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
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

Background image source: Pawel Czerwinski on Unsplash
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.

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

Source: LinkedIn, Global Talent Trends Report, 2019

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

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

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

Background image source: Pawel Czerwinski on Unsplash
Soft skills are part of the priority skills identified in SSG’s inaugural Skills Demand for the Future Economy Report (2021)

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

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.

Usage of CCS by Front-liners

- Self Management
- Customer Orientation
- Influence
- Learning Agility
- Communication
- Digital Fluency
- Creative Thinking
- Collaboration
- Develop People
- Building Inclusivity
- Adaptability
- Problem Solving
- Transdisciplinary Thinking
- Sense Making
- Decision Making
- Global Perspective

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

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

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.

Usage of CCS by Managers

- Self Management
- Collaboration
- Digital Fluency
- Communication
- Customer Orientation
- Influence
- Decision Making
- Problem Solving
- Building Inclusivity
- Sense Making
- Adaptability
- Transdisciplinary Thinking
- Develop People
- Learning Agility
- Global Perspective
- Creative Thinking

CCS to develop: 
- Adaptability
- Customer Orientation
- Self Management

Most important CCS:
- Collaboration: 4.13 / 5
- Digital Fluency: 3.90 / 5
- Self Management: 3.63 / 5
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.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Analytical Thinking and Innovation</td>
<td>Creativity</td>
<td>Creative &amp; Problem Solving Skills</td>
<td>Communication (27% of resumes)</td>
</tr>
<tr>
<td>Complex Problem-Solving</td>
<td>Persuasion</td>
<td>Adaptability &amp; Flexibility</td>
<td>Critical Thinking (27% of resumes)</td>
</tr>
<tr>
<td>Critical Thinking and Analysis</td>
<td>Collaboration</td>
<td>Persistence, Perseverance &amp; Patience</td>
<td>Collaboration (22% of resumes)</td>
</tr>
<tr>
<td>Active Learning and Learning Strategies</td>
<td>Adaptability</td>
<td>Leadership &amp; Ability To Inspire Others</td>
<td>Analytical Skills (24% of resumes)</td>
</tr>
<tr>
<td>Creativity, Originality and Initiative</td>
<td>Time Management</td>
<td>Communication &amp; Presentation Skills</td>
<td>Creativity (11% of resumes)</td>
</tr>
</tbody>
</table>

Background image source: Pawel Czerwinski and Guilherme Stecanella on Unsplash
To develop CCS, we conducted executive interviews and industry validations with >120 attendees from 78 organisations across 28 sectors.
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

- HR Generalist: 45%
- Learning & Development: 23%
- Curriculum Development: 17%
- HR Specialist (excluding L&D): 3%
- Others: 12%

Background image source: Pawel Czerwinski and Guilherme Stecanella on Unsplash
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

