, public infrastructure ➤ Difficulty to thorough access to the government's supports ➤ Limitation of the source of fund
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4. Conclusions

Many policy makers have tended to solved inequality and poverty problem in the way to raise the income in terms of money to low income people. However, an increase of money income alone does not completely implacable to a better quality of life and well-being. The research results indicate that households in the Northeastern depend on income in-kind in higher proportion than that in other regions. Low- income households and households in the non-municipal area may earn less money income but have more food security. Low-income people and people in the rural area can live their life based on income in-kind in the higher proportion comparing to people in the higher income level. That is to say the low-income people do not necessarily mean they have low quality of life. Households in the Northeastern region have higher self-sufficiency that based on income in-kind comparing to households in other regions that have more money income dependence.

As the results of SWOT analysis, the positive aspects are that they have strength of the solidarity to support the community members, and their way of life have relied on Sufficiency Economy and self-sufficiency, however, the negative aspects such as lack of water supply and information technology of the surveyed area are the retardations for development.

5. Policy Implications

The inequality, poverty and well-being are multi-dimensional issues. The policy that can improve people's quality of life should be implemented carefully. The policies implications from this research will be proposed in 2 aspects; in terms of raising income in-kind and money income.

Income In-Kind

- Encouragement to employ the Sufficiency Economy principal.
- Support education and development in human capital so that people can have potential to enhance their quality of life and well-being by themselves.

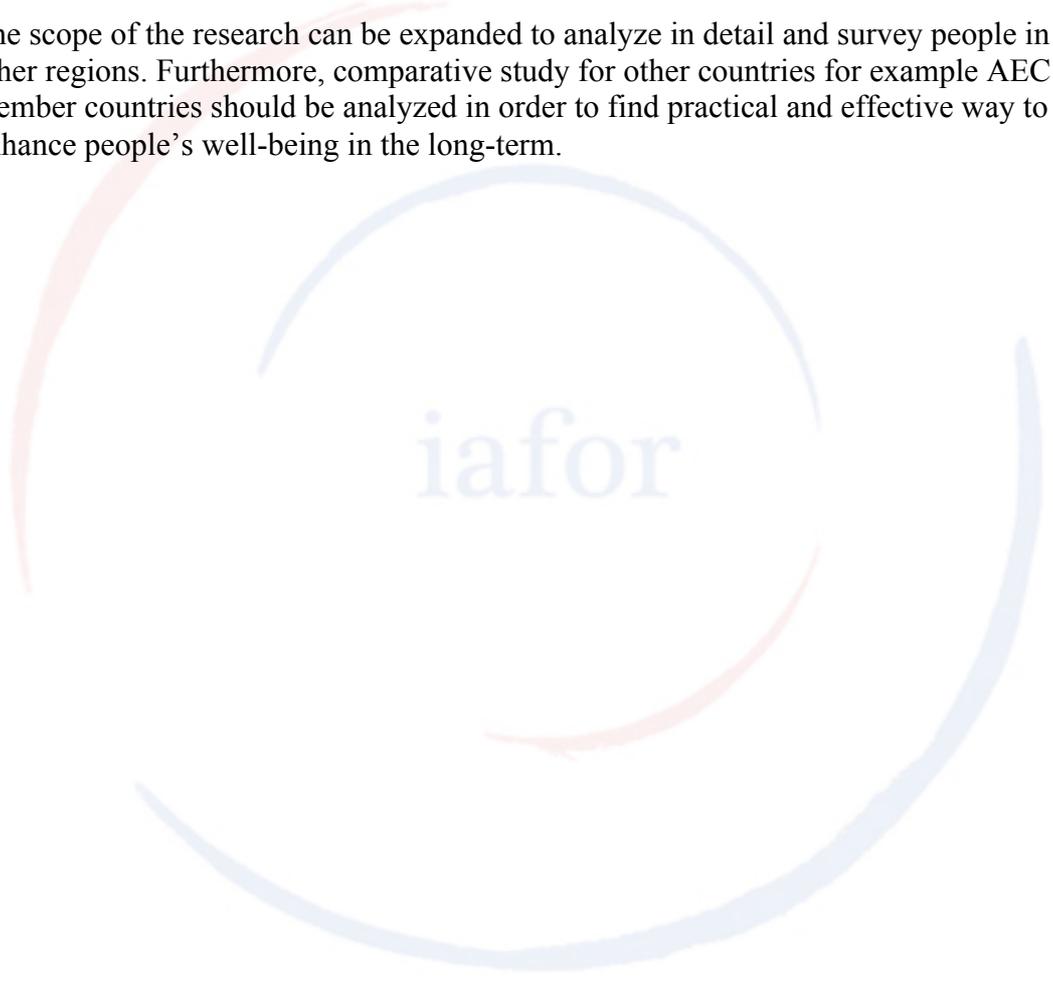
- Information technology (IT) training project for local people so that they can obtain more market channels and ability to promote their products
- Promoting the Barter Trading System in the community so that people will not largely depend on money income.
- Promoting One Household One Product.

Money income

- Establishing saving and credit cooperative in local community to be the source of funds for people in the community.

6. Future Study

The scope of the research can be expanded to analyze in detail and survey people in other regions. Furthermore, comparative study for other countries for example AEC member countries should be analyzed in order to find practical and effective way to enhance people's well-being in the long-term.

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