

Critical Core Skills (CCS) for the Future of Singapore's Workforce

TVET for hospitality and tourism: Solutions for the digital and green transition
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SkillsFuture Singapore

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Vision

A nation of lifelong learners; a society that values skills mastery

Mission

Enable individuals to learn for life, pursue skills mastery and develop fulfilling careers, for a future-ready Singapore

As part of SSG, the **Jobs-Skills Insights Division** aims to:

- Anticipate and forecast intel in supply and demand for jobs and skills
- Develop fit-for-purpose insights for respective stakeholders
- Disseminate information on a more dynamic and frequent basis
- Facilitate JSI application, tapping on levers where necessary

BUILDING INTELLIGENCE POWERING INSIGHT

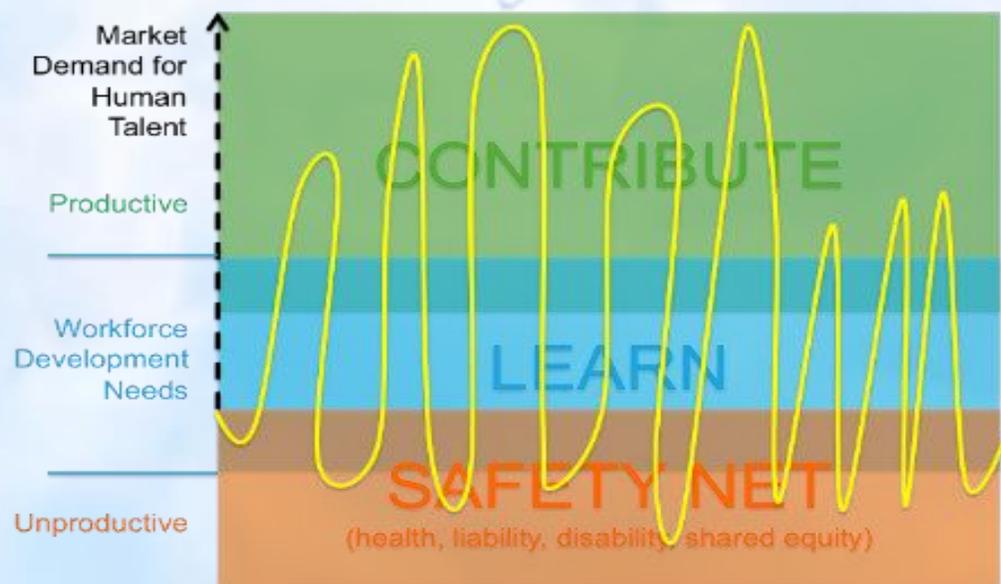


Job-Skills Intel | Skills Forecasting | Skills Measurement | Job Adjacency | Fit-for-purpose Jobs-Skills-Insights

The operating context of our work has *changed*

All of us are **'Working Learners'**. We all flex continuously between working and learning, or juggle both at the same time. The increasing prevalence of structural unemployment is causing the need to reskill and embark on new careers **throughout one's lifetime**

Skill, re-skill and re-skill again. How to keep up with the future of work

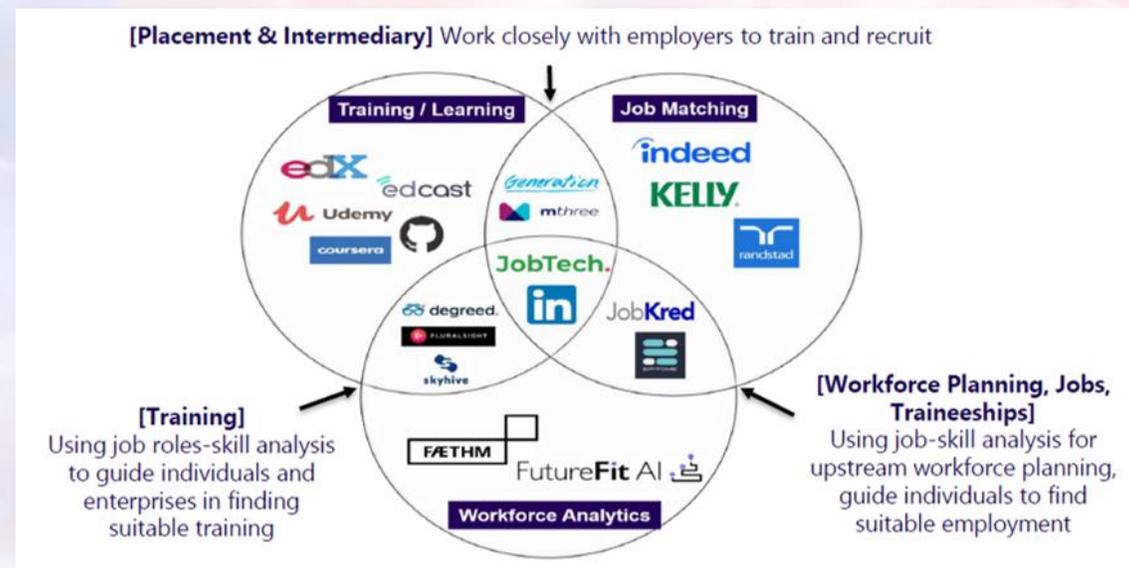


More Than 12 Jobs in a Lifetime

Already, workers who are 55 and older are staying in the workforce at historically high rates, well into their late 60s and even 70s.⁵ And job transitions have become an established part of life. In the United States alone, 10,000 baby boomers will turn 65 every day from now until 2030,⁶ and many of them will have experienced at least 12 job changes by the time they retire.⁷

