Evolving Critical Core Skills Needs in the Singaporean Workforce: A Mixed-Methods Review for a Future-Ready Framework

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Abstract

This paper presents a comprehensive review of Singapore's Critical Core Skills (CCS) framework, a national standard established in 2020 to equip the workforce with essential transferable skills for employability and career mobility. As the nature of work transforms, a static framework risks obsolescence. This study aimed to evaluate the continued relevance of the 16 CCS, identify needs for substantive updates, and explore the integration of emerging competencies such as mental wellbeing and career health. The methodology included eight focus group discussions (FGDs) with 55 employees and 16 management representatives from 21 companies across eight key industry sectors, supplemented by quantitative ranking surveys and a review of secondary data from national and international sources. Our findings confirm the continued relevance of all 16 CCS, with participants advising against the removal of any skill. However, the research identified significant thematic overlaps and redundancies, leading to a primary recommendation to streamline the framework by merging four pairs of complementary skills. This consolidation would create a more intuitive and efficient 12-skill framework. Furthermore, the study proposes specific, nuanced content revisions for eight other skills to enhance their clarity, modernise their language, and improve their practical application. The research concludes that concepts of mental wellbeing and career health are effectively embedded as outcomes within existing skills like Self-Management and Learning Agility, rather than requiring the creation of new, distinct competencies. This paper provides an evidence-based roadmap for the strategic evolution of a national skills framework, ensuring its dynamic alignment with contemporary and future workplace demands.

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Introduction

The 21st-century economic landscape is defined by unprecedented volatility, complexity, and ambiguity, driven by forces such as digitalization, automation, and globalization (Schwab, 2017). In this environment, the paradigm of workforce value has shifted decisively. While technical or "hard" skills remain essential for specific job functions, their shelf-life is shortening. Consequently, durable, transferable "soft skills" have emerged as the bedrock of individual and organizational resilience, adaptability, and long-term success. These skills, encompassing cognitive, interpersonal, and self-management capabilities, are not mere supplements to technical knowledge but are crucial enablers of its effective application. As Bora (2015) posits, soft skills like communication, leadership, and collaboration act as a multiplier, enhancing the performance of individuals and the competitiveness of enterprises.

Recognizing this imperative early on, Singapore's national skills authority, SkillsFuture Singapore (SSG), has proactively developed and refined its national soft skills frameworks for nearly two decades. This journey of evolution reflects the nation's own economic transformation from a manufacturing-based to a knowledge- and innovation-driven economy. As depicted in Figure 1 (based on Slide 3), this journey began with foundational Employability Skills (ES) under the Workforce Skills Qualifications (WSQ) system in 2004. It then expanded to include domain-specific frameworks such as the Service Excellence Competency Framework (SVCF) in 2006, Leadership and People Management (LPM) WSQ in 2008, and Business Management (BM) WSQ in 2010.

In 2016, these disparate frameworks were synthesized into a more holistic model: the Generic Skills and Competencies (GSCs). The most significant evolution occurred in August 2020 with the launch of the Critical Core Skills (CCS) framework. This was not a minor update but a fundamental reimagining, developed through extensive consultation with 122 attendees representing a tripartite coalition of enterprises, government agencies, and Institutes of Higher Learning (IHLs). This broad-based consultation affirmed that a robust soft skills foundation was indispensable for supporting business competitiveness in an era of rapid change.

The resulting CCS framework comprises 16 essential skills deemed critical for employability and career mobility across all sectors of the economy. These skills are strategically organized into three clusters:
- **Thinking Critically:** Cognitive skills for navigating complexity (e.g., Creative Thinking, Problem Solving, Sense Making, Transdisciplinary Thinking).
- **Interacting with Others:** Interpersonal skills for effective collaboration (e.g., Collaboration, Communication, Building Inclusivity, Developing People).
- **Staying Relevant:** Self-efficacy skills for personal and professional adaptability (e.g., Adaptability, Learning Agility, Digital Fluency, Self-Management).

