Future Digital Finance: Ethnic Traditional Jewellery as Intangible Heritage and Its Influence on Places’ Assets

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Abstract
It is impossible to emphasize the importance of intangible cultural heritage. Create a lasting impression in the minds of future generations by holding your own in a cutthroat industry. For many people, the allure of traditional jewellery lies not only in its aesthetic appeal but also in the deeper meanings and beliefs it represents when employed in the performance of age-old rites. It is possible to assign a monetary value to this intangible asset. This research intends to analyse the potential of intangible legacy to help future growth and development of the digital economy, and it does so by focusing on traditional Indonesian jewellery. To remain competitive in the years to come, this is a goal we must achieve. The study employs a qualitative approach and collects data using digital mapping. Two significant hubs for ethnic Indonesian jewellery production, Bali and Sumba are the primary targets of the investigation. Integrating the Intangible Living Heritage into the digital economy sustainably is achievable through the use of time series, scarcity hierarchy, and authentic features based on the uniqueness of the location and its affinity to it.

Keywords: Intangible Place Heritage, Heritage Assets, Ethnic Jewelry, Digital Economy
Introduction

All parties involved in the preservation, repair, and utilization of historic structures derive an economic advantage. As a result of cultural preservation, property values and tax revenues may increase, in addition to the creation of new jobs, rejuvenated communities, and economic expansion. It is not novel to assign a monetary value to cultural artifacts to demonstrate the economic and social benefits of conservation. There have been many economic studies conducted on a global scale. Rare public properties, such as world-famous landmarks and tourist attractions, are the subject of numerous studies, and no sane person would ever propose destroying them (Timothy, 2014). Because recreational perception values and bequest values are the two most vital forms of wellbeing that heritage generates, both of these types of values have been identified for this legacy that cannot be denied for its undeniable significance. The value of cultural heritage is evaluated from three perspectives: the recreational perception value, the inheritance value, and the home comfort value. Because the discussion in this paper is not concerned with a heritage that is clearly significant and well-known, but rather with a past that is less well-known by the current generation, mostly privately held, and hence more threatened, the extra value of home comfort entered into the picture. Home comfort in heritage is related to familiarity, and somehow the value of familiarity is related to the economy.

Cultural heritage protection not only benefits the economy, but it also helps to retain local and national identities, as well as pride in those identities, and it serves to remind people of their common history and the progress they've made. People who have a strong attachment to a certain location report better levels of well-being and overall life satisfaction. This is good for the health and happiness of an individual (Rasciute & Downward, 2010). A recent study emphasizes the significance of cultural legacies to nations and their potential to contribute to a nation's social, economic, and environmental goals. Cultural inheritance enriches people's sense of identity and belonging, which not only supports but also enables sustainable development in terms of economic growth (such as increased tourism and local employment). The amount of societal benefit generated because of cultural legacy is one way to think about how to quantify the economic value of cultural heritage. This concept of well-being includes both the material and metaphysical aspects of well-being. The overall well-being generated by cultural heritage outweighs the monetary benefits generated by historical artifacts or regions because of exploitation for monetary gains, such as in the case of tourism. Benefits that are not directly tied to market economic functioning, such as recreational perceptual pleasures, are also considered. Economic valuation approaches, such as Contingent Valuation and Hedonic Pricing, which are frequently used to determine the monetary value of nature and the environment, enable such advantages to be quantified and measured (Blake, 2000).

History preservation is vital for a multitude of reasons, including cultural, aesthetic, educational, environmental, social, and historical factors. The economic value of historical preservation is a very new addition to this list of advantages, which formerly solely covered cultural advantages. This component of adding value was ignored since it was believed to be both insulting and dismissive of the historical treasures' significance to be investigated in depth. Purists in heritage conservation continue to resist economic measures and advocacy for historic preservation on the grounds that these efforts devalue and disdain the spiritual and metaphorical aspects and importance of humankind's-built patrimony (Nasr, 2005).

However, many of people with the most influence over what happens to our legacy resources are preoccupied with the economic implications of ancient structures in the short term.
Property owners, politicians, bankers, and investors are among them. Because of the economic benefits, these decision-makers frequently come around to supporting historic property preservation for other, more important reasons. The educational, environmental, cultural, and social consequences of preserving historic resources outweigh the economic benefits.

The purpose of this study is to shed light on the value of traditional jewelry in establishing a region's authenticity so that it can compete successfully on the global stage. This will be accomplished by identifying the main features that will become economic variables in the development of the digital economy in the future.