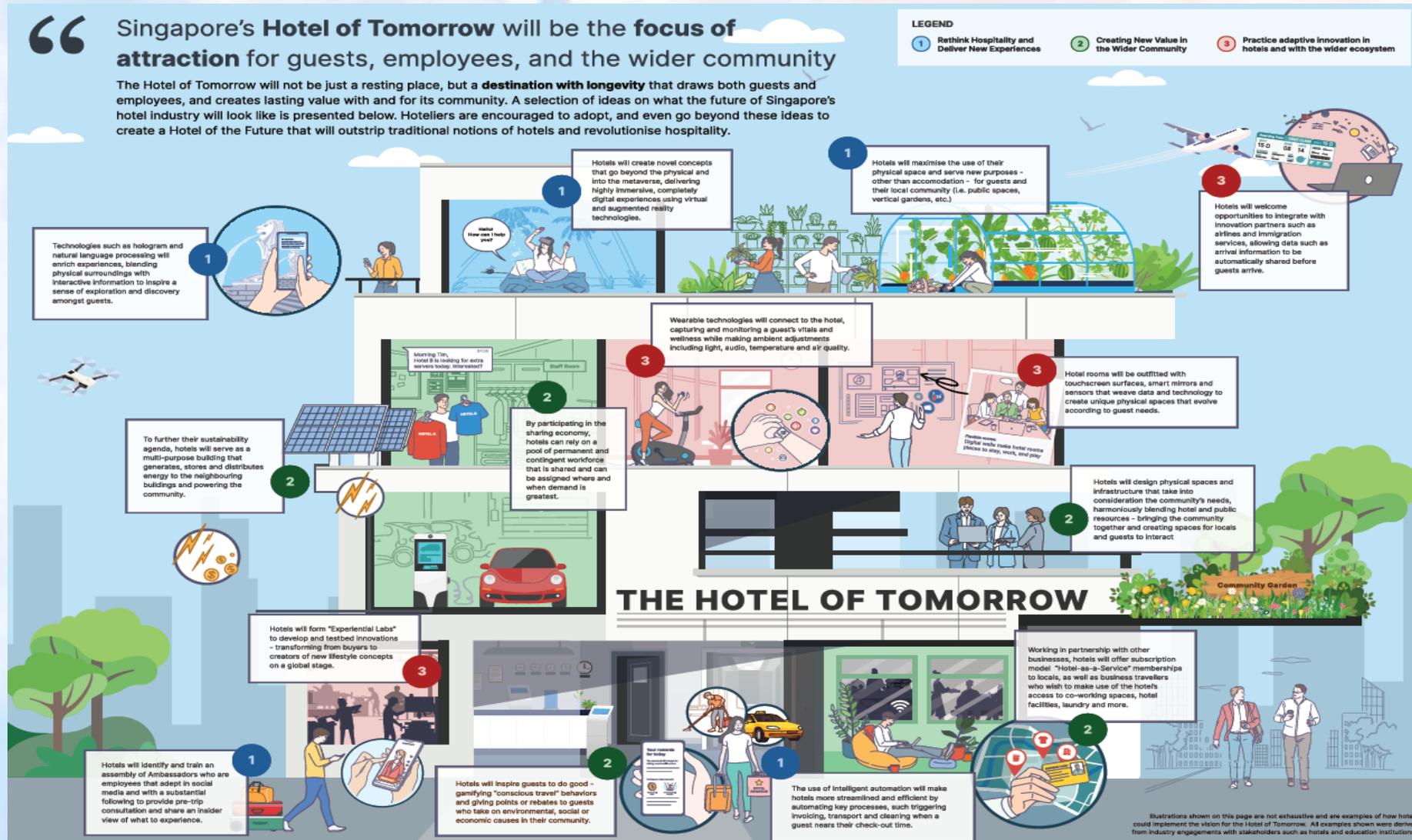
Source: Michelle R. Weisse, *Long Life Learning: Preparing for Jobs That Don't Even Exist Yet*, 2021

Global demand to overcome skills gaps, unemployment, and learning needs is creating a surge in firms tapping on big data and machine learning to create solutions in the skills ecosystem



Inculcating soft skills in the workplace help strengthen careers and open doors to new opportunities

Recent launched Jobs Transformation Map for hotel sector identifies how job roles and skills will be affected by technology, as well as global and local trends, over the next three years



Source: Hotel JTM, 2023

Soft skills are critical. They serve as the foundation to build new skills.

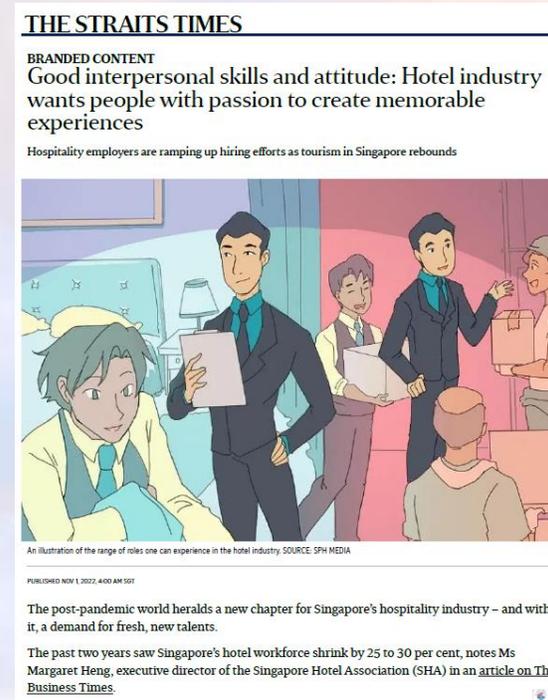
Soft skills are expected of all job roles, in every workplace, and are essential to help us think critically, interact with others, adapt, learn and grow

Creativity, persuasion, collaboration and adaptability are among the most in-demand soft skills for companies today