However, a framework designed for an era of change must itself be capable of change. To prevent its obsolescence and ensure its continued efficacy, SSG initiated this comprehensive review in August 2024. The study was guided by three core objectives:
1. To stay systematically up-to-date with emergent and evolving soft skills demands in the labour market.
2. To rigorously evaluate the continued relevance and applicability of the existing CCS framework for the contemporary Singapore workforce.

3. To generate evidence-based recommendations for updating the CCS framework to ensure its timely and effective activation within Singapore's national Continuing Education and Training (CET) ecosystem.

To structure this investigation, the research pursued two primary Lines of Inquiry (LOIs):

1. Workplace Relevance and Framework Integrity: Are all 16 existing CCS still relevant in the modern workplace? Are there any skills that have become obsolete and should be removed? Conversely, are there new or emerging skills that warrant addition? Do any existing skills require updates to their content, definition, or title to maintain relevance?
2. Integration of Emerging Competencies: Given the growing global discourse on workplace wellness, to what extent should mental wellbeing and career health be recognized as new, distinct competencies within the CCS framework?

This paper presents the methodology, findings, and detailed recommendations stemming from this critical review, offering a blueprint for the iterative and user-centric evolution of a national skills architecture.

Literature Review

The Singapore CCS framework is situated within a vibrant global conversation among policymakers, academics, and industry leaders about the essential skills for the future of work. A review of prominent international frameworks reveals a broad consensus on the types of skills needed, while also highlighting nuanced differences in terminology, categorization, and emphasis.

Comparison With International Skills Frameworks

As shown in the comparative analysis, the core components of the CCS framework align well with other major studies. A comprehensive study by Taylor et al. (2022), analyzing international data from organizations like the OECD and ILO (2018-2021), identified skill clusters that closely mirror the CCS. Their "Cognitive" cluster includes Creativity and Critical Thinking, their "Interpersonal" cluster includes Collaboration and Empathy, and their "Self-efficacy" cluster includes Flexibility/Adaptability. Notably, Taylor et al. place a stronger emphasis on specific attributes like Resilience and Optimism, which, while implicit in the CCS, are not foregrounded as distinct skills.

A meta-review by Liu et al. (2023) synthesized a wide array of frameworks from 2008-2023, including those from O*NET, McKinsey, and the Education Design Lab. This review confirmed the universal importance of "essential cognitive skills" (e.g., problem-solving) and "interpersonal skills" (e.g., teamwork). However, Liu et al. also identified emerging skill categories that reflect recent shifts in the work environment, such as dedicated "Remote Work Skills" (e.g., digital collaboration, time management in a virtual setting) and Societal Skills" (e.g., civic skills, cross-cultural humility), suggesting dimensions that future iterations of skills frameworks may need to consider more explicitly.

Alternative Theoretical Lenses: The OECD SES Framework

While most frameworks, including the CCS, adopt a competency-based approach (defining what a person can *do*), the OECD's framework for Measuring Socio-Emotional Skills (SES)

offers a complementary, trait-based perspective rooted in the Big Five personality model. This model links workplace behaviors to underlying personality dimensions:

- Task Performance (e.g., achievement orientation, persistence) is mapped to Conscientiousness.
- Emotional Regulation (e.g., stress resistance, optimism) is mapped to Emotional Stability.
- Collaboration (e.g., empathy, trust) is mapped to Agreeableness.
- Open-Mindedness (e.g., curiosity, creativity) is mapped to Openness to Experience.
- Engagement with Others (e.g., sociability, assertiveness) is mapped to Extraversion.

The OECD framework is valuable because it highlights the dispositional roots of workplace competencies. For instance, the CCS of Adaptability can be seen as a manifestation of high Openness and high Emotional Stability. This perspective reinforces the idea that developing skills is not just about learning techniques but also about cultivating underlying personal attributes. Contrasting the CCS's applied, behavioral focus with the OECD's dispositional model provides a richer theoretical context for understanding the nature of soft skills.