**Literature Review**

**Heritage and The Economic Value**

Indonesia's many cultures make this nation have various cultural identities. Ethnic diversity is one of the foundations of the Indonesian government in building identity within the framework of cultural diversity. The diversity of Indonesian culture is also the national identity of the country. The richness of cultural language has given birth to various Indonesian arts and cultures. Van Ham's writing explains efforts to build Indonesia's national identity through the nation brand, which states that a country's brand exists because of recognition from other countries or the international community for an identity that already exists in that country (van Ham, 2008). Indonesia's abundant cultural heritage is a data attraction in the Indonesian tourism sector in addition to natural resources. Many tourists visit areas in Indonesia not only to enjoy nature but also to learn and enjoy various cultural heritages, including dance, music, and various historical sites, including buying and enjoying a variety of Indonesian jewellery.

Cultural values have multiple functions. The values contained in the arts are reassuring, inspiring, and appreciative. The values contained in painting, fine arts, sculpture, jewelry, palaces, temple buildings, and cultural heritage become an attraction, tool, and place to communicate with tolerance. Many meanings and heroic stories in the cultural heritage are listed and carved on the ornaments of the building (Rachman, 2012). Even culture has an economic value that makes it an object of "selling" with a value that exceeds expectations. Like batik, a commercial product with inherent national value, the variety of jewelry in the archipelago can be a similar asset. Because in jewellery, there is not an only economic value which generally comes from raw materials, but also cultural value from the shape or symbol attached to the object.

Cultural heritage plays as an alternative new economic source. Cultural heritage in Indonesia will produce various benefits if appropriately managed, with the application of the rule of law that is also correct and appropriate. At least some benefits can be obtained from using cultural heritage as a new source of Indonesia's economy, that the development of culture-based products will revive the identity of the Indonesian nation. Economic acceleration based on traditional knowledge and art can help improve the economic welfare of the community groups of stakeholders and actors of the tradition concerned (Petronela, 2016). Suppose the rich diversity of cultures and traditions is managed properly and correctly. In that case, Indonesia's economic revival may be triggered not because of technological sophistication but because of tradition's beauty and cultural heritage diversity.
**Future Digital Heritage Culture**

Computer-based assets of enduring worth that ought to be preserved for future generations make up digital heritage. Digital legacy comes from a variety of communities, businesses, sectors, and geographical areas. Not all digital resources have lasting significance, but those that do necessitate proactive preservation techniques to preserve the continuity of digital legacy (Cooke, 2020). Humans are producing and distributing digital resources in information, artistic expression, ideas, and knowledge encoded for computer processing that they value and desire to share with others through time and across location by using computers and related tools. This is proof of a digital past. It is a heritage made up of numerous components, many of which have things in common, and it faces numerous risks (Pan et al., 2013).

Essentially, telling the story is purpose of the cultural heritage section. What does include in the story? They can be historical, artistic, sociological, psychological, contemporary, or ancient story. Whatever the experience, the story is central. Until now, these stories have tended to be passive (Ivanovic & Saayman, 2013). Exhibitions and tours where visitors can tell stories through their eyes. But digital offers new and exciting possibilities that put the visitor at the centre. Encourage active two-way dialogue and position visitors as participants rather than audiences.

**Intangible Heritage and The Value Assets**

The discussion about the need for the protection of culture has become an important issue today, and this is due to the rise of claims that Indonesian cultures are claimed to be owned by foreign countries. However, this issue has actually been a subject of debate at the international level since 2001, when the first session of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC GRTKRF) was held at the WIPO headquarters in Geneva, Switzerland. The substance of traditional knowledge and traditional cultural expressions has been the subject of debate since 1967, when the Bern Convention for the Protection of Literary and Artistic Works added Article 15.4, which states that works that have not be published and whose authors are not known, can be protected, as copyright if it is suspected that the creator is a citizen of a party to the convention. In addition, state parties to this convention are required to appoint competent authorities to provide protection.

Based on the UNESCO convention 2003, intangible cultural heritage is a variety of practices, representations, expressions, knowledge, skills, instruments, objects, artifacts, and related cultural spaces. Where in some cases, a community, group, or person can also become an intangible cultural heritage. Intangible cultural heritage is intangible/abstract, such as concepts and technologies that can pass and disappear over time, such as language, music, dance, ceremonies, and other structured behaviors. The protection in question is all forms of efforts to protect Traditional Cultural Expressions against use that is carried out without rights and violates propriety (Asri, 2018). The protection of traditional culture as part of traditional knowledge is essential, at least for 3 (three) reasons, namely:

1. There is potential for economic benefits resulting from the use of traditional knowledge,
2. Justice in the world trading system, and
3. The need to protect the rights of local communities.
This potential for economic benefits, which then makes a cultural heritage needs to be protected by law so that it does not become a source of profit for an unauthorized person or group to the detriment of the community that owns the cultural asset.