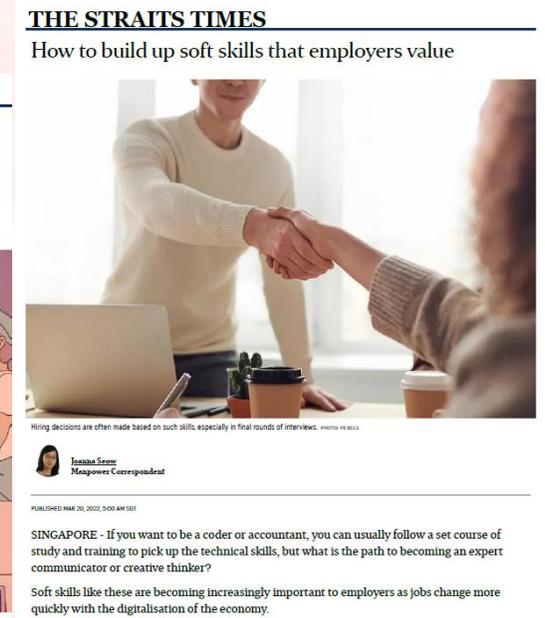
According to a study by LinkedIn, **92%** of talent professionals believe that soft skills are just as important, if not more important, than hard skills. Shockingly, only **37%** of employers feel that their entry-level employees have the necessary soft skills. The disconnect between the importance of

Source: <https://www.linkedin.com/pulse/importance-soft-skills-modern-workplace-justin-dile/>, 1 Mar 2023



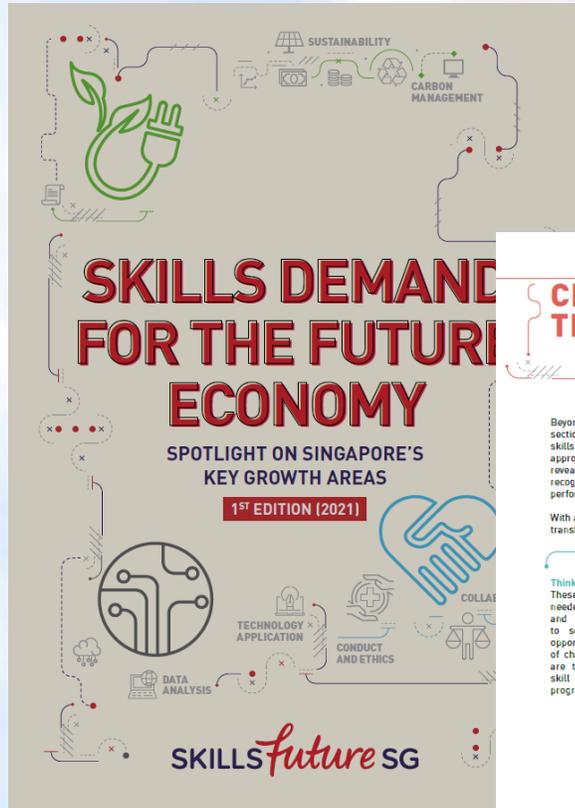
Source: The Straits Times, "Good interpersonal skills and attitude: Hotel industry wants people with passion to create memorable experiences", 1 Nov 2022

Developing soft skills in the workplace helps strengthen employees' careers, and brings forth new staff development opportunities

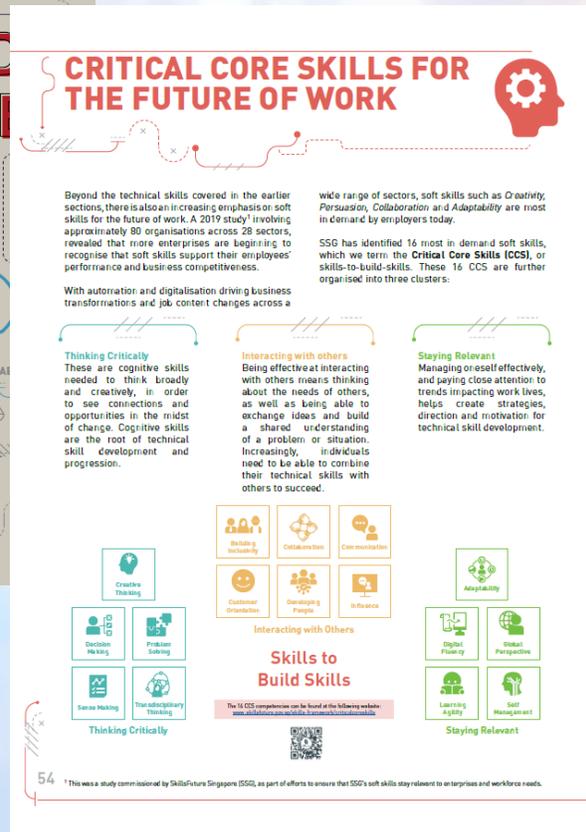


Source: The Straits Times, "How to build up soft skills that employers value", 20 Mar 2022

Soft skills are part of the priority skills identified in SSG's inaugural Skills Demand for the Future Economy Report (2021)



