The Fourth Industrial Revolution: New paradigm for education and training

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The Fourth Industrial Revolution

Velocity

Scope

Impact
Impact on Jobs

Impact of automation varies by a country's income level, demographics, and industry structure.

Source: McKinsey Global Institute, Jobs lost, Jobs Gain: Workforce Transitions in a time of automation, Dec 2017
Impact on Skills

65% of children entering primary school today will have jobs that do not yet exist and for which their education will fail to prepare them.

And more of the desired skill sets of most jobs will be comprised of skills not yet considered crucial today, by 2020.

Half-life of skills in the future of work will decrease to 5 years.

Individuals on a 30 year career have to refresh their skills throughout their careers 6 times.
• Broad-based, diverse education and training opportunities and pathways
• Modular, bite-size, in-time learning
• Agile and responsive skills ecosystem
• Blended delivery to cater to needs of different learners
The **SKILLSfuture** Movement

1. Enable individuals to make informed learning & career choices
2. Develop an integrated, high-quality education & training system
3. Promote employer recognition & career development based on skills & mastery
4. Foster a culture that supports & celebrates lifelong learning
Rebalance Academic & Vocational Pathways
Rebalance Learning at School & Learning at the Workplace
Rebalance Front-Loaded Learning & Learning for Life
Rebalance Learning Technical & Transversal Skills

**Occupational Skills**
- Knowledge & Analysis
- Application & Adaptation
- Innovation & Value-Creation

**Personal Skills**
- Social Intelligence & Ethics
- Learning to Learn
Supporting Enterprises and Individuals

Develop Skills of Today and Tomorrow

Enable Learning Workplaces
Develop Skills of Today and Tomorrow

Skills Framework

1. **Comprehensive**
   - information on in-demand and emerging skills

2. **Current**
   - job roles and skill information are refreshed regularly

3. **Open source**
   - it’s free for your use

Source: skillsfuture.sg/skills-framework
Skills Framework

Use it to:

• Develop job descriptions
• Chart career pathways
• Benchmark skills
• Develop on-the-job training plan
• Conduct performance evaluation
• Identify training programmes

Source: skillsfuture.sg/skills-framework
2-day programme to develop foundational digital skills in your employees.

At the end of the programme, learners will:

- Develop an awareness on the future of work
- Able to work in a technologically rich environment confidently
- Able to use frequently-used mobile apps
- Develop an appreciation of cyber security, use of data

Source: skillsfuture.sg/digitalworkplace
Develop Skills of Today and Tomorrow

Acquiring Skillsets in Eight Emerging Areas:

- Advanced Manufacturing
- Cyber Security
- Data Analytics
- Digital Media
- Entrepreneurship
- Finance
- Tech Enabled Services
- Urban Solutions

Source: skillsfuture.sg/emergingskills
Top SkillsFuture Series courses

1. Alibaba Global Course (Digital marketing - Basic)
2. NICF – Certified ScrumMaster (Tech-Enabled Svcs - Advanced)
3. Data Analytics Begins with Me (Data Analytics - Basic)
4. Robotics & Automation 101 (Advanced Mfg - Basic)
5. Data Analytics for Managers (Data Analytics – Intermediate)
6. Data Driven Decision Making (Data Analytics – Basic)
7. Water Efficiency Manager (Advanced Mfg – Intermediate)
8. NICF – Business Process Reengineering (Tech-Enabled Svcs – Intermediate)
9. NICF – Digital User Experience Design (Tech-Enabled Svcs – Basic)
10. Innovation Bootcamp (Tech-Enabled Svcs – Basic)

Source: SSG, Jul 2018
Develop Skills of Today and Tomorrow

Access to learning opportunities anytime:

Source: myskillsfuture.sg
Supporting Enterprises and Individuals

Develop Skills of Today and Tomorrow

Enable Learning Workplaces
Enabling Learning Workplaces

Enhanced Training Support for SMEs

1. Higher Course Fee Subsidy
   Enjoy 90% course fee subsidy when you sponsor your employees for certifiable courses.

2. Higher Absentee Payroll Funding
   You can claim Absentee Payroll funding of 80% of basic hourly salary, capped at $7.50/hour.

Source: www.ssg.gov.sg
Enabling Learning Workplaces

Work-Learn Programmes

- Budding Talents
- Aspiring Entrants
- Experienced Workforce

Enhanced Internships
SkillsFuture Earn & Learn Programmes
Professional Conversion Programmes

Engage professionals to formalise in-house workplace learning systems:
NATIONAL CENTRE OF EXCELLENCE FOR WORKPLACE LEARNING (NACE)

Source: skillsfuture.sg
Enabling Learning Workplaces

Empower self-directed Learning:

Topics:
- Resilience at the workplace: The changing world of work / workplace
- Importance of skills upgrading and growth mindset for progression
- Employer and SkillsFuture programmes to support skills development
- Navigating the new MySkillsFuture portal to tap on SkillsFuture resources

Duration: 1.5 hour

Cost: Fully funded

Contents: Tailored to industry and organisation

Source: skillsfuture.sg/advice
Enabling Learning Workplaces

SkillsFuture Fellowships & SkillsFuture Employer Awards 2018

Guest of Honour
Madam Halimah Yacob
President of the Republic of Singapore, Patron of the SkillsFuture Fellowships & SkillsFuture Employer Awards
31 July 2018

Source: SSG Photo, 31 Jul 2018
Discussion Points

• Relevance
• Motivation and Drivers
• Mindsets, Culture
• Gaps
SKILLS future SG

Thank You.