THE USE AND DEVELOPMENT OF CRITICAL CORE SKILLS IN SINGAPORE

- There is increasing employer demand for Critical Core Skills (CCS) as these skills are essential for supporting business transformation
- The top three most important CCS used at work are *Self Management*, *Influence* and *Creative Thinking*
- Seven work-role archetypes were identified with unique CCS use and CCS development needs
- Workplace learning is an effective mode for developing CCS

Increasing demand for soft skills amid enterprise transformation

There is an increasing demand for soft skills to support enterprise transformation. Singapore employers identified 16 **Critical Core Skills (CCS)** most critical to their business (see Diagram 1). This set of CCS is a combination of digital, cognitive and socio-emotional skills presented in three bundles – Staying Relevant, Interacting with Others and Thinking Critically.

Figure CS1: CCS for the future economy

SKILLS TO BUILD SKILLS

THINKING CRITICALLY — Creative Thinking, Decision Making, Problem Solving, Sense Making, Transdisciplinary Thinking

INTERACTING WITH OTHERS — Building Inclusivity, Collaboration, Communication, Customer Orientation, Developing People, Influence

STAYING RELEVANT — Adaptability, Digital Fluency, Global Perspective, Learning Agility, Self Management

With the increasing demand for CCS, SkillsFuture Singapore (SSG) sees the need to understand how CCS are used at work and how to develop CCS effectively. In 2021, SSG partnered the Institute for Adult Learning (IAL) to conduct a mixed-method study[1]. The study surveyed a nationally representative sample of 2,000 members of the local workforce on the importance of CCS at work.

Among them, 40 participated in an additional semi-structured interview on their experiences in CCS development modes. As part of the study, IAL developed a CCS profiling tool[2] to support decision-making in skills utilisation and development. Based on this survey, the top three most important CCS used at work are *Self Management*, *Influence* and *Creative Thinking*.

1 The details of this research report are available at IAL's webpage.
2 CCS Profiling Survey is accessible here

Usage of CCS and development needs by work-role archetype

The study derived seven unique work-role archetypes by clustering the most important CCS across different occupations[3]. A description of each archetype, the most important CCS[4] to that archetype, and the CCS to develop[5] for that archetype are presented below. The seven archetypes are: Front-liners, Nurturers, Deal-makers, Wayfinders, Managers, Administrators, and Analysers.

Front-liners
Front-liners jobs have a high level of customer engagement in daily work, managing varied requests from customers where communication is critical. Work demands constant negotiation within tight business processes and regulations. Examples of Front-liners include taxi drivers, shop and store salespersons.

Most important CCS:
Self Management
3.89 / 5
Customer Orientation
3.64 / 5
Influence
3.46 / 5

CCS to develop:
This group did not identify any CCS for development.

Usage of CCS by Front-liners

3 The details of the skills clustering method and the derivation of the seven unique working contexts are in the Methodology chapter of the report.
4 The most important CCS are reported by respondents as CCS that support work activities deemed most important to their work context.
5 CCS for development are identified where an archetype's average confidence level for a given CCS is significantly lower than the rest of the sampled population, after adjusting for CCS importance and other demographics.

PROFILE STORY:

NURA SHEREEN BINTE NORDIN, social media service manager in the financial services sector

Shereen is a social media service manager at a bank with eight years of experience in her role. She is currently leading a team of service executives who perform community management on the bank's social media platforms.

Which are the top CCS most applicable to your work, and why?

If I had to pick, *Communication* skills would naturally come up on top. In particular, writing skills are important – not so much learning to write more efficiently but learning to write in a non-hostile manner. In favour of efficiency in the corporate world, people can often appear curt in writing. I believe good *Communication* through writing can go a long way, especially when it comes to managing external partners and expressing ourselves.

Digital Fluency skills are highly relevant as well. Social media may be associated with the younger generation, but that is not a reason for those who are older to stop learning about it. It is all about being interested in the work you do. My organisation offers training courses to facilitate our learning – most recently, I attended a course on digital technology specific to the banking industry.

Problem Solving skills are important to help me manage my team. When you manage people, you also deal with their personal issues. Some

of the team members prioritises family concerns. I would then seek to work out an arrangement with them empathetically. After all, it is not just about the figures and numbers one produces at work.

Did you attend any training courses to develop your CCS?

I took a course on emotional intelligence a few years ago within the organisation. After the course, I took what I learnt, applied it, and immediately saw shifts in my connection with others. In particular, the course covered *Communication* through body language. Deploying the techniques I learnt from the trainer actually helped me connect better with someone who was more resistant to opening up. Going through that course with a certified professional helped me a lot.

What advice do you have for others who are looking to develop their CCS further?