Source: SkillsFuture Singapore

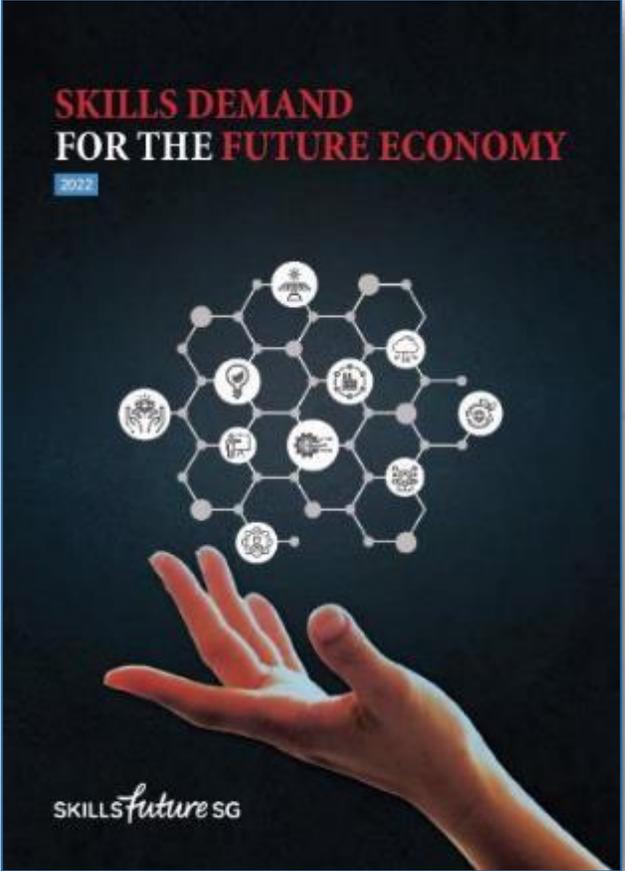


The Report highlights **16 in-demand soft skills**, which SSG terms the **Critical Core Skills (CCS)**, organised into three clusters: Thinking Critically, Interacting with Others, and Staying Relevant.



Scan to download the Full Report, or visit:
<https://www.skillsfuture.gov.sg/skillsreport>

SSG's Skills Demand for the Future Economy Report (2022) - Partnership with the Institute for Adult Learning (IAL) to study how CCS are used at work and how to develop CCS effectively



Seven work role archetypes were identified, where each archetype has its unique combination of CCS usage, developmental needs, and modes of training delivery

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		✓	✓	

Workplace learning is still the effective mode for developing CCS



Work role archetypes that are most relatable to Hotel and Tourism Sectors

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



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

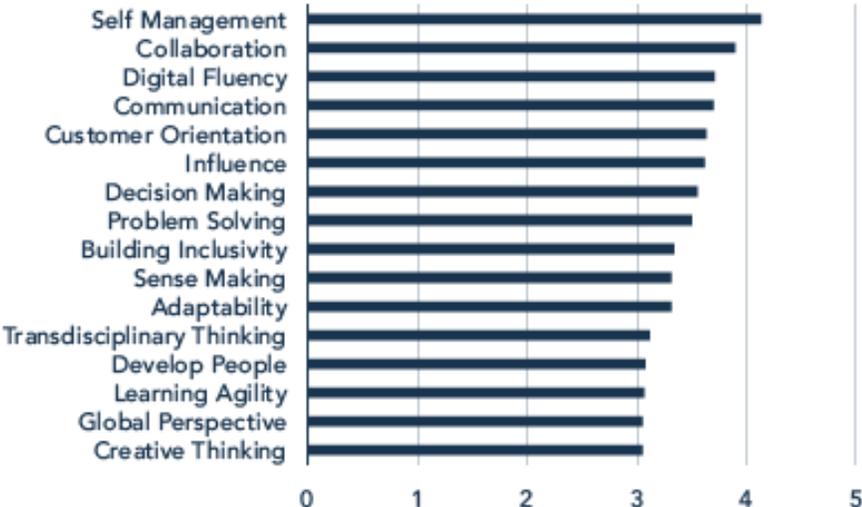
Collaboration
3.90 / 5

Digital Fluency
3.68 / 5

CCS to develop:

- Adaptability
- Customer Orientation
- Self Management

Usage of CCS by Managers



Let's recap our Journey.....



SSG started on a holistic review of our soft skills competencies in 2019

The importance of **relational skills**, together with **problem solving or creative** skills, are common areas. Other areas are **Influencing skills, self management** and **adaptability**

World Economic Forum – The Future of Jobs Report, 2018	LinkedIn – Top 5 Soft Skills Research, 2019	Randstad - Competency Framework: Core Competencies & Soft Skills, 2019	Burning Glass – Country Reports (SGP, US, UK, ANZ), 2019
			
Analytical Thinking and Innovation	Creativity	Creative & Problem Solving Skills	Communication (27% of resumes)
Complex Problem-Solving	Persuasion	Adaptability & Flexibility	Critical Thinking (27% of resumes)
Critical Thinking and Analysis	Collaboration	Persistence, Perseverance & Patience	Collaboration (22% of resumes)
Active Learning and Learning Strategies	Adaptability	Leadership & Ability To Inspire Others	Analytical Skills (24% of resumes)
Creativity, Originality and Initiative	Time Management	Communication & Presentation Skills	Creativity (11% of resumes)

To develop CCS, we conducted executive interviews and industry validations with >120 attendees from 78 organisations across 28 sectors