This body of literature confirms that the CCS framework is well-aligned with global standards. However, it also raises questions about potential areas for refinement, such as the explicit inclusion of resilience, the potential for new skill categories related to remote work, and the interplay between skills and personality. This study advances the discourse by moving beyond theoretical comparison to conduct a deep, empirical validation within the specific socio-economic context of the Singaporean workforce.

Research Methodology

To generate robust and actionable insights, this study employed a sequential explanatory mixed-methods design. This approach was chosen to leverage the strengths of both qualitative and quantitative research. The initial qualitative phase (FGDs) allowed for an in-depth exploration of the nuances of skill relevance, followed by a quantitative phase (ranking survey) to measure the relative importance of these skills and triangulate the qualitative findings. The entire research process was conducted between November 2024 and February 2025.

Research Participants and Sampling Strategy

A purposive sampling strategy was used to recruit participants from a diverse range of industries critical to Singapore's economy. The goal was to ensure a representative cross-section of workplace experiences and organizational needs. The study engaged a total of 71 participants from 21 distinct companies. This cohort comprised 55 employees and 16 management representatives.

The participants were drawn from eight key industry sectors:
1. Wholesale & Retail Trade
2. Professional Services
3. Transportation & Storage
4. Financial & Insurance Services
5. Information & Communications
6. Community, Social & Personal Services

7. Manufacturing
8. Food Services

This sectoral diversity was crucial for identifying skills that were universally relevant versus those that were context-dependent. Both employees and managers were included to capture perspectives from both the "supply" side (individuals using the skills) and the "demand" side (organizations needing the skills).

Data Collection Instruments

Focus Group Discussions (FGDs)

The primary instrument for data collection was a series of eight semi-structured FGDs: seven with employee groups and one consolidated session with management representatives. Each FGD lasted approximately 90-120 minutes and was facilitated by a trained moderator. The protocol was designed to systematically address the Lines of Inquiry. Discussions were structured to first assess the relevance and importance of the existing 16 CCS in participants' daily work, followed by an exploration of potential gaps, redundancies, and needs for new skills, with a specific probe on mental wellbeing and career health. Participants were encouraged to provide concrete examples and justifications for their views. All sessions were audio-recorded and transcribed verbatim for analysis.

Ranking Survey

To complement the qualitative data, a quantitative ranking survey was administered to all participants at the conclusion of their respective FGDs. The survey used two different prompts to capture stakeholder-specific priorities:
- Employees were asked to rank the 16 CCS based on their perceived impact on an individual's career mobility and long-term employability.
- Employers were asked to rank the 16 CCS based on their perceived importance for driving organizational development, productivity, and competitiveness.
- Participants ranked the skills from 1 (most important) to 16 (least important), and the mean rank for each skill was calculated for each group.

Secondary Data Sources

To contextualize the primary findings, the research team incorporated a review of existing large-scale datasets and reports, including:
- IAL's internal Critical Core Skills Profiling and Skills and Learning Study (SLS) for national-level data on skill proficiency and demand.
- OECD's Programme for the International Assessment of Adult Competencies (PIAAC) for international benchmarking.
- IAL's Business Performance & Skills Survey (BPSS) to corroborate employer perspectives on skill needs.

Data Analysis

A systematic, multi-stage analysis process was implemented.

- Qualitative Analysis: The FGD transcripts were analyzed using thematic analysis (Braun & Clarke, 2006). This involved a six-phase process: (1) familiarization with the data through repeated reading; (2) generating initial codes from the text; (3) searching for patterns and collating codes into potential themes; (4) reviewing and refining these themes; (5) defining and naming the final themes; and (6) producing the report. This rigorous process allowed for the identification of dominant patterns and divergent viewpoints related to the research questions.
- Quantitative Analysis: The survey data was analyzed using descriptive statistics. The mean rank and standard deviation were calculated for each of the 16 CCS for both the employee and employer groups. This data was then used to compare priorities between the two groups and to validate or challenge the themes emerging from the qualitative analysis.

