

SkillsFuture

A National Movement for Everyone

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Chief Executive, SkillsFuture Singapore

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SKILLSfuture

for Employees

1

Help individuals to make well-informed choices in education, training and careers.

for Educators

2

Develop an integrated, high-quality system of education and training that responds to constantly evolving industry needs

for Employers

3

Promote employer recognition and career development based on skills and mastery.

for Everyone

4

Foster a culture that supports and celebrates lifelong learning.

Rebalancing...

Academic Pathways
versus
Vocational Pathways

Learning in School
versus
Learning at Workplace

Learning Now
versus
Learning throughout Life

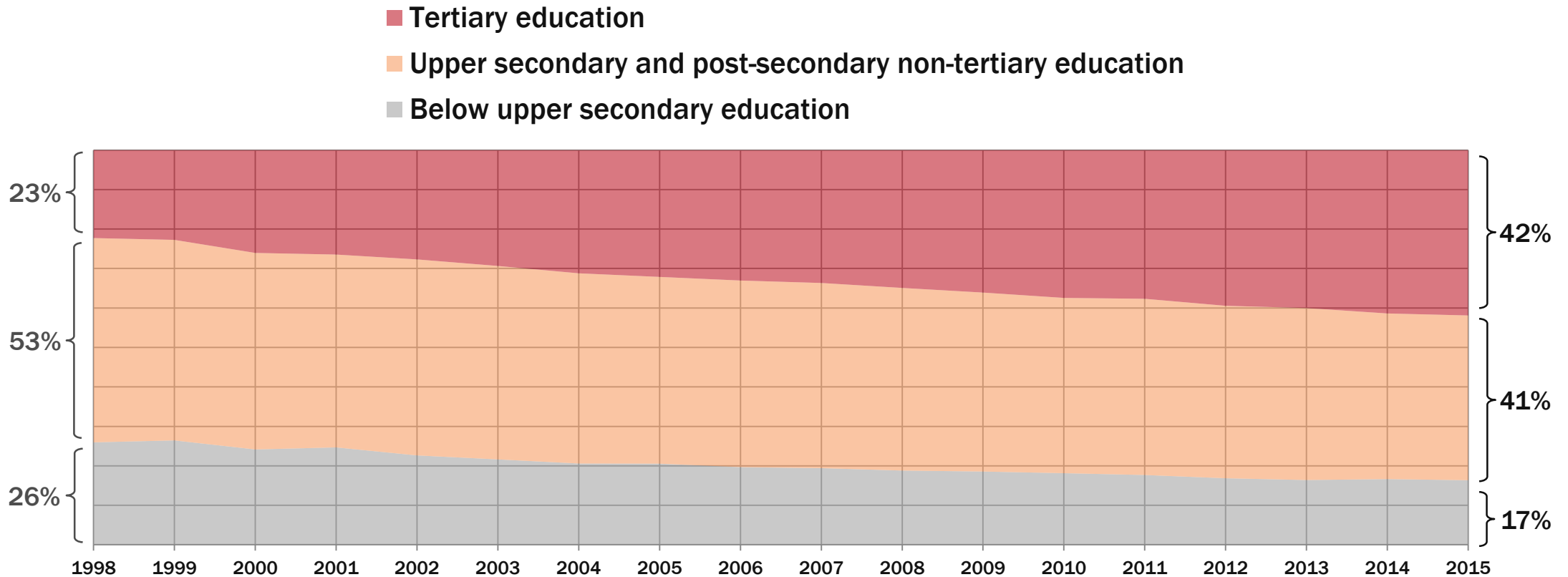
Technical Skills
versus
Transversal Skills

Academic Pathways versus Vocational Pathways



Rising Aspirations...