Professional Services
11 organisations



Essential Domestic Services
11 organisations



Trade & Connectivity
7 organisations



Lifestyle
10 organisations



Manufacturing
17 organisations



Built Environment
6 organisations



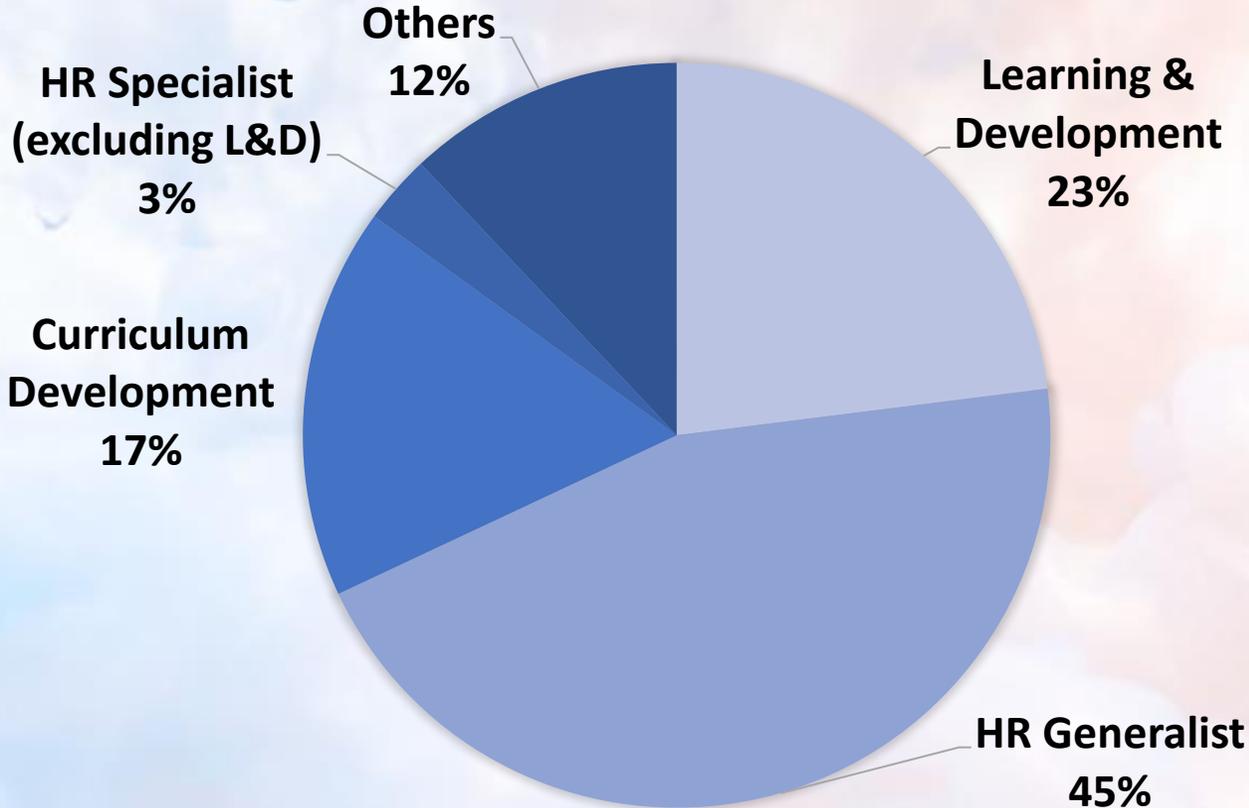
IHLs/Public Sector
17 organisations



Developing the Critical Core Skills (CCS) through deep consultations with stakeholders

We consulted a **broad range of industry stakeholders and experts**, including HR Specialists, division heads, line managers, and individuals involved in curriculum development and L&D

BREAKDOWN OF VALIDATION SESSION ATTENDEES BY JOB FUNCTION





Building Blocks - CCS Framework

Singapore's national Critical Core Skills (CCS) Framework was launched in August 2020

The CCS Framework is made up of **3 clusters**, with a total of **16 competencies**

Cognitive skills are at the root of problem solving and solutioning. Employees who build cognitive skills tend to think more broadly and creatively. This helps workers see connections and opportunities, in the midst of change.

**THINKING
CRITICALLY**

Learning from others is one of the most effective ways to acquire new skills and ideas. Employees adept at interacting with others might think about the needs of their colleagues/stakeholders, and/or effectively build shared understanding within their team(s), towards addressing a problem or situation.