By integrating these multiple data sources and analytical techniques, the study ensured a comprehensive and well-substantiated evaluation of the CCS framework.

Results

The analysis of the qualitative and quantitative data yielded a rich set of findings that directly address the study's Lines of Inquiry. The results are presented below, organized by key themes.

Quantitative Ranking of Critical Core Skills

The survey provided a clear hierarchy of perceived importance for the 16 CCS. As presented in Table 1, there was significant agreement between employees and employers on the most critical skills.

Table 1

Mean Ranking of CCS by Employees (Career Mobility) and Employers (Organizational Development)

CCS	Employee Mean Rank	Employer Mean Rank
Adaptability	**4.2**	**4.8**
Collaboration	**4.7**	6.1
Communication	9.9	**4.9**
Customer Orientation	**5.5**	**5.6**
Building Inclusivity	6.2	10.5
Creative Thinking	6.7	8.2
Learning Agility	7.3	6.9
Problem Solving	8.4	7.1
Decision Making	8.8	8.3
Self-Management	9.5	9.7
Sense Making	9.9	10.2
Develop People	10.1	8.2
Global Perspective	10.2	12.3
Digital Fluency	10.6	10.7

Transdisciplinary Thinking	11.2	12.8
Influence	12.7	9.5

Key Observations From Rankings

- **Top-Tier Skills:** Adaptability and Customer Orientation were ranked in the top three by both groups, highlighting their universal importance for both individual success and organizational effectiveness in a dynamic environment.
- **Stakeholder Divergence:** Communication was ranked much higher by employers (4.9) than by employees (9.9), suggesting employers place a greater premium on this skill for overall organizational functioning. Conversely, Collaboration was seen as more critical for individual career mobility by employees (4.7) than by employers (6.1). The largest divergence was seen in Influence, which employers ranked as moderately important (9.5) while employees ranked it near the bottom (12.7) for their own career progression.
- **Lower-Tier Skills:** Global Perspective and Transdisciplinary Thinking were consistently ranked in the bottom third by both groups, suggesting they are perceived as more niche or less frequently required compared to other skills.

Qualitative Findings From Focus Group Discussions

The FGDs provided the essential context behind these numbers. The thematic analysis revealed five key findings corresponding to the LOIs.

Theme 1: Universal and Continued Relevance of All 16 CCS (LOI 1a)

There was an overwhelming consensus across all eight FGDs that no CCS should be removed from the framework. Participants affirmed that every skill held value in certain contexts. A senior manager in the Professional Services sector remarked, "We don't need to throw the baby out with the bathwater. All of these skills are 'critical' at some point; the question is 'when' and 'for whom.'" This finding validates the foundational work of the 2020 framework.

Theme 2: The Criticality of Context (LOI 1a)

While all skills were deemed relevant, participants repeatedly emphasized that their importance was highly dependent on industry, job role, and organizational context. This explains the lower rankings of certain skills in the survey.

- **Global Perspective and Transdisciplinary Thinking:** Participants from SMEs and domestically-focused companies noted these skills had limited application in their daily work. An owner of a food services business stated, "Global perspective is great for a multinational, but for my team, mastering customer orientation is what pays the bills."
- **Creative Thinking and Adaptability:** Participants in roles governed by strict regulations or routine processes (e.g., certain finance or manufacturing roles) felt these skills were less critical than skills like problem-solving or communication within established parameters.

Theme 3: Thematic Overlaps and Opportunities for Synergy (LOI 1c)

A dominant theme emerging from all groups was the perception of significant overlap and redundancy between certain skills. Participants found it difficult to distinguish between some pairs. A project manager in the IT sector commented, "Is 'Sense Making' not just the first step of 'Decision Making'? And you can't really be 'Adaptable' if you aren't also learning, so 'Learning Agility' and 'Adaptability' feel like two sides of the same coin." This feedback pointed directly toward the potential for merging and streamlining the framework. Four specific pairs were repeatedly identified as candidates for combination.

