

Unlocking Insights: Equipping Training Providers with Analytical Dashboards for Strategic Decision-Making

Dr Albert Liau Head Analyst Institute for Adult Learning

Ms Cassandra Wong Jobs-Skills Analyst SkillsFuture Singapore

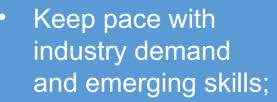
With Ms Jessy Yau and Ms Sharon Lim Singapore Polytechnic





Why Training Providers Need Better Labour Market Insights

Training providers face pressure to stay relevant amidst a rapidly evolving labour market



 Align course offerings, curriculum with realworld job-skills needs. The right insights can power better planning, curriculum development, and impact.

Jobs-SkillsPortal SKILLS future SG

Home

Insights \lor Frameworks \lor

Data and Tools $\, arsigma$

Engage Us \lor

About Us

Create customised jobs-skills insights for your needs

The one stop platform for your jobs-skills data and insights



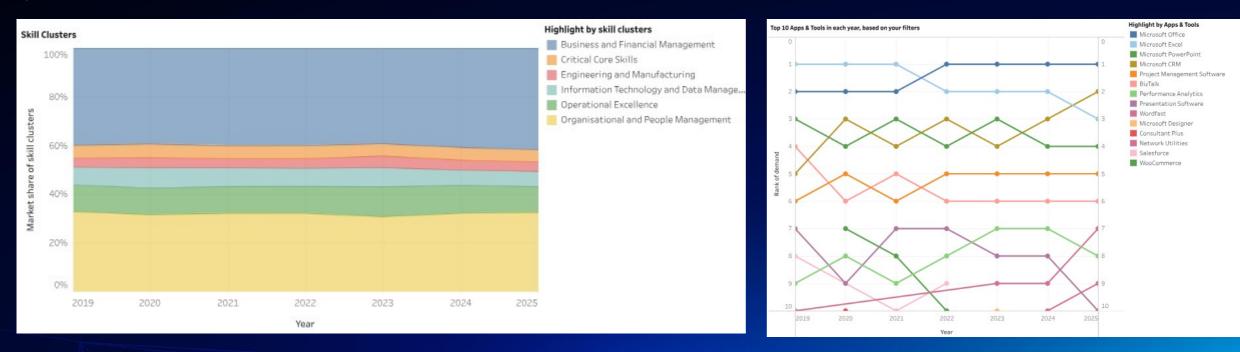


Getting The Most Out Of Our Dashboards

		Jobs-SkillsPortal Skills future sg								
		Home	Insights \vee	Framewo	orks \vee	Data and Tools A	Engage Us \vee	About Us		
	Data and Tools				*	Dashboards			^	
I	Dashboards			>		Job Requirements D	Dashboard			Job Roles
	Methodology			>		Priority Skills Dashb	ooard			Skills
						Skills and Job Mobility Dashboard			Job Transition	
						Jobs-Skills Dashboa	ard			
						List of Skills Dashbo	bard			
						Apps and Tools Das	shboard		÷	

Job Requirements Dashboard

Allows users to choose specific job role and see the skills and Apps & Tools required by that job

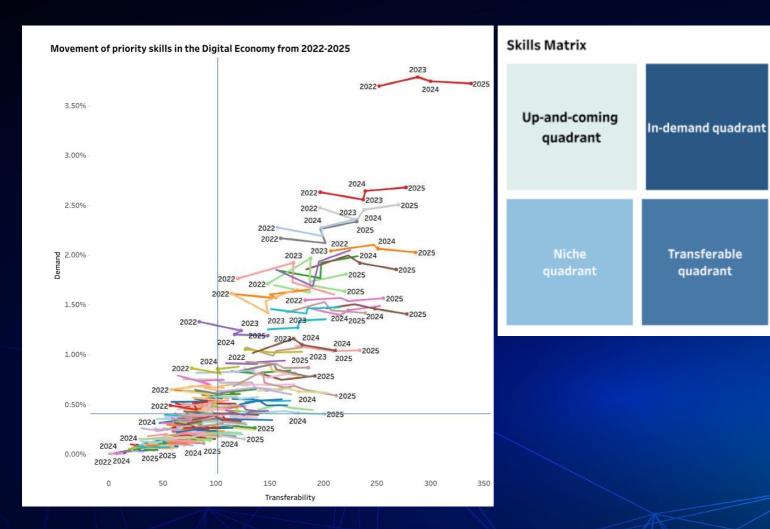


TPs can use the insights to guide the development of training programmes for specific job roles