Educational attainment for 25-34 year olds by qualification *As share of OECD population*

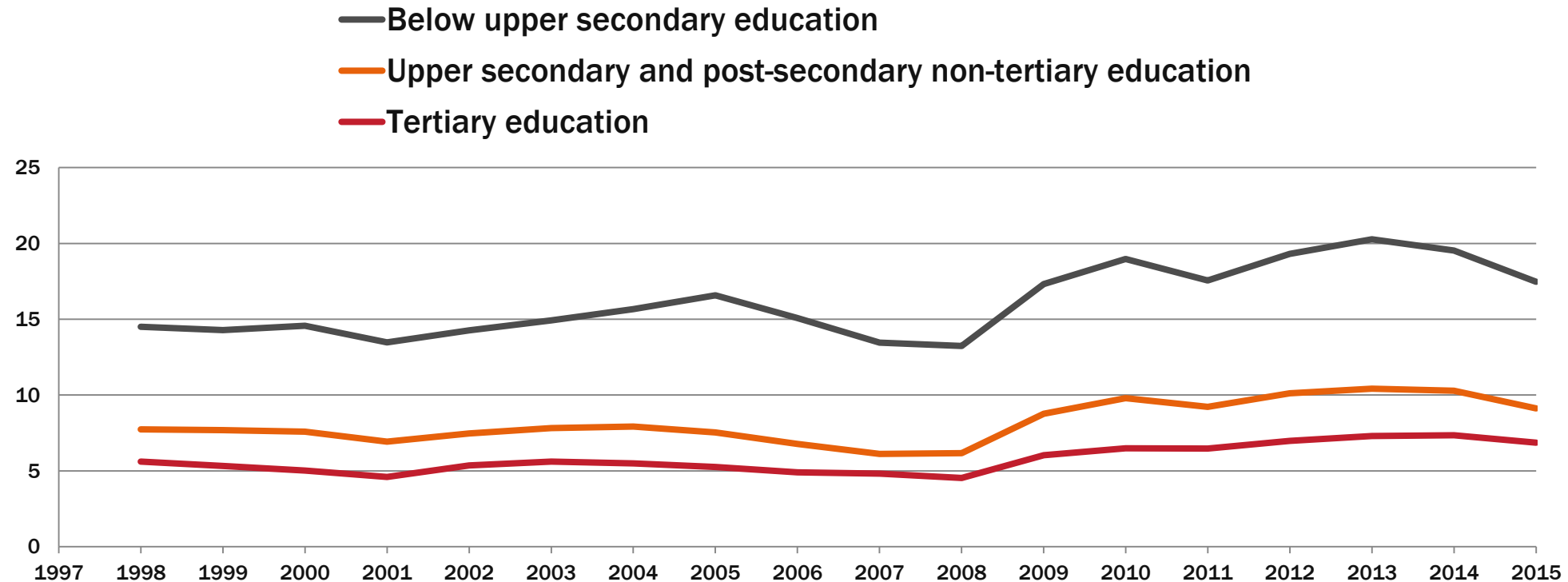


Source: OECD Educational attainment and labour-force status

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Rising Aspirations... and Youth Unemployment

Unemployment rates for 25-34 year olds by qualification
as % of corresponding group in labour force (OECD)



Source: OECD Educational attainment and labour-force status

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Growing Interest in Skills Training

THE WALL STREET JOURNAL.
**U.S. Companies Turn to German
Training Model to Fill Jobs Gap**
Vocational approach popular in Germany helps smaller U.S. firms build skilled



**OECD Reviews of Vocational
Education and Training**
**A Skills beyond School
Review of Switzerland**
Mihály Fazekas and Simon Field

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Vocational Education: Polytechnics and Institute of Technical Education

