

# I. EXECUTIVE SUMMARY

Knowing which skills are in demand has never been more important. With the relentless pace of technological innovations, evolving consumer demands and disruptions brought about by the COVID-19 pandemic, many Singaporeans are asking how they can better prepare themselves for unprecedented changes to their jobs and livelihoods.

In 2020, the World Economic Forum reported that “the adoption of new technologies” is “giving rise to greater demand for Green Economy jobs” and those “at the forefront of the data and [artificial intelligence (AI)] economy”<sup>1</sup>. Additionally, the “continuing importance of human interaction in the new economy” is increasing “demand for care economy jobs”, including “roles at the forefront of people and culture”<sup>2</sup>. Many of these developments are already happening in Singapore, with macroeconomic trends, new business models and technology innovations accelerating the emergence of new jobs and skills.

## KEY FINDINGS

### 1 Singapore’s key growth areas bring about exciting opportunities for jobs and skills

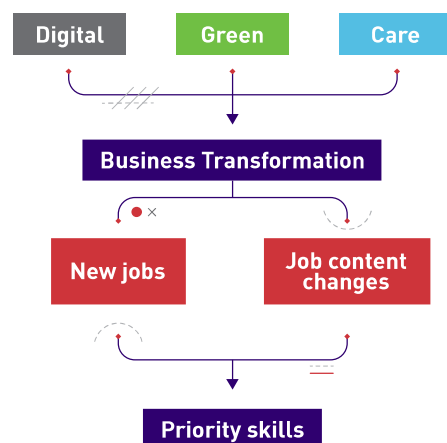
The **Digital Economy** has been gathering pace, powered by Smart Nation initiatives and the National Artificial Intelligence Strategy<sup>3</sup>. Today, digitalisation is a key driver of growth, and Digital Economy jobs can be found across all 23 sectors with **Industry Transformation Maps (ITMs)**<sup>4</sup>.

The **Green Economy** involves enterprises that are restructuring and creating new business functions by shifting from environmentally harmful business activities to greener ones. Today, more than 450 job roles across 17 sectors require green skills, from manufacturing and trade & connectivity, to financial services, hospitality and built environment.

The **Care Economy** is driven by an ageing population, evolving demands for care and the future of work and learning. This is part of national efforts to transform and protect health, advance human potential and inculcate lifelong learning. These efforts will leverage data to bring about innovations in new care models, teaching and learning, and health and wellness.

### 2 Growth in these economies have direct influence on priority skills

New opportunities presented in these economies can affect changes in work processes and job functions. This, in turn, changes the content and skills profile of existing jobs, while creating new jobs. To take advantage of the new opportunities, employers and citizens need to prioritise the acquisition of relevant skills in new and emerging areas.



<sup>1</sup> World Economic Forum, *Jobs of Tomorrow: Mapping Opportunity in the New Economy*, 2020.

<sup>2</sup> Ibid.

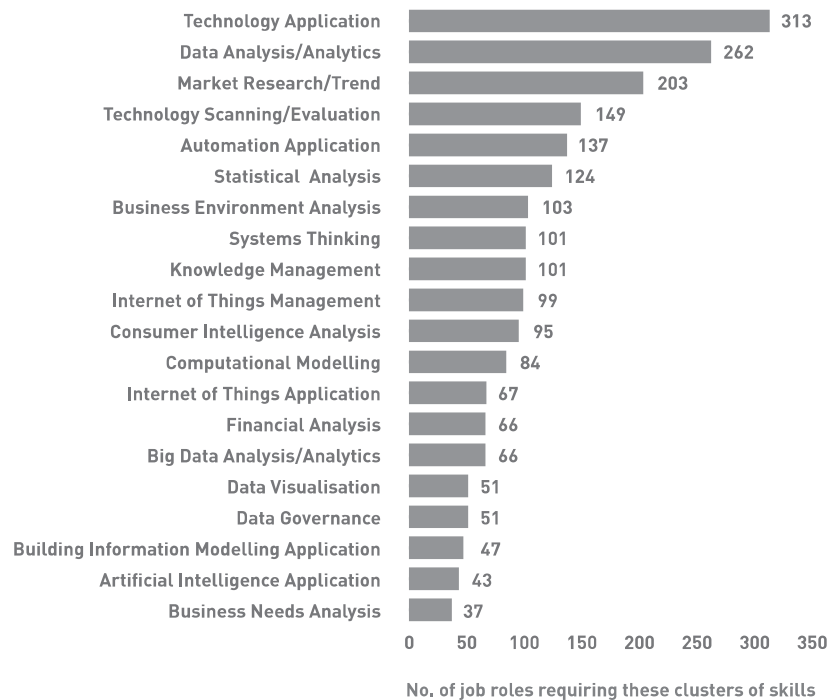
<sup>3</sup> Smart Nation Digital Government Office, *National Artificial Intelligence Strategy: Advancing our Smart Nation Journey*, 2019.