Which skills have consistently high demand and should be incorporated into training programmes targeted at specific job roles?

Priority Skills Dashboard

Allows users to visualise movement of priority skills over time, in terms of demand and transferability within the Care, Digital, and Green economy over the years



TPs can also use the insights on forecasted skills to catch the needs by providing courses in these areas.

What skills should we develop training programmes in, to future-proof the workforce?

Skills and Job Mobility Dashboard

Allows users to explore the job roles with good growth and potential for career mobility while considering skills needed for such transitions

Feeder Job	Role	Desirable	e Job Role	Destination Job Role		
[33232] Purchasing agent		[33461] Logistics/product	ion planner 🔹 🗪	[24213] Business and financial project manage		
Salary: Job Demand: Change in Job Demand: Economy:	\$4,200 Mid Positive Other	Salary: Job Demand: Change in Job Demand: Economy:	\$4,700 High Positive Green/14.0	Salary: Job Demand: Change in Job Demand: Economy:	\$7,100 High Positive Digital	
	Feeder to Desirable Job R	ole	Desirab	le to Destination Job Role		
Skills Similarity:	High		Skills Similarity:	Mid		
Historical Transitions:	Yes		Historical Transitions:	Yes		
Difference in Salary:	\$500		Difference in Salary:	\$2,400		
Both SCTP and CCP available	(see Annex)		SCTP available (see Annex)			
Skills required for transition	Course Title		Skills required for transition	Course Title		
Construction Project Manag	ement [TGS-20205021	65] Essential Managerial Skil	Change Management	[TGS-2020500535] Adv Administrative Profess		
Data And Statistical Analysi	s [TGS-20205032 Techniques in M	12] Advanced Pivot Table	Construction Project Managemen	nt [TGS-2020502165] Ess Skills	ential Managerial	

TPs can utilise this dashboard to see what skills can facilitate potential job transitions

What are examples of desirable jobs that we can recommend trainees when providing career advice and employment assistance?



Subscribe

Sign up for updates on the latest jobs and skills developments



https://go.gov.sg/js-portal-subscribe



Dashboard demo By Singapore Polytechnic





Context

SP would like to propose a new proposed SkillsFuture Career Transition Programmes (SCTP) Green and Sustainable Data Centre Technologies

How would SP use the SSG Job-Skills Dashboards to validate the proposed SCTP and ensure the course equips participants with core and in-demand skills to transit into the target industry sector?

Feature	Train-and-Place
Course Objective	The course aims to equip learners with the skills to plan, design, build, operate, and maintain Data Centres, with a focus on sustainability and energy usage. The course includes knowledge on the Linux operating system, server management, and troubleshooting various devices. It also emphasizes fostering a growth mindset, developing workplace effectiveness strategies, assessing arguments, applying creative thinking techniques, and presenting data-driven insights effectively.
Targeted Job Role	Data Centre Engineer
Target Sector	Information and Communication Technology (ICT)





Job Requirements Dashboard

How does SP use it when **designing and validating the newly proposed** (SCTP) Green and Sustainable Data Centre Technologies?