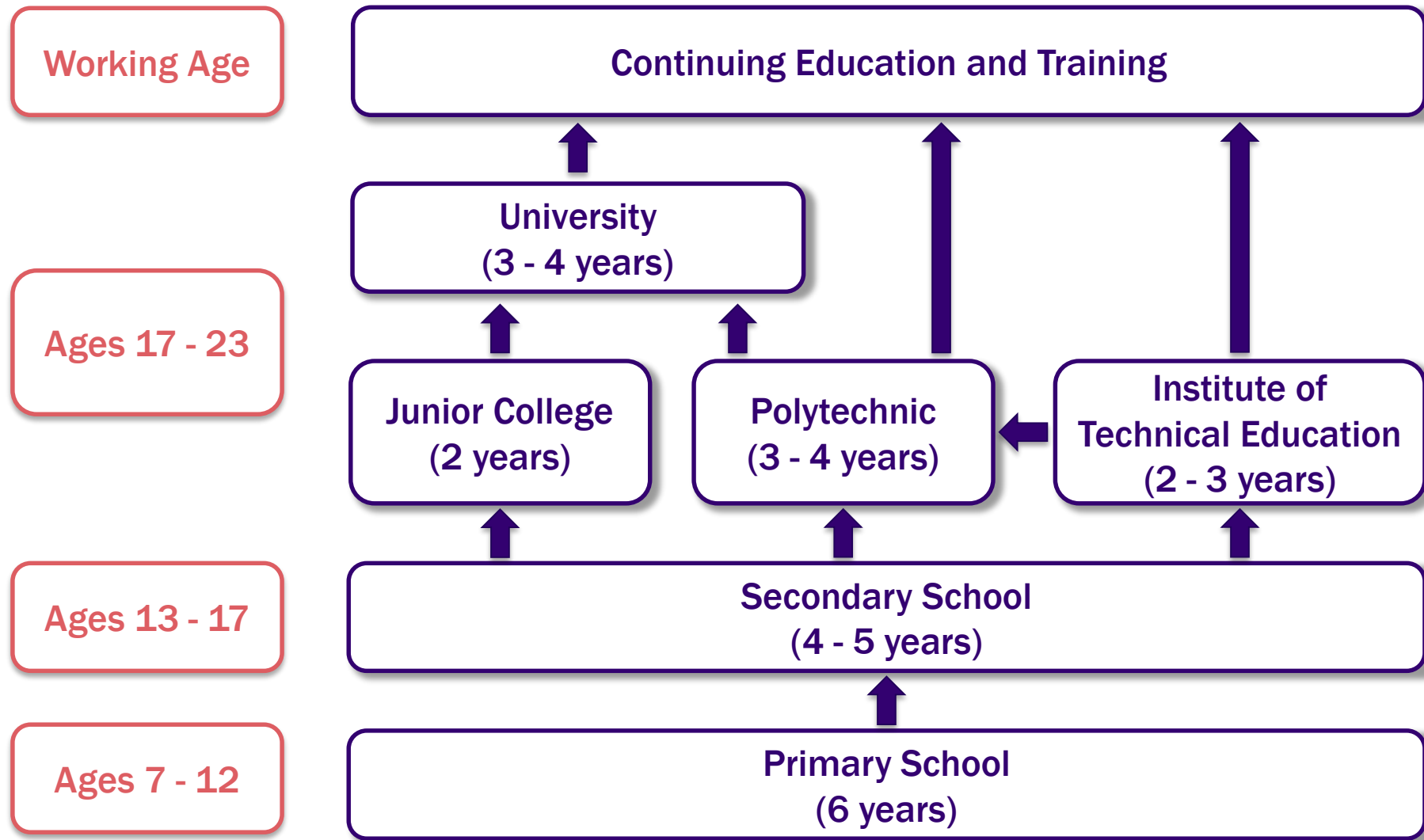
SINGAPORE
POLYTECHNIC



Sources: Singapore Polytechnic; Institute of Technical Education

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Multiple Pathways for Progression



Graduate Employment Surveys

87.3% of Polytechnic graduates and 88.9% of University graduates found jobs within 6 months of final examinations in 2017



(coming soon!)



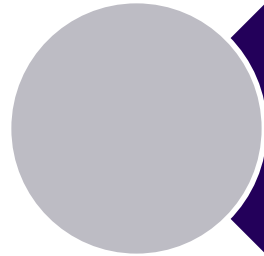
Sources: Poly GES 2017 Press Release; The Straits Times 26 Feb 2018; NUS, NTU, SIT, SMU, SUTD

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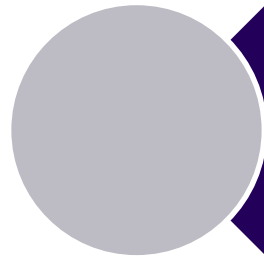
Learning in School versus Learning at Workplace



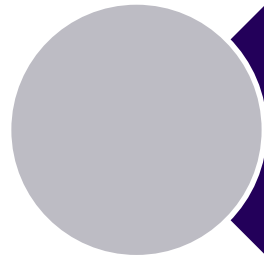
Considerations for implementing apprenticeships



**Interest companies to
take on training**



**Build capability to
deliver training**



**Blended learning in
schools and workplaces**

Work-Learn has benefited over 2,400 individuals and 600 companies



ITE

- Work-Learn Technical Diploma

Polytechnic

- Earn-and-Learn Programme

University

- Work-Study Degree Programme

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National Centre of Excellence for Workplace Learning



A collaboration of Nanyang Polytechnic, the Swiss Federal Institute for Vocational Education and Training, and the German Chamber of Industry & Commerce to build in-house training capabilities of companies.