Knowledge, information, reputation, and several other intangible things can provide a competitive advantage to individual businesses as well as nations in general. This is because the modern information society places a greater emphasis on the importance of intangible values (Bontis, 2001). The percentage of intangible capital that makes up a nation's total wealth is growing in the majority of prosperous countries. In modern economics, there are no reliable criteria for distinguishing intangible legacy, intangible national wealth, and intangible property. This leads to the confusion of notions and complicates the creation of mechanisms that increase intangible capital at the state level. Intangible capital can be thought of as the sum of a country's intangible assets (Chen, 2018).

**The Authenticity of a Traditional Ethnic Brand in Jewellery**

Global enterprises face both an economic opportunity and a difficulty in the modern technological era. Due to a shortage of clients, there is an abundance of items and competitors. Customers are kings in this situation because they have access to a plethora of information and options. As a result of the proliferation of information and technology, market competition has become more dynamic and complex (Cavusoglu et al., 2007). In this case, clients are provided a wide range of options for a commodity that are virtually equivalent in price and quality. A company's name is one way to distinguish itself from the competition in the generic market. Customers use their purchasing decisions to assess the quality of a brand. To survive in today's competitive market, all organizations have been obliged to recognize the need of optimizing their assets. To achieve this condition, a single investment is required. Meeting a customer's wants is no longer sufficient; hence, brands are vital (Teece, 1998).

A brand is different from a reputation or a trademark. While marketing activities are more directly related with a brand than with a trademark, the latter has a stronger legal component. A brand is also described as the name, word, mark, or design, or any combination thereof, that identifies the creator or seller of a product or service, as well as favourable customer knowledge of the brand and the beneficial effects of using the brand, both of which communicate brand equity (von Graevenitz, 2009). A brand is much more than just a distinctive logo or concept. They aid in identifying and distinguishing their products and services from those of competitors, and they are essential in forming effective partnerships with a diverse range of stakeholders, giving firms a competitive advantage. The luxury goods industry is becoming more competitive and profitable.

To improve customer demand reactions, luxury companies need to obtain a deeper understanding of what is going through their customers' minds, whereas food and beverage labels may strive to enhance sales. Luxury goods manufacturers are obligated to make their products of the highest possible quality, to sell them at competitive prices, and to collaborate with well-known public figures so that customers of any social standing who place symbolic or emotional importance on their purchases can take pleasure in them (Walls et al., 2011). Because premium brands are more noticeable when worn, they have the potential to elevate the social status of the individual who wears them. Luxury goods are products that the owner of the good can use to enhance their status. Examples of luxury goods include watches, jewelry, handbags, shoes, and accessories.
For a long time, the concept of resilience has been related to an organization's prestige or brand identity. Organizations perceived as more sustainable or responsible will frequently demand higher pricing, and supply chain sustainability issues pose a danger to the chain's brand or reputation. From the standpoint of a business, sustainability may be defined as an organizational strategy that emphasizes reducing the quantity of resources consumed and making effective use of waste generated (Hrebiniak & Joyce, 1985). This is done to reduce the negative effects of the company's actions on humanity. Policies and programs that promote sustainability, in general, strive to support sustainable development in such a way that behaviours meet current demands without jeopardizing future generations' ability to meet their own.

Material and Method

The study was carried out using qualitative methodologies. The data was collected in two stages: To begin digital mapping, samples are collected from the Indonesian towns of Yogyakarta and Denpasar, as well as the islands of Java and Bali, which have historically produced ethnic jewelry. In addition to random questionnaires in the first phase, big data harvesting, product samples, and interview techniques are used in the second phase. The Butterfly Mamoli technique was employed for the study, which is based on studies on the roles of the left brain (logical) and the right brain (emotional) in humans, as seen in figure 1.

![The Butterfly Mamoli Diagram in the Study of Historical Sites](Image)

**Figure 1 The Butterfly Mamoli Diagram in the Study of Historical Sites**


Result and Discussion

According to the study's conclusions, cultural institutions' use of digital technologies benefits tourism destination management. This is especially true when it comes to reaching new audiences and improving the visiting experience. This is accomplished by distributing high-quality, authenticated digital content that may be accessed online or deployed on-site. It is possible that such methods, in addition to providing new ways to involve the public in historical study, will now serve as a new type of money in a new experiential sector of the global digital economy. This opportunity exists because such methodologies may provide new opportunities to involve the public in historical inquiry.

