Work, Innovation and Learning in SMEs

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Dr Silin Yang
Centre for Work and Learning
Presentation Outline

1. Research study “Innovative learning culture in SMEs”
2. Issues identified of the healthcare industry
3. Enablers to develop an innovative learning culture
4. Discussion
OBJECTIVES

1. Investigate how SMEs ‘afford’ learning opportunities that promote innovation, and what it means to have a culture that supports innovation and learning.

2. Inform government policies and initiatives on how development of innovative learning culture in SMEs can be supported.

RQ1: How do SMEs develop innovative learning cultures?

RQ2: What will drive SMEs to develop an innovative learning culture?

RQ3: What are the implications of the findings from RQ1 and RQ2 for government and industry efforts to support development of innovative learning culture in SMEs?
SMEs INTEGRAL TO ECONOMY AND KEY EMPLOYER IN SINGAPORE

99% of Singapore’s Enterprises

215,600 SMEs in Singapore

CONTRIBUTE nearly half of GDP

EMPLOY 70% of the workforce

Source: SPRING Singapore, (SingStat, 2015)
IMPORTANCE OF INNOVATION IN SMEs

- Innovation forms the **backbone** of organisations, especially for SMEs as insufficient innovation endangers their survival in an increasingly competitive economy
- **Positive effects**: increased productivity, growth potential and probability of survival
  (Source: Cefis & Marsili, 2006; Heunks, 1998)

Many sources of funding in Singapore to support SMEs, but only about half of SMEs in Singapore are engaged in innovative activities
(Singapore Chinese Chamber of Commerce and Industry, 2016)

Despite the push for innovation, little is known about what is happening inside SMEs in relation to innovation and learning. Hence the impetus for this study on “Innovative learning culture in SMEs”.
DISCOURSES ABOUT INNOVATION IN SMEs

Organisation for Economic Cooperation and Development (OECD, 2005): 4 types of innovation in an organisation

- Product Innovation
- Process Innovation
- Marketing Innovation
- Organisational Innovation

Concept of innovation should not be “limited to industrial, scientific and technical innovations” (Ramstad, 2009, p. 2)
OUR DEFINITION OF INNOVATION

GOING BEYOND THE OECD DEFINITION

- Generation and implementation of new processes, products, or ideas
- Remaking of everyday work practices, job enactment and social processes
- The tendency to think about new and better ways of doing things and to try them out in practice

Innovative learning culture as an environment or set of practices that encourage and promote learning and innovation.
Understanding the relationship between work, learning, and innovation.

Remaking of everyday work practices, job enactment, and social processes contribute to innovation.

Innovation and learning occur interdependently, where learning is both a response to innovation and an inspiration for innovation.

Learning arises all of the time and every day, as individuals engage in thinking and acting, and is embedded within everyday workplace activity.
SAMPLING FRAME

- 6-8 case studies
- Identified as an SME (organisation size of less than 200 employees or organisation’s annual sales turnover of not more than S$100million)
- At least half of the SMEs to have more than 10 years of operation
- Willingness to participate in project
- Two industry sectors (Advanced Manufacturing and Healthcare)

Advanced Manufacturing and Healthcare as the two sectors for this study:
- (potential of) high value add to Singapore in terms of contribution to national GDP and value added per worker; and
- high potential for innovative learning due to high operation risk and/or cost.
### PARTICIPATING ORGANISATIONS

<table>
<thead>
<tr>
<th>Industry</th>
<th>Name of organisation</th>
<th>Years in industry</th>
<th>Key businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>Loving Home</td>
<td>5 years</td>
<td>Specialised in home care services for the elderly</td>
</tr>
<tr>
<td></td>
<td>Moonlight Nursing Home</td>
<td>More than 30 years</td>
<td>Nursing home with capacity of more than 300 beds</td>
</tr>
<tr>
<td></td>
<td>Universal Health Nursing Home</td>
<td>More than 100 years</td>
<td>Nursing home with capacity of more than 600 beds</td>
</tr>
<tr>
<td></td>
<td>Sunshine Home</td>
<td>More than 10 years</td>
<td>Nursing home with capacity of more than 300 beds</td>
</tr>
<tr>
<td>Advanced Manufacturing</td>
<td>Future Forward Engineering</td>
<td>More than 30 years</td>
<td>Development of medical products (e.g. scopes for diagnosis and medical check-ups)</td>
</tr>
<tr>
<td></td>
<td>3Design Technology</td>
<td>6 years</td>
<td>Reseller of 3D printing machines and manufacturer of 3D printing</td>
</tr>
<tr>
<td></td>
<td>Security Manufacturing</td>
<td>More than 20 years</td>
<td>Business is mainly with the electronic industries, especially in the Semiconductor Backend</td>
</tr>
</tbody>
</table>