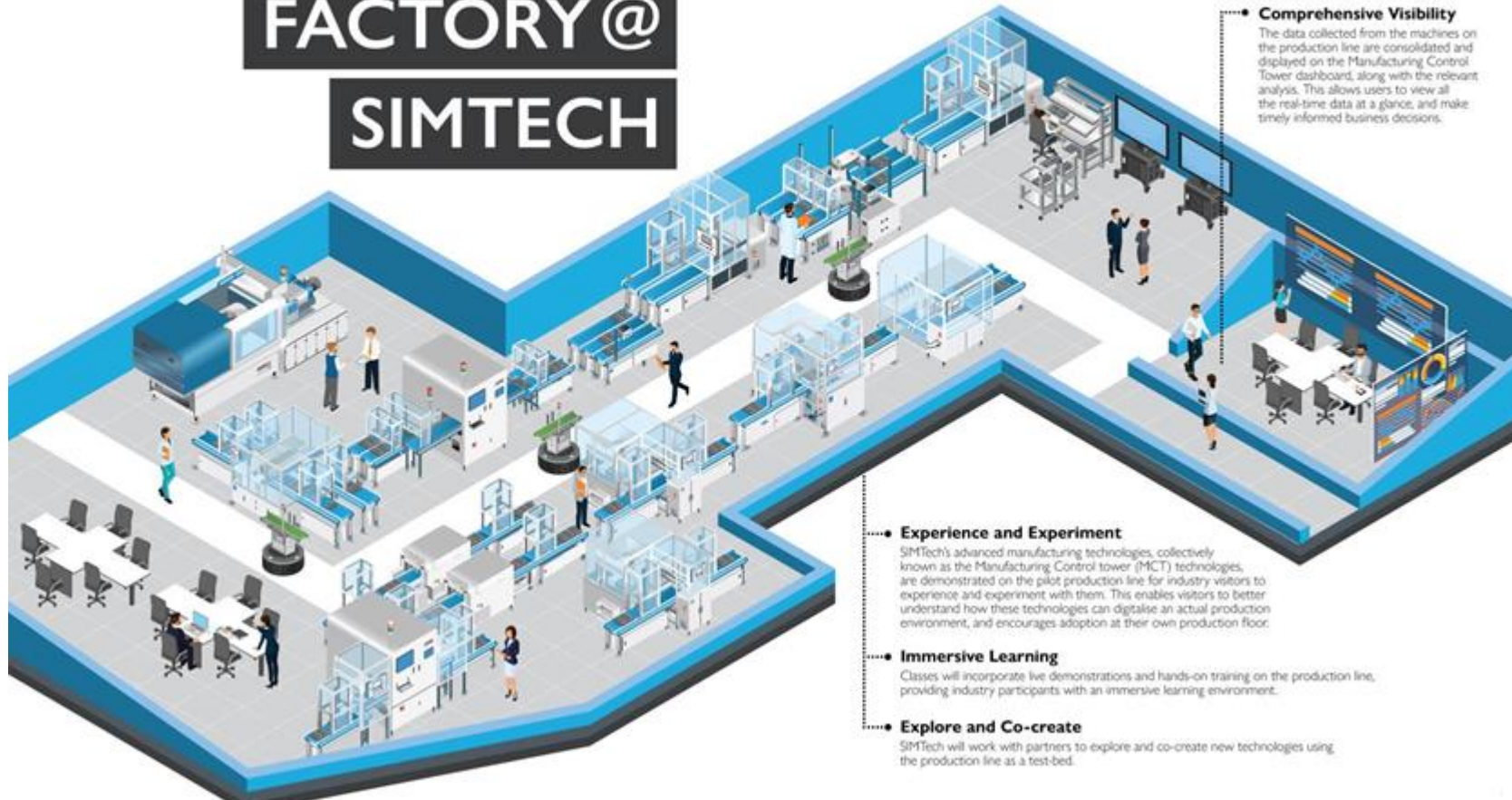
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Model Factory @ Singapore Institute of Manufacturing Technology