Tourism development is strongly based on cultural legacy, and internet tools can be utilized to expand the worldwide reach of cultural assets and narratives. Furthermore, these tools can
be utilized to give increasingly localized stimuli for in-destination visits to historical sites, as well as the use of digital technology to exhibit components of intangible heritage.

Traditional Indonesian jewellery is one of several cultural artifacts that are still practiced today, along with dance and regional language. Traditional jewellery differs from one region of Indonesia to the next in the same manner that traditional clothing does. This style of jewellery is typically used during traditional ceremonies or weddings (Carpenter & Heurtault, 2011). This is one of the records of Indonesian culture that should not be lost, and we can see our ancestors' metallurgy skills through the traditional jewellery they wore. According to historical accounts, the ability of the people who are now known as Indonesians to manufacture metal can be traced back to as early as 1000 BCE.

All the way through the Dong-Song Bronze Age, in particular. When Chinese and Indian influences first arrived in the archipelago around 500 B.C., the metal crafts that were the forerunners of jewellery began to experience considerable changes in appearance. Each region of Indonesia has its own distinct culture. Traditional rites, such as wedding ceremonies, are an example of cultural practices that are still practiced today. At this celebration, traditional clothing, and accessories, such as jewellery, are worn (Cohen, 2016).

Besides being worn for aesthetic purposes, this jewelry is often the focal point of ritualistic ceremonies, partly because the bulk of these classic jewelry items are treasured heirlooms. Jewelry passed down through generations is often associated with long-standing cultural practices that have maintained their significance in modern Indonesia. This is since jewelry is something that is always passed down from one generation to the next (Manning, 2000). A Surakarta-based expert shared that jewelry serves as a status signal and is only worn to events when a deeply held religion is celebrated and respected. Marriage, the end of adolescence, the birth of a child, and the introduction of any new member to the family are all instances of such milestones. This is because traditional jewelry craftsman canter are spread out across the entirety of Indonesia, as shown in Figure 2.

**Figure 2 Digital Map illustrates the connection between heritage, location, and cultural goods**


Furthermore, in complement to being worn as an accessory at traditional events with cheerful components, ethnic jewellery is also worn during significant occasions and is sombre, especially when worn during events with a tense atmosphere, such as war. This is because
Figure 3 illustrates the evolution of traditional jewellery over time. It is no longer a unique spiritual thing but rather a commercial product. This is altered by the changing behaviour of people over time. Originally, the term "place" referred to a location where a group of people assembled. Currently, the term is used to describe places with an emotional link to a person, even if that person is no longer present or has changed. The worth of the product is no longer solely determined by a material's rarity, uniqueness, and durability. In addition, it is influenced by new technology and other novel and singular variables. In a same manner, the current meaning has developed through both tradition and ritual, which are always displayed to everyone, including tourists.

The tangible artifacts and intangible traits of a group or culture that have been passed down through the years, preserved in the present, and passed on to the next generation make up what is known as cultural heritage. Cultural heritage includes things like structures, monuments, landscapes, books, artworks, and artifacts. Also included are the oral traditions, performing arts, social practices, rituals, celebratory events, knowledge, and practices concerning nature and the universe, and the skills necessary to manufacture traditional crafts that have been passed down from our ancestors and on to our descendants (Hayden, 1997).

These artifacts, in whatever form they take, are component of our legacy, and preserving them needs our active participation. They may be significant because of their economic worth, but they may also be significant because they make us feel a certain way or make us feel like we belong to something, such as a country, a tradition, or a way of life. The most effective way to maintain your cultural inheritance, no matter what it is, is to share it. It is vital to maintain our cultural legacy since it contributes to the preservation of our national identity. The value of intangible cultural legacy lies not in the cultural manifestation itself, but in the abundance of skills and information that it transmits from generation to generation.

**The Economic Values Of Cultural Heritage: A Case Study In Bali, Indonesia**

As one of the tourist areas which is also the main tourist destination in Indonesia, Bali does not only rely on natural resources but also cultural values that are inherited from their ancestors. Various tourist sites in Bali will always have a relationship with cultural values as an ancestral heritage where each cultural heritage is, at the same time, a source of economic
development for the community and regional economic growth. One example is Subak Jatiluwih, located in Jatiluwih Village, Tabanan Regency.