**INTERACTING WITH
OTHERS**

**SKILLS TO
BUILD SKILLS**

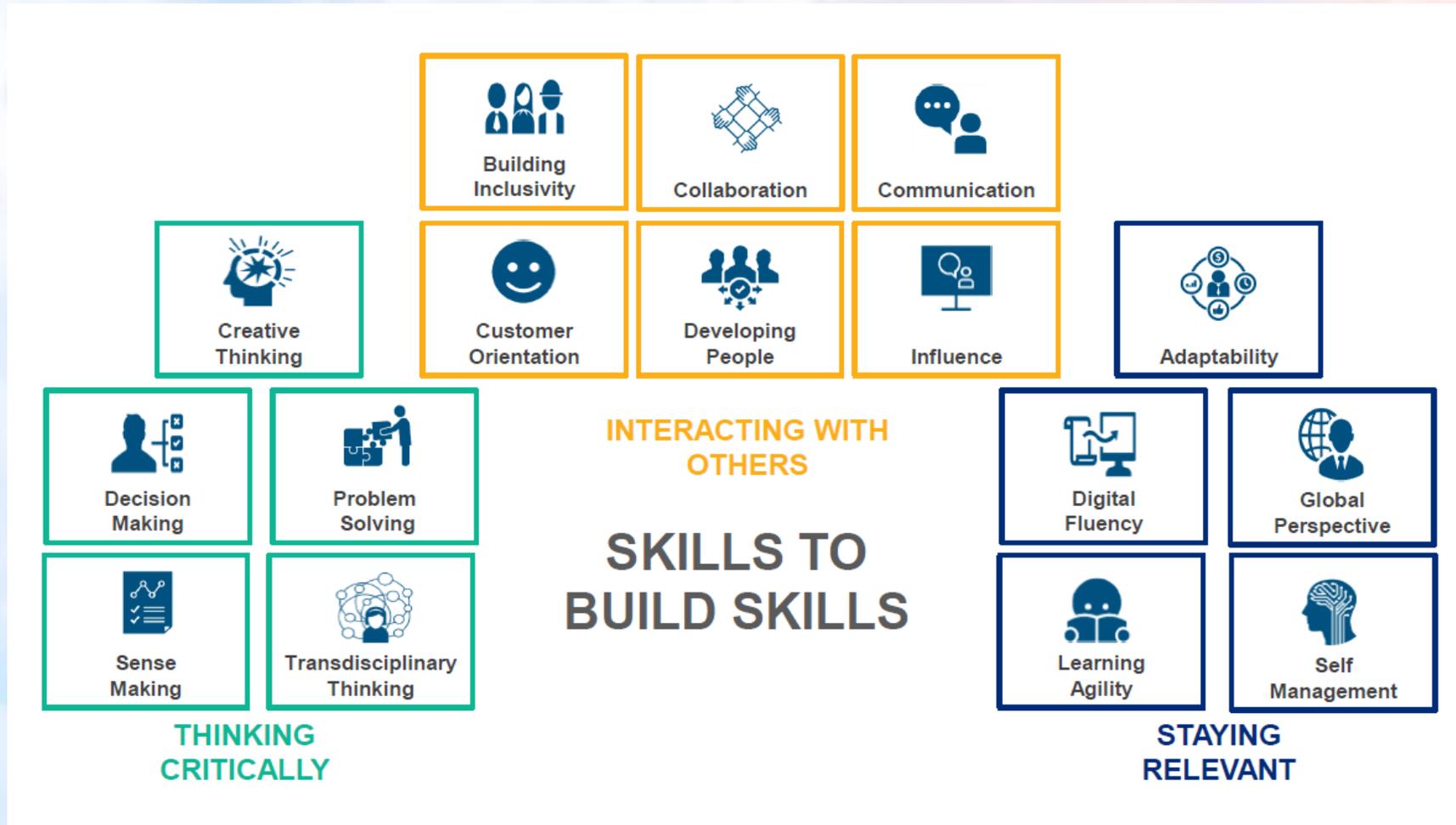
Employees who strive to stay relevant might manage themselves more closely, and pay heightened attention to the trends impacting their work lives. Having this stronger sense of self adds towards direction and motivation for the staff's technical skill(s) development as well.

**STAYING
RELEVANT**

- These skills are expected of **all job roles in every workplace**
- Applicable **regardless of a worker's sector or job**
- Can be considered to be the **most fundamental skills and competencies for one to succeed in working life**

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Each CCS has 3 proficiency levels, and includes a list of Knowledge & Abilities for employers and citizens to reference

Content topics / Types of knowledge required to perform at the given proficiency level

Different levels of mastery of a given skill – difficulty and complexity increases as the proficiency level increases

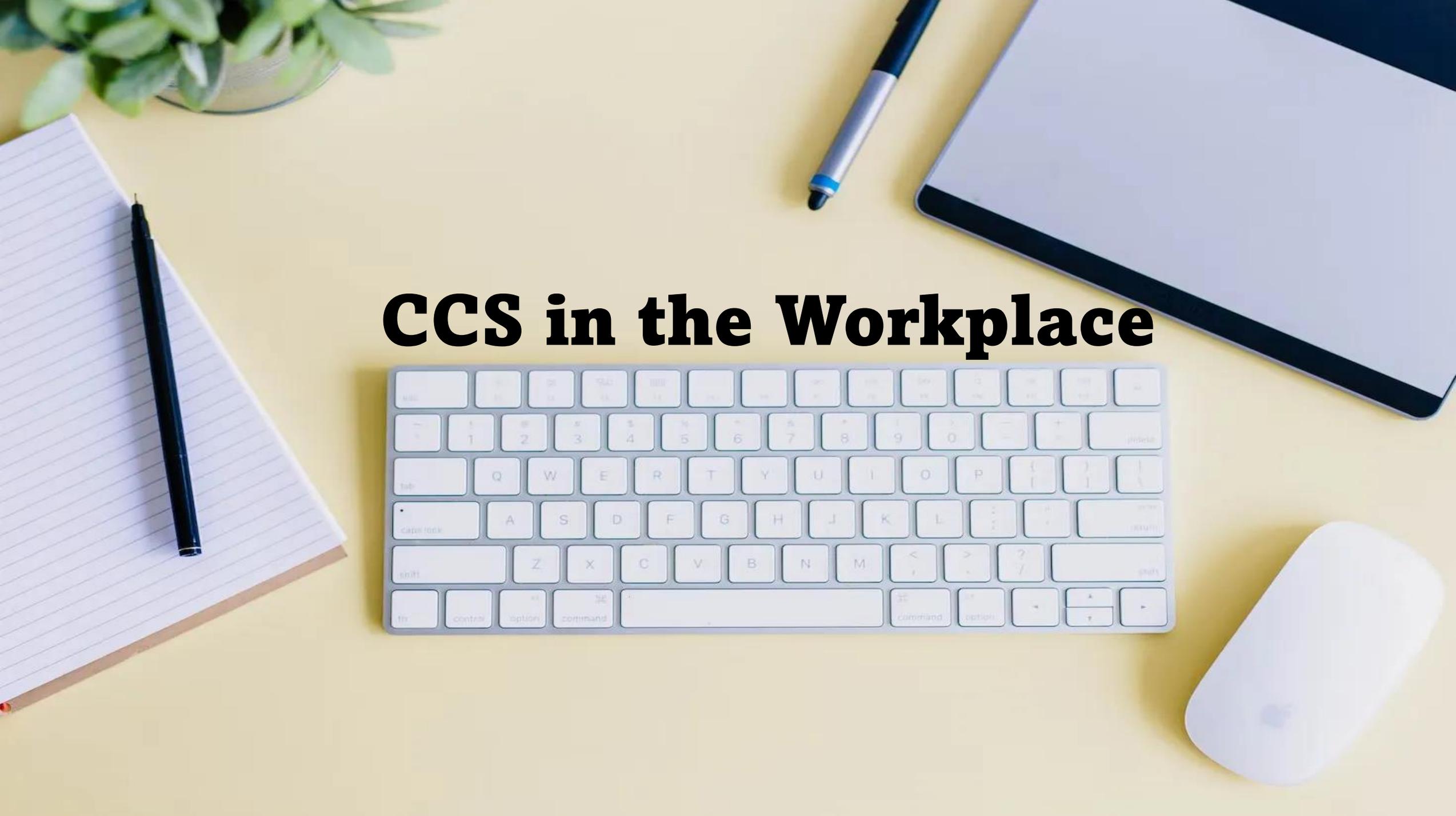
Expected abilities (demonstrated in behaviours) at each proficiency level