MODEL FACTORY@ SIMTECH

The A*STAR Model Factory initiative will allow companies to experience advanced manufacturing technologies first-hand in a learning environment, as well as collaborate with stakeholders to test-bed and jointly develop innovative solutions. The initiative will also be key to upgrading our manufacturing workforce's skills so that they are compatible with the latest Industrie 4.0 technologies. Model Factory@SIMTech aims to achieve these objectives through its key feature – the **pilot-scale production line**.



• **Comprehensive Visibility**
The data collected from the machines on the production line are consolidated and displayed on the Manufacturing Control Tower dashboard, along with the relevant analysis. This allows users to view all the real-time data at a glance, and make timely informed business decisions.

• **Experience and Experiment**
SIMTech's advanced manufacturing technologies, collectively known as the Manufacturing Control tower (MCT) technologies, are demonstrated on the pilot production line for industry visitors to experience and experiment with them. This enables visitors to better understand how these technologies can digitalise an actual production environment, and encourages adoption at their own production floor.

• **Immersive Learning**
Classes will incorporate live demonstrations and hands-on training on the production line, providing industry participants with an immersive learning environment.

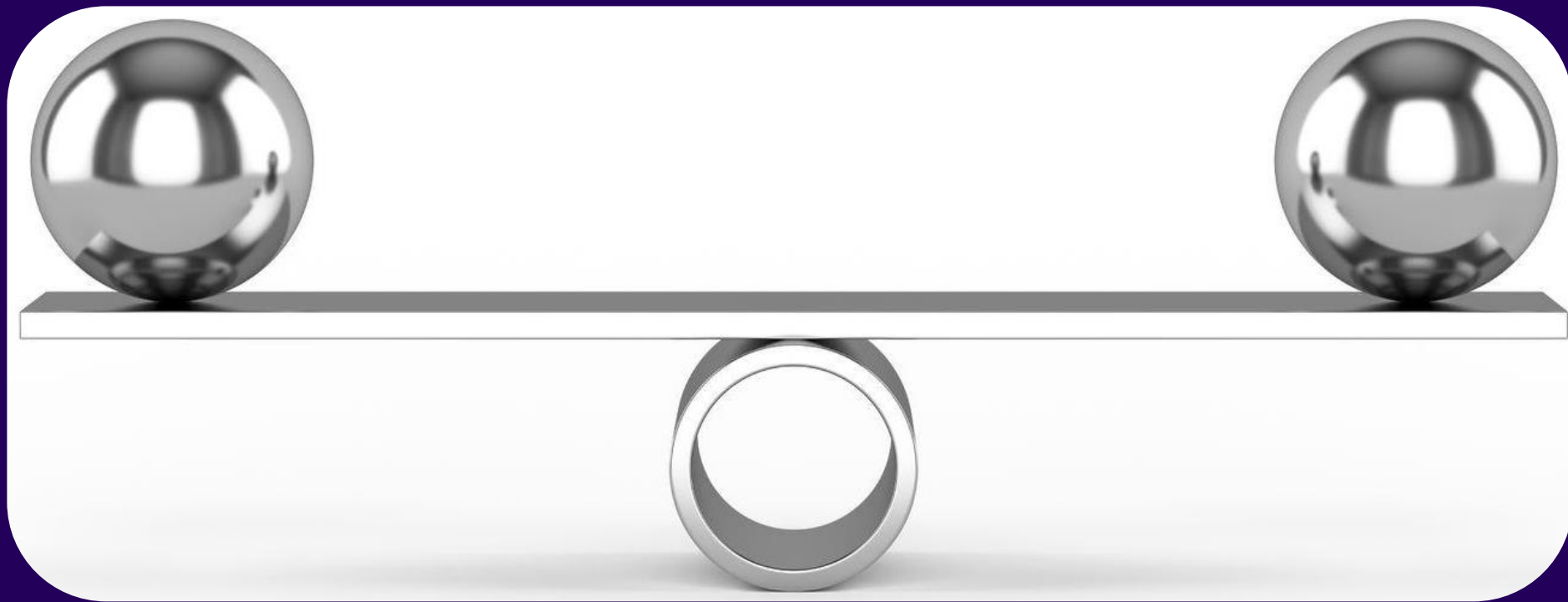
• **Explore and Co-create**
SIMTech will work with partners to explore and co-create new technologies using the production line as a test-bed.