<sup>4</sup> For more information, please visit [www.mti.gov.sg/ITMs/Overview](http://www.mti.gov.sg/ITMs/Overview).

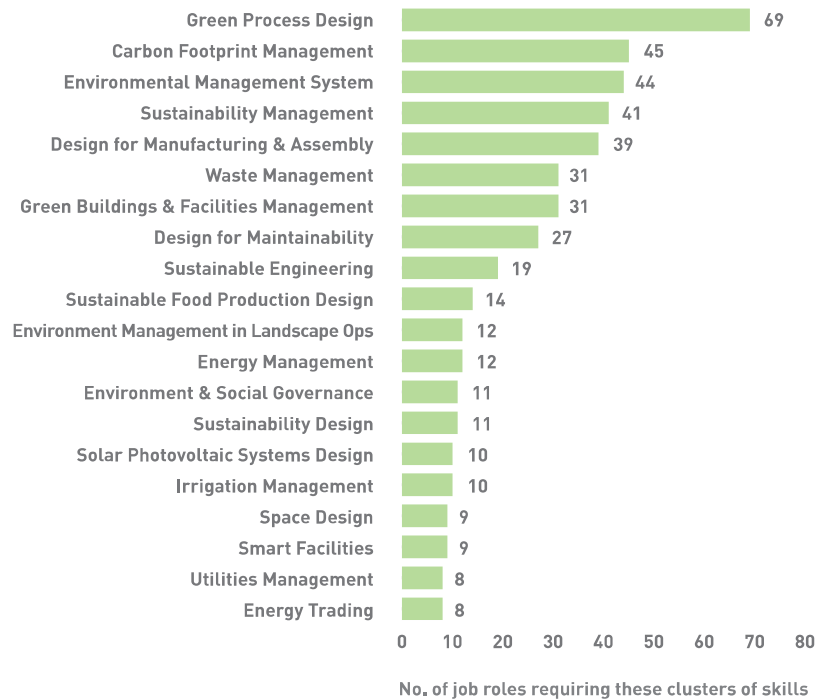
### 3 Priority skills arising from these economies are largely transferable

The wide-reaching influence of the three economies, as the root impetus for change across multiple sectors, means that enterprises are pursuing transformation for similar objectives. The priority set of skills needed to support new developments in each economy, therefore, become transferable across various industries, as enterprises create demand for similarly-skilled workers to achieve their goals.

**Digital skills** are increasingly transferable across different sectors, as more enterprises embark on digital transformation and technology adoption. The Digital Economy entails different types of skills, depending on their job role applications. **Tech-Lite roles** are job roles that involve the use of foundational digital solutions at work; while **Tech-Heavy roles** are specialised roles responsible for the development, implementation and maintenance of more complex technological solutions and applications. Today, the majority of tech roles across all 23 ITMs are tech-lite. Top clusters of priority skills include *Technology Application*, *Data Analysis/Analytics*, and *Market Research/Trend*.



In the Green Economy, there are many skills for implementing and managing sustainability practices that are applicable across organisations and sectors, as they adopt greener business models and practices. These priority skills are transferable, as large numbers of job roles and sectors require them. Top clusters of priority skills include *Green Process Design*, *Carbon Footprint Management*, and *Environmental Management System Framework and Policy*.



Source of data in graphs: SkillsFuture Singapore

Technology enablement, multi-disciplinary skills and community collaboration provide more holistic and inclusive care-wellness-learning outcomes. These in turn drive the emergence of new jobs and skills in the Care Economy. Today, clusters of priority skills such as *Conduct and Ethics*, *Stakeholder Management* and *Inclusive Practices* are required by at least two-thirds of job roles in the Care Economy, and are transferable across sectors from healthcare and community care, to early childhood, social service, and training and adult education.



Source of data in graph: SkillsFuture Singapore

Beyond technical skills, there is also a set of transferable soft skills, that guides how we think critically, interact with one another and stay relevant. These **Critical Core Skills (CCS)** enable the integration of knowledge across disciplines for more effective decision-making and problem-solving, influencing of stakeholders through empathy and consensus, and management of one's own well-being, personal effectiveness and personal brand. These are the skills increasingly valued by employers to drive sustainable organisations. For individuals, these are also the skills supporting the building of other skills.

#### 4 Many curated jobs-skills resources and programmes available for public access are already aligned to these growth economies

These resources and programmes have enabled Singaporeans to pivot careers, and move into new or emerging jobs. This report highlights individuals from different walks of life who have stepped into new roles or opportunities by taking advantage of SSG's programmes and resources. It features a collection of resources carefully curated to help Singaporeans consider, plan, determine and materialise their career trajectory.