**SKILLSFUTURE SINGAPORE
CRITICAL CORE SKILLS (CCS) REFERENCE DOCUMENT**

CCS Category	Interacting with Others		
CCS	Collaboration		
CCS Description	Manage relationships and work collaboratively and effectively with others to achieve goals		
CCS Proficiency Description	Basic GSC-CLB-B001-1	Intermediate GSC-CLB-I001-1	Advanced GSS-CLB-A001-1
	Contribute to a positive and cooperative working environment by fulfilling own responsibilities, managing interpersonal relationships and providing support to others to achieve goals	Build relationships and work effectively with internal and external stakeholders to create synergies in working towards shared goals	Establish team effectiveness and manage partnerships to create a cooperative working environment which enables the achievement of goals
Knowledge	<ul style="list-style-type: none"> Types of collaboration tools and platforms Team roles and responsibilities Team communication techniques Diversity dimensions and preferences Behavioural styles Knowledge sharing methods and tools Listening techniques Emotional intelligence dimensions Techniques to develop empathy Workplace and social etiquette 	<ul style="list-style-type: none"> Types of team structures Types of team development methods Team goal-setting concepts Group facilitation and problem-solving methods Stakeholder analysis techniques Persuasion methods Communication styles Interpersonal communication techniques Personality types and interpersonal needs Emerging virtual collaboration tools and platforms 	<ul style="list-style-type: none"> Organisation's vision, objectives and operating climate Team organisation theories Motivation theories Measures of team effectiveness Behavioural science concepts Stakeholder dynamics Stakeholder management strategies Best practices in virtual collaboration Conflict management strategies Types of social, political, economic and cultural factors which impact stakeholder relationships
Abilities	<ul style="list-style-type: none"> Perform work activities collaboratively with others to foster team spirit and contribute to identified goals Demonstrate a positive attitude in various situations and interactions with stakeholders Share information, knowledge and experiences with co-workers Implement collaboration tools and platforms to enable different types of collaboration and information sharing Seek to understand others' situations, perspectives and emotions Build rapport with co-workers to maintain relationships Escalate information pertaining to conflicts in teams to relevant stakeholders Seek feedback from co-workers on own role and performance in the team 	<ul style="list-style-type: none"> Identify shared goals which require collaboration to facilitate the achievement of team and organisational objectives Organise teams in a manner that capitalises on team members' strengths Adapt methods of interaction to cater to the needs and motivations of others Align values, beliefs and perceptions amongst team members to establish harmonious working relationships Guide team members to manage work challenges and tasks in a positive manner Develop partnerships with key internal and external stakeholders to achieve win-win outcomes Resolve issues arising from working in teams Provide feedback to team members on their roles, working styles and performance in the team Suggest tools and platforms which could be integrated to facilitate virtual collaboration and enhance productivity of teams 	<ul style="list-style-type: none"> Champion the development of an open and collaborative organisational culture Establish organisational policies and procedures that promote a cooperative working environment Drive mutual understanding between teams across the organisation to encourage the achievement of shared goals Navigate diverse views and opinions within and beyond the organisation to achieve beneficial outcomes Build strategic alliances and partnerships to achieve desired organisational objectives Oversee the resolution of conflicts or removal of barriers to collaboration across the organisation Devise feedback processes to ensure the organisation strives to work cooperatively and continuously improve Evaluate the effectiveness of virtual collaboration across the organisation to recommend improvements

The reference documents for each of the 16 CCS competencies can be found at the following website <https://www.skillsfuture.gov.sg/initiatives/mid-career/criticalcoreskills>

CCS in the Workplace



CCS supports our workforce to work and learn, and upskill and reskill for new careers throughout one's lifetime

Critical Core Skills for *Transition to Work*



Jackie Tsai Jia Qi

22 YEARS OLD
NEW ENTRANT
TO WORKFORCE

Fresh graduate
from Ngee Ann
Polytechnic, with a
Diploma in
Aerospace
Electronics

1. SELF MANAGEMENT

I **reflect** on my own learning and **evaluate strategies to manage my own well-being, personal effectiveness and personal brand** as I navigate the new working environment and new job role given to me.

2. ADAPTABILITY

I have been through 4 different job roles (Dispatch Agent, Crew Scheduling Officer, Flight Watch Officer, Flight Dispatcher). Being **open minded** and my ability to be **flexible and manage changes** have helped me to kick start and build a good foundation for my budding career.