The CCS involved in social media management can be quite innate to some. For those without these natural born inclinations but are keen on the role, I would encourage them to register for courses by SSG, or complimentary training by their organisations. Take it as a chance to get to know others better, and to get out of your comfort zone!

Nurturers
Nurturers perform various carer roles with high level of interpersonal engagement. Examples of Nurturers include educators, human resource practitioners and nurses. They require strong interpersonal skills and emotional management.

Usage of CCS by Nurturers

Most important CCS:
Self Management
3.91 / 5
Creative Thinking
3.73 / 5
Communication
3.52 / 5

CCS to develop:
• *Adaptability*
• *Problem Solving*
• *Building Inclusivity*
• *Sense Making*
• *Communication*
• *Creative Thinking*
• *Develop People*
• *Influence*

Deal-makers
Deal-makers grow the company via activities in sales and business development. Such tasks require high level CCS to synthesise information and insights across a variety of sources and contexts, and to manage demands from employers and customers. Examples of Deal-makers include sales and business development managers.

Usage of CCS by Deal-makers

Most important CCS:
Problem Solving
3.73 / 5
Creative Thinking
3.69 / 5
Decision Making
3.68 / 5
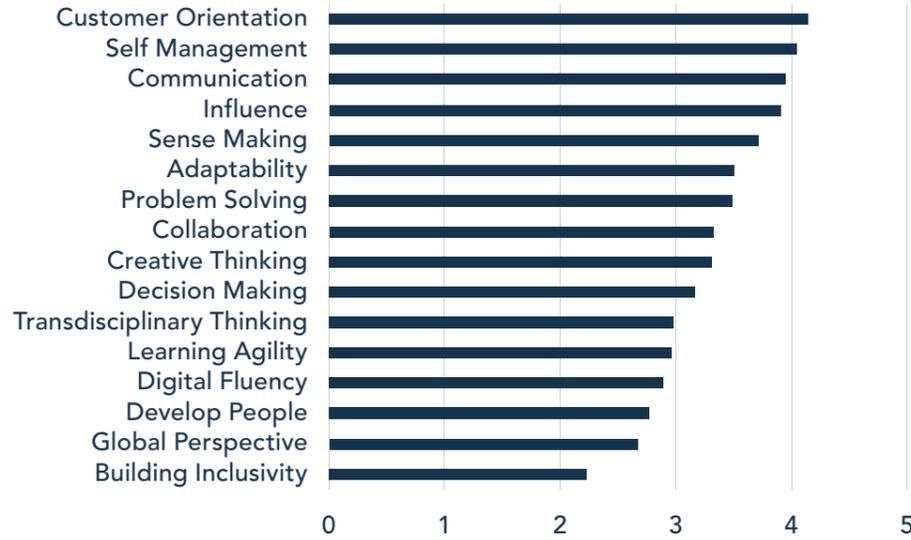
CCS to develop:
• *Building Inclusivity*
• *Digital Fluency*
• *Influence*
• *Problem Solving*

Wayfinders

Wayfinders ensure smooth operation of businesses and organisations. Managing customers' and stakeholders' needs is the core. Examples of Wayfinders include management and business consultants, managing directors, chief executives and general managers.

Most important CCS:
Customer Orientation
4.13 / 5
Self Management
4.04 / 5
Communication
3.96 / 5

CCS to develop:
• *Creative Thinking*

Usage of CCS by Wayfinders

Administrators

The work of Administrators revolves around creating better solutions and enhancing work processes and productivity, ensuring orderliness, system discipline, and resources management. Examples of Administrators include accountants and system analysts.

Most important CCS:
Self Management
4.25 / 5
Creative Thinking
3.68 / 5
Problem Solving
3.57 / 5