Immersive learning
experience to
support training
programmes in
advanced
manufacturing

Source: Agency for Science, Technology and Research

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Learning Now versus Learning throughout Life



SkillsFuture for Digital Workplace



- Digital literacy and confidence
- Positive mindset towards innovation
- Enables work in technology-rich environments

Over 17,000 individuals have benefited

Empowering individuals to take charge of their learning...



**SKILLSFUTURE
CREDIT**

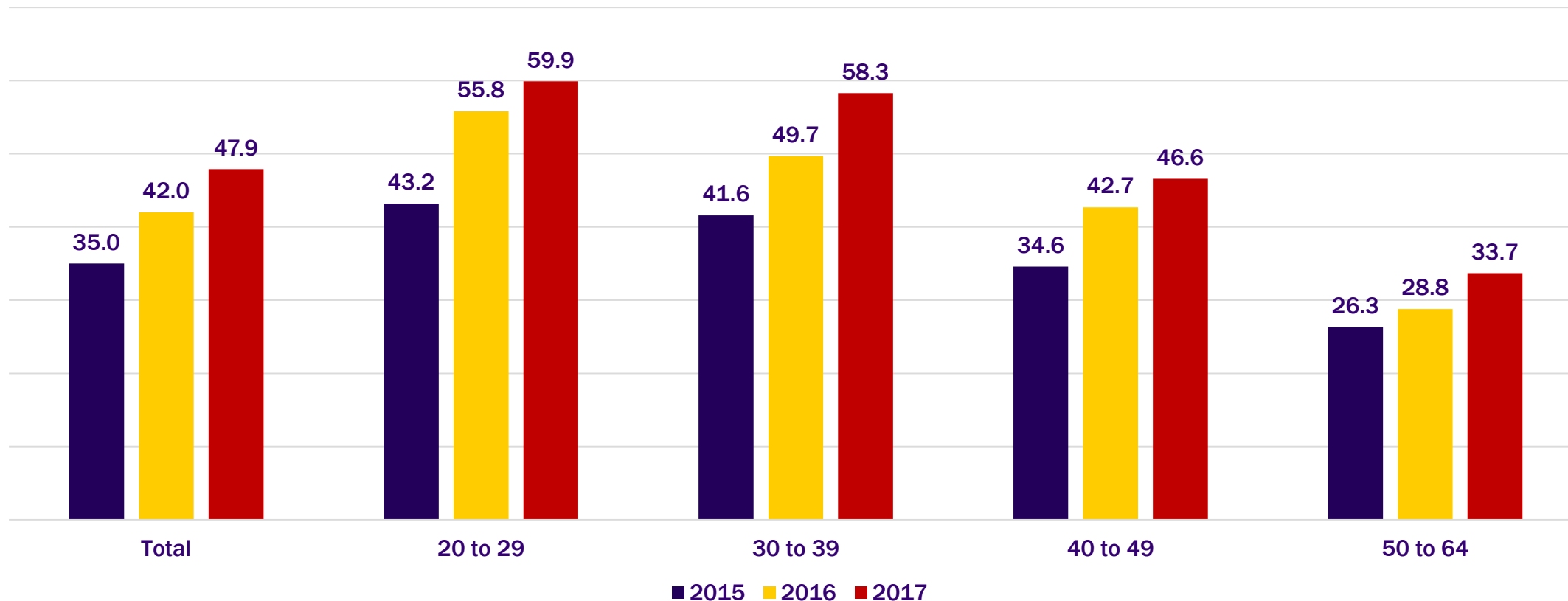
LIFELONG LEARNING
BEGINS WITH ME

- 
Singapore Citizen
- 
Aged 25 years and above
- 
Receive S\$500 initial credit

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...has seen some early success in training participation