3. COLLABORATION

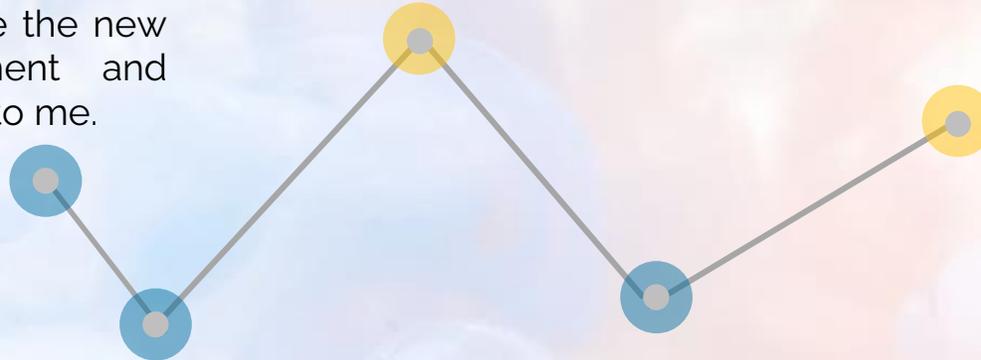
In my company, every department works together to ensure every aircraft takes off on time. I need to **build relationships** with my new colleagues in multiple departments and **create synergies** with them to work towards our common goals.

4. LEARNING AGILITY

As a new entrant, I recognized the need to learn the complexity of the business in a speedy manner. I **identify opportunities for learning** to facilitate my continuous career development.

5. COMMUNICATION

As a flight dispatcher, I need to **convey information** to the pilots clearly. At work, I **exchange thoughts, ideas and information effectively** to both internal and external stakeholders.



CCS supports our workforce to work and learn, and upskill and reskill for new careers throughout one's lifetime

Critical Core Skills for Career Development



Muhamad Fadil s/o
Abu Bakar

40 YEARS OLD
TRAINER

- Customer Service Agent (2001), Customer Service Officer (2011), Pax Service Trainer (2013)
- Union journey: Shop Steward, Youth Chairman, Head of Sports Committee and Assistant Treasurer

1. CUSTOMER ORIENTATION

With the trainings that I have received in Passenger Services through the years, I am now able to **empathise, engage & support internal and external customers effectively**. This enables me to address my stakeholders' concerns appropriately.

2. SELF MANAGEMENT

I invest in my own **personal development** by attending part-time classes at SUSS on Social Work. Through this course, I will gain an in-depth knowledge to understand the society's needs today. This will help me deliver my work as a trainer more effectively.

3. INFLUENCE & COMMUNICATION

As a trainer, I have a role to shape my trainees as they start their journey in my company. For existing staff, when I have the opportunity, I **regularly engage them** to reinforce the company's values and guide them in achieve higher work performance.

4. DEVELOPING PEOPLE

The 20 years of skillsets, experience and achievement I possessed through my job and training programmes enabled me to become a skilled trainer. I have passion in training and everything I do. **I walk the talk and am an inspiration to all my trainees.**

Technological innovations, the shift towards a green economy, demographic transition and changing consumer needs are giving rise to new growth sectors, job roles and skills. Let's look at some of the key insights in the Skills Demand for the Future Economy Report 2022, and how you can use them to plan your skills development and career progression.

01 Green, Digital and Care Economies are key growth areas

The Singapore Green Plan 2030, accelerating digitalisation, and an increased focus on preventive care and mental wellness are driving job demand in these three growth areas.

Workers should take advantage of such trends to upgrade and future-proof their skill sets. For instance, healthcare staff could learn about person-centred care to help patients feel more at ease, while auditors and accountants could take courses on environmental and social governance, and sustainability reporting.

TIP Book a free 1-to-1 consultation with a Skills Ambassador to better understand your upskilling options. Register at: go.gov.sg/registration-sta

02 Priority skills are valued and marketable

Digital skills and green skills are highly sought-after across different sectors as companies embark on digitalisation for improved efficiency, as well as adopt greener business models. Skills with high demand growth such as software design, environmental and social governance, and carbon footprint, are also highly transferable across sectors and job roles.

Learning such skills will contribute significantly to your long-term career versatility and success.

TIP Keep track of emerging trends in the sector you work in through SSG's jobs-skills insights at: go.gov.sg/guex0q

How Ready are you for the Future of Skills?

03 Rise of smart jobs in manufacturing

Singapore is ranked second globally in terms of robot density in manufacturing, with 605 robots per 10,000 workers. This number is expected to increase as more sectors adapt to Industry 4.0 (I4.0) to respond to Singapore's ageing workforce. I4.0 requires work processes and functions to change, and in turn impacts job tasks. In-demand I4.0 skills include 3D modelling, additive manufacturing and quality assurance.

TIP Have a conversation with your supervisor to understand the company's needs in I4.0 and secure support for your skills development.



Get more insights to guide your career progression and skills development journey at skillsfuture.gov.sg/skillsreport

05 Sharpen soft skills to get an edge

Singapore employers are placing more emphasis on not just technical expertise, but also soft skills. Of the 16 identified Critical Core Skills that are key to business transformation, self management, influence and creative thinking are the top three most important. Other soft skills include learning agility, communication, digital fluency, problem solving and customer orientation. For instance, an educator and human resource professional would both need a high level of communication, self management and creative thinking skills to excel in their job.

TIP Use the Critical Core Skills profiling tool to identify the soft skills you have and plan your soft skills development. Visit: go.gov.sg/ccs-profiling

04 Skills top-up for mid-career workers

Mid-career workers, aged 40 to 59, form half of Singapore's workforce. Many work in five job families that are undergoing transformation: operations and administration; sales, marketing and customer service; human resource; finance and accounting; and engineering and technology. Upskilling can help you stay relevant in your current job role, while reskilling can help you move into other job roles in growing sectors.

TIP Upskill to raise career versatility, and consider signing up for short courses focusing on emerging skills at: skillsfuture.gov.sg/series

[Skills Demand for the Future Economy \(skillsfuture.gov.sg\)](https://skillsfuture.gov.sg)



<https://go.gov.sg/alcstdf>

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