CCS to develop:
• *Self Management*

Usage of CCS by Administrators
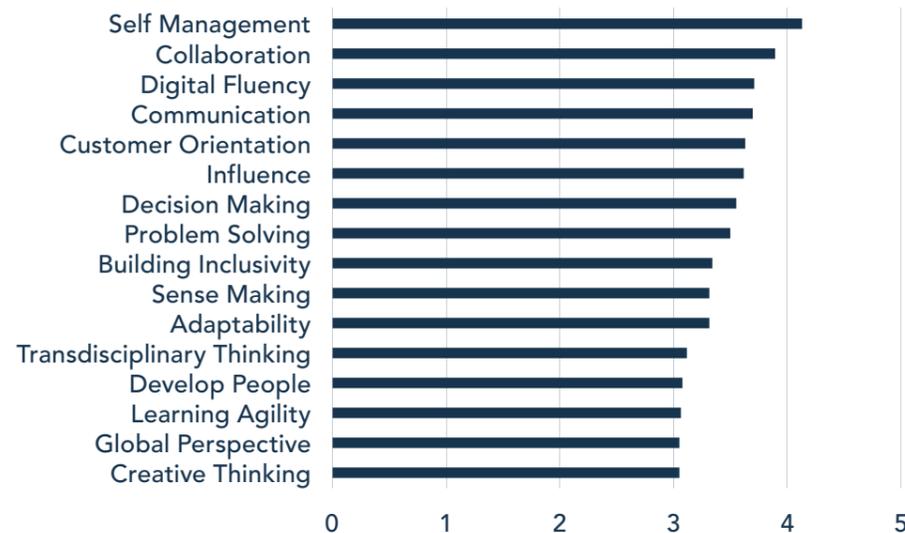

Managers

Managers work across multiple stakeholders to coordinate delivery of services and solutions. Information processing and collaboration across stakeholders, and use of digital tools are critical. Examples of Managers include supervisors and general foremen for building and related trades, business services, and administration managers.

Most important CCS:
Self Management
4.13 / 5
Collaboration
3.90 / 5
Digital Fluency
3.68 / 5

CCS to develop:
• *Adaptability*
• *Customer Orientation*
• *Self Management*

Usage of CCS by Managers

Analysers

Analysers are the typical knowledge workers in the **Digital Economy**, requiring strong cognitive skills to create value. Their decisions have major impacts on the organisations. Examples of Analysers include financial analysts, data scientists, investment managers, and purchasing agents.

Most important CCS:
Sense Making
3.93 / 5
Decision Making
3.92 / 5
Problem Solving
3.86 / 5

CCS to develop:
This group did not identify any CCS for development.

Usage of CCS by Analysers

PROFILE STORY:

SARINA BINTE MOHD YASAR, finance executive cum administrator in the healthcare sector

Sarina is a finance executive cum administrator in the healthcare sector supporting polyclinics and hospitals. Her job scope had only recently expanded from administration to include providing financial services.

Your job scope recently expanded from administrative work to include finance. How did this change occur?

Having been in the organisation for around four years, I was offered the opportunity to take up a basic accounting course. The course helped me understand fundamental finance terminologies, and helped me put a name to the processes I was involved in. Following this, I took up more finance-related work as part of my official job scope. Taking on these additional responsibilities has been a learning journey!

Which are the top CCS most applicable to your work, and why?

I liaise closely with hospital staff on their claims submission process. There are instances where there are hospital staff who are working on the ground and managing claims at the same time. They may not be trained in finance, leading to errors in their submissions at times. Part of my work involves identifying issues pertaining to such financial processes, suggesting changes, and using my *Communication* skills to close the loop successfully with the staff. For instance, when an item has been coded incorrectly, I reach out to the staff to seek clarity, and keep in mind to translate any complex terminologies into simpler language for their understanding. *Problem Solving* at this scale is important, as small errors made in the claims process can affect a healthcare organisation's financial system.

It helps that I am someone who truly enjoys talking to people as well! With this, I began practicing *Collaboration* as an administrator with the organisation. Having nurtured healthy working relationships with my colleagues, this became a good foundation for my work processes today. My role also involves working with large agencies via email and phone call, so having the ability to build good rapport is very helpful.

What advice do you have for others who are looking to develop their CCS further?

Love learning new things! Taking on a new course was daunting at first, but I enjoyed it in the end. Though you may have a hard time when starting out in any transitions, things eventually get better with time and practice. It is all about time-management, self-management and good communication with others.

The seven work-role archetypes provide an insightful overview of the use of CCS in the various working contexts in Singapore. As enterprises embark on business transformation, it is worthwhile paying attention to the design of job roles and task activities to better leverage CCS to achieve transformation.

The CCS development of the seven work-role archetypes

The summary in Figure CS2 implies the importance of job design and the need to make full use of workplace learning to support the development of CCS. Designing skills-related tasks in daily jobs would provide more opportunities for individuals to develop CCS.

With the typical development modes, such as contextual practices in work contexts via on-the-job training, peer support, and trial and error, learning designers and facilitators are strongly encouraged to incorporate workplace learning into learning interventions. Institution-based learning should collaborate with workplaces to allow for workplace contexts to be part of the skills-based learning design.

Figure CS2: The development modes[6] of the most important CCS in various working contexts

SEVEN GROUPS OF WORKING CONTEXTS	CONTEXTUAL PRACTICES AT WORKPLACES			CLASSROOM TRAINING
	TRIAL AND ERROR	ON-THE-JOB TRAINING	PEER SUPPORT	
1. Front-liners	✓	✓	✓	
2. Nurturers	✓	✓	✓	✓
3. Deal-makers		✓	✓	✓
4. Wayfinders		✓	✓	
5. Managers	✓	✓	✓	✓
6. Administrators		✓		✓
7. Analysers		✓	✓	

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6 Modes of CCS development: the ways which could facilitate the development of CCS.