Jatiluwih Village, with the potential for natural beauty, panoramic views of terraced rice fields or terraces and the cool air of the area with an altitude of 700 meters above sea level, has become one of the tourist destinations in the world and is included in the United Nation Educational, Scientific and Culture (UNESCO) World Heritage list as world cultural heritage. The uniqueness of terraced rice fields or terraces is also supported by a traditional irrigation system, namely subak with the Yeh Aya Hulu Dam as a dam to regulate the water flow in the rice fields separates tourist attractions. The concept of environmental preservation that adheres to Tri Hita Karana makes Jatiluwih Village a tourist village that maintains environmental balance (Prastyadewi et al., 2020).

The way of processing agricultural land is still traditional by using cows or buffalo to plow the fields and traditional plow tools. Likewise, harvesting is traditionally done using ani-ani as the primary means. Planting and harvesting in land management still use the mutual cooperation pattern. After harvesting is done, it will be tied traditionally, which has its own peculiarities and is not easy for everyone to do because women farmers generally carry out harvesting traditions. After drying, they will be transported to their respective homes to be stored in a barn for a certain period of time.

The cultural uniqueness of rice cultivation and harvesting, landscapes with the traditional Subak irrigation system, and temples in Jatiluwih Village have now become a unified tourist destination that creates economic resources for the community. Status as a world cultural heritage area also provides benefits for farmers in the form of cutting tax obligations. The village-managed financial management system divides the amount of income from tourist areas and frees farmers from payment obligations for religious ceremonial activities. These points make a cultural heritage a valuable economic asset if it can be adequately managed.

**Culture and the Future Economic Value**

Culture plays an important role in the economic development of a nation. The way people of a nation see their government, their jobs, their relationship with family and relatives and other people around them are what the culture refers to. So how a man ends up being is not determined by nature but by culture. By how a person is being raised, his habits, his education, and his customs. Therefore, the better culture a nation has the better its economy it has.

When used by economists, the term "culture" refers to people's views and values. Culture can refer to a variety of things, such as diverse culinary preferences and odd practices. It covers the society they were reared in and the worldview their parents instilled in them. Studies looking at how parents and their kids behave have revealed that attributes like saving, trust, patience, and a risk-taking attitude are frequently passed down through the generations. Like this, cultural values are passed down from one generation to the next. Many of these ideals will influence behavior, which will impact the economy.

We have seen evidence thus far that culture differentiates, is largely inherited, and is important in explaining individual behavior. However, how does culture assist us in comprehending why some nations have developed economies and others do not?
So how should we consider culture while assessing economic development? The flowchart below was taken from Guilino, it gives clearer picture of how culture relates to economic development.

**Figure 4 Diagram economics of politics by Giuliano**

Paola Giuliano and Alberto Alesina states:

The same institutions may function differently in different cultures, but culture may evolve in differing ways depending on the type of institutions. (Alesina & Giuliano, 2015)

From the quotation above, it can be concluded that even though the same institutions may function differently in many civilizations, culture can develop in a variety of ways depending on the institutions.

Cultural identity and personal preferences are typically used in economic research as exogenous fixed factors on which to base studies and reach conclusions. The premise behind other social sciences, such as anthropology, sociology, and psychology, is that culture and personal preference may change through time and be impacted by their circumstances. Economy and culture interact with one another.

**Conclusion**

The cultural and ecological histories of a country are unique and extremely valuable. It's a means of displaying your personality to the rest of the world. Cultural heritage is a vital aspect of who we are as a people because it establishes a framework for preserving cultural and historical places, old buildings, monuments, shrines, and landmarks. A group's values, beliefs, and ambitions define their national identity, which is shaped by their culture and history. It is critical to preserve our cultural history because it allows us to remain loyal to who we are as a group. The importance of intangible cultural heritage comes not in the cultural artifact itself, but in the wealth of knowledge and skills it passes down from generation to generation. This information flow has enormous social and economic implications for both minority and majority communities inside a country. It is also critical for both developing and established countries.

This digital legacy's importance and extent will only grow in the future. The use of digital technologies to record and share what people value and want to pass down to future generations is growing. New means of expression and communication have emerged that were previously unknown. The expanse of the Internet exemplifies this phenomenon. Further rapid growth in digital heritage in regions of the world currently disadvantaged by the prevalence of English on the Internet is likely to be aided by the development of tools to promote larger multilingual and multi-script Internet usage. As a result, the preservation of the world's expanding digital legacy is a global issue affecting all governments and people.
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