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

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

<table>
<thead>
<tr>
<th>CCS Category</th>
<th>Interacting with Others</th>
<th>Collaboration</th>
<th>Critical Core Skills (CCS) Reference Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCS</td>
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<tr>
<td>Description</td>
<td>Manage relationships and work collaboratively and effectively with others to achieve goals</td>
<td>Build relationships and work effectively with internal and external stakeholders to create synergies in working towards shared goals</td>
<td>Establish team effectiveness and manage partnerships to create a cooperative working environment which enables the achievement of goals</td>
</tr>
<tr>
<td>CCS Proficiency Description</td>
<td>Basic</td>
<td>Intermediate</td>
<td>Advanced</td>
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<tr>
<td>Description</td>
<td>Contribute to a positive and cooperative working environment by fulfilling own responsibilities, managing interpersonal relationships and providing support to others to achieve goals</td>
<td>Build relationships and work effectively with internal and external stakeholders to create synergies in working towards shared goals</td>
<td>Establish team effectiveness and manage partnerships to create a cooperative working environment which enables the achievement of goals</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Types of collaboration tools and platforms</td>
<td>Types of team structures</td>
<td>Organisation’s vision, objectives and operating climate</td>
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<tr>
<td></td>
<td>Team roles and responsibilities</td>
<td>Types of team development methods</td>
<td>Team organisation theories</td>
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<td></td>
<td>Team communication techniques</td>
<td>Group facilitation and problem-solving methods</td>
<td>Motivation theories</td>
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<td></td>
<td>Diversity dimensions and preferences</td>
<td>Stakeholder analysis techniques</td>
<td>Measures of team effectiveness</td>
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<td></td>
<td>Behavioural styles</td>
<td>Persuasion methods</td>
<td>Behavioural science concepts</td>
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<td></td>
<td>Knowledge sharing methods and tools</td>
<td>Communication styles</td>
<td>Stakeholder dynamics</td>
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<tr>
<td></td>
<td>Listens to and builds on other’s opinions</td>
<td>Emotional intelligence dimensions</td>
<td>Stakeholder management strategies</td>
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<tr>
<td></td>
<td>Emotional intelligence dimensions</td>
<td>Interpersonal communication techniques</td>
<td>Best practices in virtual collaboration</td>
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<td>Techniques to develop empathy</td>
<td>Personality types and interpersonal needs</td>
<td>Conflict management strategies</td>
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<td></td>
<td>Workplace and social etiquette</td>
<td>Emerging virtual collaboration tools and platforms</td>
<td>Types of social, political, economic and cultural factors which impact stakeholder relationships</td>
</tr>
<tr>
<td>Abilities</td>
<td>Perform work activities collaboratively with others to foster team spirit and contribute to identified goals</td>
<td>Identify shared goals which require collaboration to facilitate the achievement of team and organisational objectives</td>
<td>Champion the development of an open and collaborative organisational culture</td>
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<td>Demonstrate a positive attitude in various situations and interactions with stakeholders</td>
<td>Demonstrate methods of interaction to cater to the needs and motivations of others</td>
<td>Establish organisational policies and procedures that provide a cooperative working environment</td>
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<td></td>
<td>Share information, knowledge and experiences with co-workers</td>
<td>Align values, beliefs and perceptions amongst team members to establish harmonious working relationships</td>
<td>Drive mutual understanding between teams across the organisation to encourage the achievement of shared goals</td>
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<tr>
<td></td>
<td>Implement collaboration tools and platforms to enable different types of collaboration and information sharing</td>
<td>Guide team members to manage work challenges and tasks in a positive manner</td>
<td>Build strategic alliances and partnerships to achieve desired organisational objectives</td>
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<td></td>
<td>Seek feedback from co-workers on own role and performance in the team</td>
<td>Develop partnerships with key internal and external stakeholders to achieve win-win outcomes</td>
<td>Oversee the resolution of conflicts or removal of barriers to collaboration across the organisation</td>
</tr>
<tr>
<td></td>
<td>Expected abilities (demonstrated in behaviours) at each proficiency level</td>
<td>Resolve issues arising from working in teams</td>
<td>Devise feedback processes to ensure the organisation tunes to work cooperatively and continuously improve</td>
</tr>
<tr>
<td></td>
<td>Champion the development of an open and collaborative organisational culture</td>
<td>Provide feedback to team members on their roles, working styles and performance in the team</td>
<td>Evaluate the effectiveness of virtual collaboration across the organisation to recommend improvements</td>
</tr>
</tbody>
</table>

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

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.

Jackie Tsai Jia Qi
22 YEARS OLD
NEW ENTRANT TO WORKFORCE

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

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.

Muhamad Fadil s/o Abu Bakar
40 YEARS OLD
TRAINER
- Union journey: Shop Steward, Youth Chairman, Head of Sports Committee and Assistant Treasurer

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 adapt 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 SGD’s jobs-skills insights at: go.gov.sg/guidesq

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 adopt 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 modeling, 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.

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

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/ocs-profiling

Skills Demand for the Future Economy (skillsfuture.gov.sg)
Thank You