Tips to enhance the use and development of CCS

- Develop CCS awareness among employees and supervisors, including the use of the CCS Profiling survey developed by IAL

- Unpack CCS into work activities that help to establish shared understanding between work performance expectations and developmental design

- Embed CCS into job role-related technical skills training to enhance the effectiveness of CCS application, including leveraging the National Centre of Excellence for Workplace Learning's (NACE)[7] networks to support CCS development

- Consider using a variety of CCS development modes in workplace learning, including reflective practice, peer support, and embedding CCS development as part of skills training

Help us improve our analysis

Our study is only as good as the data we get. We seek your help to contribute to our study and enhancing our understanding of CCS. If you have 20 minutes, please go to this link to identify the important CCS and the CCS to develop for your particular work-role archetype.

Please visit this link for information on suggested courses for CCS:

https://go.gov.sg/ccs-courses

INDUSTRY VOICE

Resorts World Sentosa

LEE SHI RUH

Chief People Officer and Accounting, Resorts World Sentosa

At Resorts World Sentosa (RWS), where we offer a wide and diverse range of experiences to millions of guests, Critical Core Skills (CCS) are important for our team members to be future ready and adaptive, especially as we embark on our growth and expansion plans for 'RWS 2.0'.

Our centre of excellence for capability development, RWS Academy, uses the CCS as the foundation of a structured framework to curate training curricula and programmes for the reskilling and upskilling of our team members. We also offer an online learning platform with more than 75,000 courses to our team members where they can e-learn courses aligned to CCS.

Besides the opportunity to learn new skills such as data analytics and robotic process automation, our team members also get the opportunity to deepen their CCS in *Customer Orientation*. These diverse learning opportunities empower and equip our team members to better navigate the new business environment especially in this growing digital economy, where there is prevalent adoption of the latest technologies.

CCS are also incorporated to complement functional training for our team members. For example, our attractions park ambassadors are trained in relevant CCS, such as *Self Management*, as part of their cross-training for different attractions, so that they can supervise teams to create memorable experiences for our guests.

We recently piloted a game-play behavioural assessment tool. This is a fun and unique way to help our team members be more self-aware of their behavioural attributes and allows them to identify potential gaps for further development. We plan to extend this assessment tool to more team members so that everyone can identify and chart their development pathway forward.

RWS is moving towards self-directed learning and allowing our team members to take ownership of their skills development. We recognise that they are our most valuable assets, and by helping them see the importance of CCS, we want our team members to always want to improve themselves and thus cultivate a lifelong learning culture in RWS.

> **Critical Core Skills are important for our team members to be future ready and adaptive.**

INDUSTRY VOICE

National Centre of Excellence for Workplace Learning at Singapore Institute of Technology (NACE@SIT)

ARTHUR POH

**Director,
NACE@SIT**

With the support of SkillsFuture Singapore, the National Centre of Excellence for Workplace Learning (NACE) was established with the aim of helping companies build and develop their workplace learning capacities, solutions and systems through training and consultancy projects. Over the past two years, one key observation from our workplace learning journeys is that we often undervalue the importance of soft skills.

In fact, 'soft' skills may be a little under-represented in its role in a VUCA (volatile, uncertain, complex, and ambiguous) environment like today. With technology growing at an unprecedented pace, jobs that require standard work with little need for human interventions may become obsolete as they are easily replaced by automation and digitalisation. While technical skills are still essential, CCS are key, as they cannot be replaced by technology.

A report by Deloitte[8] stated that soft skills will account for almost two thirds of the jobs by 2030 and hiring employees with soft skills will yield greater profits. CCS, as I would refer to, are the new skills currency. Though current jobs might become obsolete in the future, skills and competencies are not easily replaceable and would have their fair share in the future.

Given its increase in importance, NACE@SIT has taken an active role in embedding the CCS in the trainings we offer. When the CCS complement technical skills, it equips the employee to be future ready. In our recent study, our participants shared that CCS, like abilities to adapt, communicate and influence, are important future skills to horn and practice!

We strongly believe embracing CCS would be the way forward to better combat the uncertainty the future holds. On the part of companies, human resource professionals may wish to infuse CCS in their training, such that skills are caught and practised at work, and not just taught. Companies seeking to equip themselves with skills like technology sensing and job redesign could approach any of the eight NACE centres to support their workforce transformation plans.

> **"** **Human resource professionals may wish to infuse CCS in their training, such that skills are caught and practised at work, and not just taught.** **"**

8 Deloitte, 2017