Training Participation Rate (%) of Singapore Resident Labour Force aged 15-64 years old



Source: Ministry of Manpower, Adult Training Survey

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Lifelong learning now integral to the mission of education institutions



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SkillsFuture Series

Industry-relevant modular courses curated for 8 emerging areas

Advanced
Manufacturing

Cybersecurity

Data Analytics



Urban Solutions

Tech-enabled
Services

Finance

Digital Media

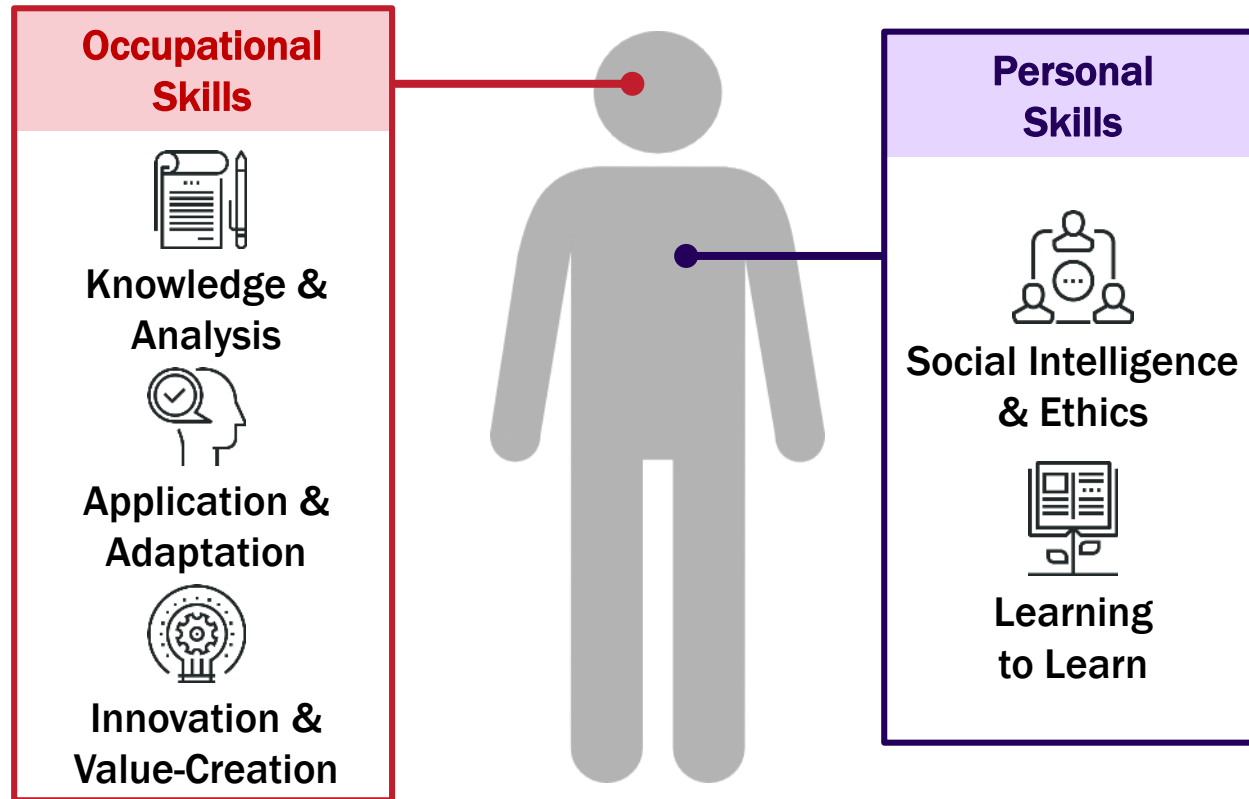
Entrepreneurship

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Technical Skills versus Transversal Skills



Developing both technical and soft skills are important



Skills Frameworks

- Common skills language for individuals, employers, education & training providers
- **Individuals** can assess if their skills match career interests, and find relevant training
- **Employers** can design progressive human resource practices to recognise skills, and make informed decisions on skills investment
- **Training providers** can develop responsive, industry-relevant programmes



Source: skillsfuture.sg/skills-framework

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More information available at
www.skillsfuture.sg