Theme 4: The Need for Modernization of Skill Content (LOI 1c)

Even for skills that were not considered overlapping, participants suggested that their definitions and proficiency level descriptions needed updating to reflect contemporary work practices. For instance, discussions around Communication frequently highlighted the need to explicitly include empathy and social awareness, particularly in the context of digital and hybrid communication. Similarly, for Self-Management, participants felt the description should be updated to more explicitly address modern challenges like managing digital distractions and preventing burnout.

Theme 5: Embedding Mental Wellbeing and Career Health (LOI 2)

When probed on the need for a new, standalone CCS for "Mental Wellbeing" or "Career Health," the consensus was clear: these are not discrete skills but rather outcomes achieved through the effective application of a combination of existing CCS. A participant from the social services sector explained, "Mental wellbeing isn't a task you perform; it's the result of good self-management, effective communication, and supportive collaboration. Creating a separate skill for it would be artificial." Participants pointed specifically to Self-Management as the home for competencies related to stress management and emotional regulation, and to Learning Agility as the home for career planning and development.

These findings collectively point towards a strategy of evolution, not revolution, for the CCS framework—one focused on refinement, consolidation, and modernization rather than a complete overhaul.

Discussion and Recommendations

The results of this study provide a clear, evidence-based mandate for the evolution of the Critical Core Skills framework. The discussion below synthesizes the findings and elaborates on the three primary recommendations for action, including detailed proposals for the revised skill content.

Interpretation of Findings

The research confirms that the 2020 CCS framework is fundamentally sound and well-regarded by its end-users. Its three-cluster structure and the selection of its 16 skills remain highly relevant. However, the framework can be significantly improved in terms of its efficiency, clarity, and contemporary relevance. The lower rankings for skills like Transdisciplinary Thinking do not signal irrelevance, but rather a more specialized

application, reinforcing the need for tailored, contextualized training pathways rather than a one-size-fits-all approach.

The most powerful finding is the call for simplification through merging. In a world saturated with information, a more streamlined and intuitive framework is more likely to be adopted and used effectively by individuals, enterprises, and training providers. The proposal to embed mental wellbeing and career health within existing skills aligns with a more holistic and integrated view of personal development, avoiding the fragmentation of competencies.

Recommendation 1: Retain All Foundational Skill Concepts but Emphasize Contextual Application

The first recommendation is to formally acknowledge the universal relevance of the concepts behind all 16 CCS while guiding the CET ecosystem to adopt a more contextualized approach to their implementation. SSG and its partners should develop resources that help organizations and individuals identify and prioritize the most critical CCS for specific industries, enterprise sizes, and job families.

Recommendation 2: Combine and Merge Overlapping CCS to Create a Streamlined 12-Skill Framework

Based on the strong thematic feedback from the FGDs, we recommend merging four pairs of skills. This action would reduce the total number of CCS from 16 to 12, enhancing the framework's clarity and impact. The proposed mergers are detailed below, incorporating the revised skill titles, descriptions, and proficiency levels from Slides 16-19.

Proposed Merger 1: Learning Agility + Adaptability → Learning Adaptability

This merger combines the proactive pursuit of knowledge with the reactive capacity to handle change.

- **Component**: **Revised "Learning Adaptability"**

  – **SkillSkill Title**: Learning Adaptability
  – **Skills Description**: Apply diverse learning approaches for continuous development and career growth, demonstrating **flexibility and resilience** to navigate changing contexts.
  – **Basic PL**: Identify suitable learning approaches and adapt one's behaviours to support ongoing career development and **thrive** in changing contexts.
  – **Intermediate PL**: Manage one's **behaviours and learning strategies** in changing contexts, based on experiential knowledge and with openness to new approaches to achieve career goals and **maintain future readiness**.
  – **Advanced PL**: **Lead** a culture of flexibility that **embraces** change and drives both individual learning and organisational growth.

Proposed Merger 2: Sense Making + Decision Making → Informed Decision Making

This merger integrates the analytical process of understanding data with the executive function of choosing a course of action.