- Identify domain Skills Cluster(s)
- Identify high demand skills for that specific job role Data Centre Engineer
- Validate the skills and competencies covered in the new SCTP to prepare participants for the job demand and reduce skill mismatches
- Ensure the apps and tools introduced and used in the course are relevant and in high demand

Demo on "Job Requirements Dashboard"



Job Requirements Dashboard

Targeted Job Role: Data Centre Engineer

Highlight by skills

- Data Centre Facilities Management 🗸 Infrastructure Support 🗸 Communication 🗸 Data And Statistical Analysis Facility Maintenance 🗸 Corrective Maintenance Management Networking Effective Client Communication 🗸 Electrical, Electronic And Control Engineering 🗸 , Project Management Team Management Database Administration 🗸 Security Administration 🗸 Apply Teamwork In The Workplace Centre Operations Management
 - Equipment Breakdown Repair and Maintenance 🗸

SCTP (Green and Sustainable Data Centre Technologies) - Modules:

- 1. Gear up! Essential Skills for Career Transformation & Professional Growth
- 2. Understanding Data Centres
- 3. CompTIA Infrastructure and Core
- 4. Data Centre Engineering Operations
- 5. Energy Efficient and Sustainable Data Centres Operations
- 6. Leap Forward! Essential Skills for Career Transformation & Professional Growth

Conclusion:

- We have used the dashboard to validate and confirm the relevancy of the SCTP where 13 out of 16 skills (81%) are covered in the SCTP.
- It is concluded that SCTP is **well-designed** to prepare participants to pivot into Data Centre Engineer role

Next steps:

 To include 3 skills (i.e. Project Management, Team Management and Apply Teamwork in the Workplace) that are CCS through work-based assignment in SCTP or top up with short courses



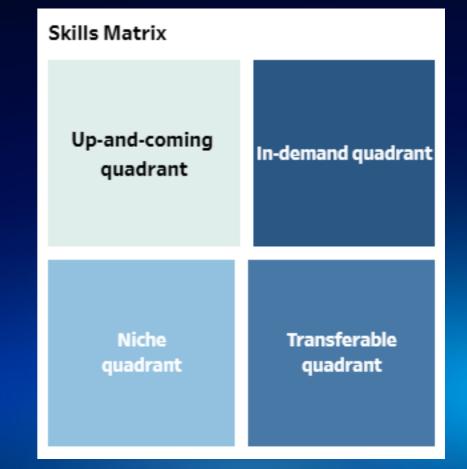
Priority Skills Dashboard

How does SP use it when **designing and validating the newly proposed** (SCTP) Green and Sustainable Data Centre Technologies?

- Observe the movement of the specific job role's identified skills
- To validate if the skills & competencies covered in the SCTP are forecasted to change to high demand and high transferability

Demo on "Priority Skills Dashboard"







Conclusion

- The Job Requirements Dashboard shows that the SP's newly proposed SCTP has good coverage of skills required of a Data Centre Engineer
- The Priority Skills Dashboard further validated that the skills covered in the SCTP course are mainly in good demand and high transferability, at a positive trend.
- SP as the dashboard users has concluded that the SSG Job-Skills Dashboards are useful to training providers, especially to validate the course design, e.g. the relevancy and currency of skills covered in a course.
- SP has also provided some suggestions to SSG, where SSG is now working on some enhanced features of the dashboards for continuously improvement.









2

3

From Skills Intelligence to Capability Building

- 2021

SSG launched inaugural Skills Demand for the Future Economy Report, democratising jobs-skills resources and data

2022

SSG strengthened skills ecosystem with trade associations and professional bodies to enhance skills articulation, aggregation and recognition

Now

Advanced jobs-skills analytics needed to support capability development and decision-making

Office for Skills-First Practices ADULT LEARNING XCHANGE



Collaborate internationally to

advance skills-first practices,

and convene exchange of

insights and solutions.

Set up to build capability and mindshare of stakeholders to articulate, activate and recognise skills, thereby driving the optimisation of human capital development and effective skills use in Singapore.



that inform policy & programme

design, and provide lead response

time to stakeholders.

Professional Development (CPD) programmes that empower stakeholders to embrace skills-first practices.