1. Pseudonyms have been used to protect confidentiality of participating organisations.
METHODOLOGY

Semi-structured and in-depth **INTERVIEWS** with selected employers, middle management and workers in the participating organisations

**WORK SHADOWING** of selected workers in the participating organisations

**ENGAGEMENT** with industry bodies and relevant government agencies

**DOCUMENT ANALYSIS** of participating organisations, industry bodies and relevant government agencies

**SURVEY** of all the employees from participating organisations which provide information on innovation and learning in the organisations
OVERALL DATA COLLECTED

- More than 600 Survey from the participating organisations
- Work Observations of 20 employees
- Engagement with close to 40 internal and external stakeholders
- Interviews with 50 employees and employers (about 4000 min of transcriptions)

from government bodies, industry associations, SMEs, Institutions of Higher Learning and adult educators
DATA ANALYSIS

- Thematic coding of data
- Summarising, sorting, comparing data
- Consistency checks
- Qualitative analyses using Nvivo
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OVERVIEW: SINGAPORE’S HEALTHCARE INDUSTRY

For the purpose of today’s presentation, the focus will be on healthcare industry (Long Term Care).

Healthcare is one of the 6 growth sectors, growing at 10.5% per annum.

- Ageing populations is one of main drivers for growth
- Singapore is one of the fastest-ageing countries in the world (By 2030, 1 in 3 Singaporeans need eldercare services)
- More eldercare need → increasing demand for nursing homes

2017 Report of the Committee on the Future Economy (CFE) - 3 key strategies for healthcare in Singapore:

1) develop deep digital capabilities,
2) build strong capabilities in innovation,
3) tap opportunities in a changing Asia
**Principles of Eldercare Policy**
Individual responsibility, government as last resort
Negative connotations stigmatising the elderly

**Staffing Shortage**
Nursing aide:
- Singapore: Local S$1350, Foreign S$850
- Australia: $3280
Low pay, long work hours, and negative perception
Unable to provide quality care service due to high workload

**Institutionalised Environment**
Too much efficiency and safety compromising autonomy and quality of life
Nursing homes as a place to live in, not just to receive care
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KEY ENABLERS TO PROMOTE INNOVATION AND LEARNING (A CONCEPTUAL FRAMEWORK)
Intra-organisation Enablers

Empowerment

Discretion, trust and resources given to employees to make decisions on how best to do their work.

- Innovation
- Resolves Staffing Shortage
- Quality Life
INTRA-ORGANISATION ENABLERS

RECOGNITION

The act of acknowledging and rewarding employees’ effort in innovation and learning so that they feel valued and appreciated in their workplace. It also includes enabling employees and organisations to recognise innovation and learning opportunities which impact their motivations to innovate.

- Innovation
- Resolves Staffing Shortage
- Quality life
INTRA-ORGANISATION ENABLERS

TOLERANCE FOR FAILURE

Processes in which employee or an organisation deals with failure and risk. Taking risk involves consideration of purpose(s) and potential consequences of such actions.

Resolves Staffing Shortage

Quality life
INTER-ORGANISATION ENABLERS

ALIGNMENT

Having a shared understanding of orientation of goals, intentions, and motivations among the stakeholders. It involves discussion and negotiation to reach an agreement of expectations and practices.

COMMUNICATION, NETWORK & PARTNERS

Interactions among the stakeholders to build relationships and develop collaborative partnerships.

Tutti Assisted Bath Tub
INTER-ORGANISATION ENABLERS

KNOWLEDGE FLOWS

Exchange and co-production of knowledge to enhance learning, innovation and performance for organisations and employees can take place between multiple parties and across different organisational levels, involving internal and external stakeholders.

Sharing of best practices and discussion of residents cases with other nursing homes and community hospitals

NATURE OF WORK

Nature of work refers to the workplace environment that enables or constrains learning and innovation at work and in organisations. It includes work complexity, work variety, exposure to change. Nature of work also refers to the context of the industry.
LIMITATIONS AND FUTURE RESEARCH

LIMITATIONS

- Caution is needed when interpreting the findings as this presentation is based on the preliminary analysis of data collected. Analysis of the full dataset is expected to be ready in Q4 2018.

- Care should be exercised not to generalise this study to the entirety of the healthcare industry, much less the entire population of workers in SMEs.

FUTURE RESEARCH

- Recommended to implement the findings of the research project in organisations with different organizational and workplace contexts, with more varied compositions of workers, and with different extents of job experience to identify the learning processes that enable these insights to be implemented in other organisations.

- A longitudinal study examining how workers learn and innovate over a period of time could be a worthwhile future research topic to undertake.
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DISCUSSION:

1. How can the 7 enablers be applied in another country’s context?

2. How can the 7 enablers be further improved?

3. Any other questions?

We are happy to explore possible opportunities to conduct comparative studies / cross analysis.
THANK YOU

Silin Yang
✉️ Yang_silin@ial.edu.sg