- **Component**: **Revised "Informed Decision Making" Skill**

  – **Skill Title**: Informed Decision Making |
  – **Skills Description:** Make **informed decisions** through a **structured analysis** of qualitative and/or quantitative information and **evaluate alternatives** to achieve intended goals.
  – **Basic PL**: Organise and interpret information **systematically** to identify **patterns and assess options** to make, **data-driven** decisions that align with intended goals.
  – **Intermediate PL**: Analyse data to uncover patterns and opportunities, and evaluate multiple sources to **generate insights** and propose **effective** solutions.
  – **Advanced PL**: **Design insight-driven** decision-making processes by defining clear goals, criteria, identify trends and evaluate patterns to achieve alignment with intended outcomes.

Proposed Merger 3: Creative Thinking + Transdisciplinary Thinking → Transcreative Thinking

This merger captures the essence of innovation at the intersection of different fields and perspectives.

- **Component**: **Revised "Transcreative Thinking" Skill**

  – **Skill Title**: Transcreative Thinking (Alternate: Boundary Innovation)
  – **Skills Description**: Synthesize insights and methods from multiple disciplines and diverse perspectives to guide decisions, foster **collaborative synergy**, and drive continuous improvement and **innovation**.
  – **Basic PL**: Explores and integrates **cross-disciplinary knowledge** to enrich expertise and work practices, leveraging diverse insights to develop **innovative solutions** that challenge existing assumptions.
  – **Intermediate PL**: Identify and pursue **cross-disciplinary collaboration**, integrating diverse expertise and methodologies to **co-create innovative solutions that deliver measurable impact**.
  – **Advanced PL**: **Champion and cultivate cross-disciplinary** innovation by fostering **boundary-spanning collaboration**, whilst driving sustainable organisational change and transformative solutions.

Proposed Merger 4: Customer Orientation + Influence → Stakeholder Engagement

This merger broadens the focus from "customers" to all relevant "stakeholders" and integrates the skill of influence as a core mechanism for managing these relationships.

- **Component**: **Revised "Stakeholder Engagement" Skill**

  – **Skill Title**: Stakeholder Engagement (Alternate: Stakeholder Orientation)
  – **Skills Description**: Identifies and addresses stakeholder needs through relationship building and **persuasive engagement** to deliver effective experiences and achieve desired outcomes.
  – **Basic PL**: Demonstrate empathy to understand **stakeholder** perspectives and needs, whilst **engaging clearly** to influence outcomes and deliver solutions that meet expectations.

- **Intermediate PL**: Develop purposeful **stakeholder relationships** with confidence through **consistent engagement**, whilst **anticipating needs and aligning goals** to enhance stakeholder experience.
- **Advanced PL**: Builds consensus and fosters **positive** stakeholder experiences to develop **long-term partnerships and drive lasting impact**.

Recommendation 3: Update Specific CCS Content and Proficiency Level (PL) Descriptions

Beyond mergers, the study recommends targeted content updates for 8 of the remaining skills to ensure they reflect contemporary language and practices. The revisions focus on infusing concepts like sustainability, empathy, accountability, and resilience more explicitly into the framework. The key proposed revisions are summarized in Table 2.