From Insights to Action



Needs Analysis

Identify lines of inquiry to inform workforce development / curriculum development

- strategy In-demand jobs and skills
- High-growth jobs and skills
- Transferability of skills
- Other demand indicators

Capability Development

Build capabilities to access, interpret, and apply data insights for decision-making

- Technical data interpretation skills •
- Workforce /curriculum planning based on skills •

Application

Apply data-informed strategies to transform workforce / training outcomes

- Align courses to job roles ٠
- Skills-powered organisation framework
- Future ready job creation •

Programme Overview

Module 1: How Jobs-Skills resources can support your work

Module 2:

Navigating Jobs-Skills resources (data, insights, algorithms) on SSG's jobs-skills portal

Informative Resources

Understand how jobs-skills resources can support training providers in aligning course design and skills coverage with market demand

Skills Analysis

Interpret jobs and skills data, Identify in-demand and emerging market trends, compare skills requirements across roles and skills coverage across courses, design new courses to meet skills gaps

Module 3: Extracting insights from jobsskill resources



 \bigotimes

000

Practical Application

Apply learned concepts through hands-on exercises and real-world scenarios.

Module title subject to change and fine-tuning



What's Coming Your Way

Tailored Dashboards for Training Providers

Co-Development Approach

OSP/IAL and SSG engaged a few training providers to co-develop new dashboards and strengthen their labour market surveillance capabilities.

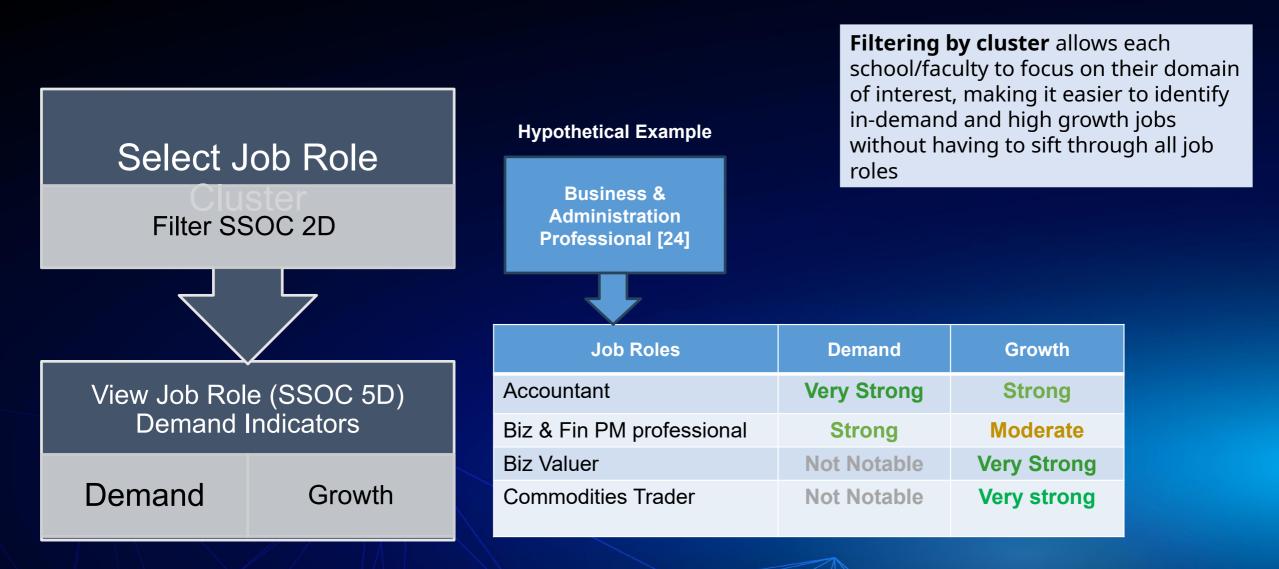
- Institute of Banking & Finance
- NTUC Learning Hub
- NUS Scale
- Ngee Ann Polytechnic
- Classin

3 Powerful Features tailored to Training Providers

The dashboard is designed to address specific Lines of Inquiry (LOIs) from training providers. It offers key features to support insight generation, including:

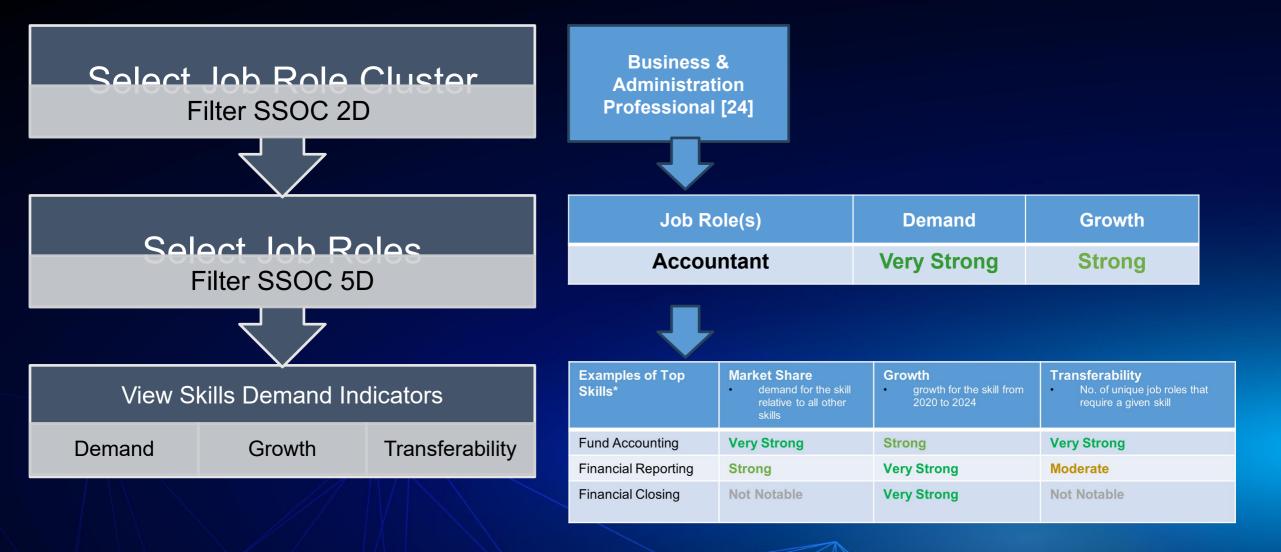
- 1. Explore job roles by cluster
- with indicators such as Market Share and Growth
- 2. View skills for each job role
- with indicators such as Market Share, Growth and Transferability
- 3. Search for job roles based on specific skill requirements

1. Explore Job Roles by Cluster





2. View Skills For Each Job Role





2. View Skills For Each Job Role

Hypothetical example Cluster: Business & Administration Professionals Job Role: Accountant

Examples of Top Skills*	 Market Share demand for the skill relative to all other skills 	Growth • growth for the skill from 2020 to 2024	 Transferability No. of unique job roles that require a given skill
Fund Accounting	Very Strong	Strong	Very Strong
Financial Reporting	Strong	Very Strong	Moderate
Financial Closing	Not Notable	Very Strong	Not Notable
*These are skills that are relatively unique to a given job role	Shows skills most in-demand by employers in the job market	Flags emerging skills that signal future relevance	Identifies skills that are mobile and portable across job roles

3. Search for job roles based on specific skill requirements

The indicators can help Training Providers in **promoting the courses** to the target audience

Salact Skills

Input skills covered in course

View Job Roles

See which roles need these skills

Hypothetical Illustration:

Selected Skills

Fund Accounting

Financial Reporting

Financial Closing

Job Roles	Demand	Growth	
Accountant	Very Strong	Strong	
Admin Manager	Very Strong	Very Strong	
Audit Manager	Not Notable	Moderate	

What's more

Bringing Supply into the Picture

Demand data is only one side of the story — pairing it with course supply insights helps reveal market saturation.

We're working with SSG to integrate this info into the dashboard — stay tuned!

Excited but unsure how to navigate these dashboards?

Fret not — join our upcoming **online** programme to learn how to use them confidently and plan your work smarter.

Launching Q4 2025. Register now — it's free for a limited time!