Table 2
Summary of Key Content Updates for 8 Critical Core Skills

Skill Title	Key Proposed Revisions to Skill Description and PLs	Rationale from FGDs
Self-Management	Added "**career sustainability**" to maintain balance, resilience, and focus. PLs revised to include "reflecting on...conduct," "personal growth and improvement," and strategies to "inspire others."	Shift from short-term task management to long-term personal and professional wellbeing, addressing burnout
Building Inclusivity	Revised to focus on understanding interests of "diverse groups" and building an environment where diverse "**ideas**" are accepted.	Move beyond tolerance to active inclusion and leveraging diversity for innovation
Collaboration	Added "**sharing accountability**" to achieve goals. PLs updated to include "taking accountability for own responsibilities" and supporting others to achieve "shared goals."	Emphasize that true collaboration involves shared ownership of outcomes, not just cooperation on tasks
Communication	Added "**with empathy and social awareness** to foster **meaningful engagement**." PLs now include establishing "common understanding" and using a "persuasive" storyline	Reflects the need for more emotionally intelligent communication in diverse and digital workplaces
Developing People	Revised to include fostering a "**growth mindset**" and offering "consistent **support** and **encouragement**" to drive "success".	Shift from a directive approach to a more empowering, coaching-based model of people development
Problem Solving	Added "**by connecting diverse information**." PLs updated to include "identifying root causes," establishing "robust processes," and strengthening "**resilience** by adopting **adaptive strategies**."	Modern problem-solving requires synthesis of varied data and the ability to adapt solutions in a volatile environment
Digital Fluency	Revised to focus on "keeping up with **evolving digital technologies**" and leveraging the "**most appropriate solutions**" for efficiency and effectiveness.	Move from basic tool usage to a more dynamic capability of continuous learning and strategic tool selection.

Global Perspective	Updated to include awareness of wider "global **trends** and **markets**" and aligning actions with business "**goals**."	Make the skill more tangible and directly linked to business strategy, beyond a general cultural awareness.

These targeted updates, while subtle, are critical for ensuring the framework's language and concepts resonate with the current and future challenges faced by the workforce.

Limitations and Future Directions

This study, while comprehensive, has several limitations. The FGD sample, though sectorally diverse, is not statistically representative of the entire Singaporean workforce, and the findings reflect the views of a specific cohort. The qualitative nature of the primary data collection method introduces the potential for social desirability bias, although the use of experienced moderators aimed to mitigate this. Finally, this study represents a snapshot in time; the relevance of skills will continue to evolve.

Therefore, future work is essential. We recommend the following next steps:
1. **Large-Scale Validation:** The proposed 12-skill framework and revised content should be validated through a large-scale quantitative survey and further consultations with a wider range of industry experts, professional bodies, and CET providers.
2. **Curriculum and Assessment Redesign:** Upon finalization of the framework, a systematic effort will be required to update all related curricula, training materials, and assessment plans across the CET ecosystem.
3. **Longitudinal Tracking:** A longitudinal study should be established to track the impact of the revised framework on training uptake, skill acquisition, and employment outcomes over time.
4. **International Benchmarking:** Continue to benchmark the evolved CCS framework against international counterparts to ensure Singapore's workforce remains globally competitive.

Conclusion

The task of maintaining a relevant and effective national skills framework in an age of perpetual disruption is a formidable challenge. This study set out to conduct a rigorous, user-centric review of Singapore's Critical Core Skills framework, moving beyond theoretical debates to ground its findings in the lived experiences of the nation's employees and employers.

The research delivers a clear and consistent message: the CCS framework is a strong and valued asset, but it requires strategic evolution to maintain its potency. The core contribution of this paper is a set of three actionable, evidence-based recommendations that advocate for a path of simplification and modernization. By recommending the merger of four pairs of overlapping skills into a more streamlined 12-skill model, and by proposing nuanced yet significant updates to the content of eight other skills, this study offers a blueprint for enhancing the framework's clarity, intuitive appeal, and practical relevance.

Furthermore, the conclusion that emerging concerns like mental wellbeing are best addressed by embedding them within the fabric of existing competencies provides a crucial insight for

skills development worldwide. This integrated approach fosters a more holistic understanding of personal and professional effectiveness.

Ultimately, this work provides a data-driven roadmap for the next iteration of the Critical Core Skills framework. By implementing these recommendations, SkillsFuture Singapore can ensure that the CCS remains a dynamic and powerful tool, empowering the Singaporean workforce with the enduring skills needed to not only navigate the future of work but to actively shape it.

Declaration of GenAI and AI-Assisted Technologies in the Writing Process

I hereby declare that GenAI (ChatGPT) has been used to proofread the texts and give some suggestions on the language use, mainly in the section of Discussion and Recommendation.

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