STREAM
Human Factor

TITLE
Capability Building leading to Innovation in Service Value Networks – Evidences from industry Case Studies

PRESENTED BY
Dr Renu Agarwal
Senior Lecturer in Innovation and Service Operations Management
University of Technology Sydney
Co-Authored with Prof Willem Selen, Ms Moira Scerri & Mr Shahriar Sajib
Australia’s population is projected to grow from around 22 million people currently to 35.9 million people in 2050. The ageing of the population will see the number of people aged 65 to 84 years more than double and the number of people 85 years and over more than quadruple.


The Economic Impact Of Australia’s Aging Population

CHAPTER 1

Innovation drives productivity

There’s no silver bullet solution to Australia’s ageing workforce

Dr Renu Agarwal
Agenda

• Management Innovation and Capability Building
  – Elevated service offerings – Innovation in Services
  – Dynamic capability building

• Quantitative Findings

• Case Studies
  – Mobile handset
  – Virtual Critical Care Unit (ViCCU)

• ViCCU focus
  – Unpacking the capabilities

• Findings Summarised

Management innovation

Many... programs in Australia are directed at technological or scientific innovation while only a few are directed at Strengthening innovation management inside organisations, including leadership and culture...

Capability Building

The Australian Government is developing these skills through Enterprise Connect and through its support for Innovation and Business Skills Australia, which is redefining the skills needed for “a flexible, innovative and adaptable workforce” by broadening its focus from skills development to capability building — with the emphasis increasing on the skills needed for innovation, leadership, and making connections between people and organisations. (Powering Ideas – An Innovation agenda for the 21st Century - Australian Innovation Policy Document 2009, p. 40).
Investment in Skills

Investment in skills has a two-fold benefit - ensuring innovation in the mining and resources sector allows us to continue to compete as other countries emerge as competitors and also ensures we have the right skills available for the likely growth in the services sector. We need reforms in these sectors that focus on building competitive capability to ensure they are better equipped to adjust – and innovate – as future competitive pressures evolve. However it cannot simply fall to government to determine and implement the necessary changes. (National Innovation System Report – 2012, page 16.)
Collaboration is increasingly the engine of innovation.

Elevated Service Offering (Innovation in Services)

**ESO** stands for new or enhanced service offerings which can only be eventuated as a result of partnering, and one which could not be delivered on individual organisational merit.

**Service** is defined as “the application of competencies (knowledge, skills and experience) of the stakeholders, whereby customers provide themselves, or provide significant inputs into the service production process and in the best case are transformed by the simultaneous consumption – the experience.”

- **Strategic ESO**
  - a new service offering
  - a new customer encounter interface
  - a new operating structure
  - a new service delivery process
  - an increase in the attributes of an existing service offering

- **Operational ESO - Performance**
  - an increase in the level of service customisation
  - an improvement in level of customer satisfaction
  - an increase in level of customer retention
  - an increase in memorable service experience of customers

- **Operational ESO - Productivity**
  - a reduction in service delivery lead times
  - an increase in on-time delivery of services
  - a reduction in customer waiting time

What is Dynamic Capability Building?
(Through Quantitative Studies)

Dynamic capability is defined as “the organisational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die” (Eisenhardt & Martin, 2000).

The building blocks of dynamic capabilities are “[...]distinct skills, processes, procedures, organisational structures, decision rules, and disciplines – which undergird enterprise level sensing, seizing and configuring capacities.” (Teece, 2009).
Dynamic Capability in Service Value Networks

ViCCU: *Without collaboration ViCCU would have never been possible and now without collaboration commercialisation is unlikely*

*R^2 = 0.21/0.27*


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R² provides the explanatory power wherein the R² value of 0.40 and 0.35, indicates that 40/35 percent of the variation in ESO outcome is explained by the combined effect of ORC and COL, for the initial and validated model analyses.


**Dynamic Capability in Service Value Networks**

Collaboration (Organisational Relationship Capital - ORC) → Stakeholder Learning (Collaborative Organisational Learning - COL) → Innovation in Services (Elevated Service Offering - ESO)
Dynamic Capability in Service Value Networks

R² provides the explanatory power wherein the R² value of 0.47 and 0.63, indicates that 47/63 percent of the variation in ESO outcome is explained by the combined effect of ORC, COL, and CIC for the initial and validated model analyses.

Dynamic Capability in Service Value Networks

Customer Involvement
(Customer Engagement – CuE)

Collaboration
(Organisational Relationship Capital - ORC)

Stakeholder Learning
(Collaborative Organisational Learning – COL)

Innovative Capacity
(Collaborative Innovative Capacity – CIC)

Innovation in Services
(Elevated Service Offering - ESO)

Entrepreneurial Alertness
(Entrepreneurial Alertness – EA)

Collaborative Agility
(Collaborative Agility - CA)

R² provides the explanatory power wherein the R² value of 0.81 and 0.67, indicates that 81/67 percent of the variation in ESO outcome is explained by the combined effect of ORC, COL, CuE, EA, CIC and CA for the initial and validated model analyses.

## Qualitative Research - Case Study Findings

<table>
<thead>
<tr>
<th>Virtual Critical Care Unit (ViCCU)</th>
<th>Mobile handsets</th>
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</thead>
<tbody>
<tr>
<td>• Required technological infrastructure was not widely available</td>
<td>• Competitive pressures experienced by the Telco</td>
</tr>
<tr>
<td>• It was challenging for the stakeholders to offer the service in a cost effective manner, as well as more importantly for patients to receive such critical services in real-time.</td>
<td>• Inability to effectively manage the mobile hand set supply chain</td>
</tr>
<tr>
<td>• Partners face serious challenges for managing intangible asset across the collaborative organisational boundary.</td>
<td>• Issue with the speed to market with innovative products and services</td>
</tr>
<tr>
<td>• The partners lack the crucial capabilities for commercialisation of the project.</td>
<td>• Inability to meet customer demand in a timely manner – loss of competitive position</td>
</tr>
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Virtual Critical Care Unit

Overview
The ViCCU (Virtual Critical Care Unit) Project sought to address the problems of shortages of Critical Care staff in regional and rural areas by developing a system that could use the capabilities of Ultrabroadband networks so as to have a Critical Care Specialist virtually present at a distant location. This is not possible in a clinically useful way with current systems. A new system (ViCCU) was developed and deployed. Critically ill or injured patients are now routinely assessed and managed remotely using this system. It has led to a more appropriate level of transfers of patients and the delivery of a quality of clinical service not previously available.
Key drivers of collaboration

• Access to strategic partners
• Access to superior technological infrastructure required to deliver the services
• Exploit strategic resources of partners
  — Deliver the service in a cost effective manner
• Ensure future development and commercial viability
• **Collaboration – Organisational Relationship Capital**
  – close, personal interaction between the partners at multiple levels
  – characterized by mutual respect between the partners at multiple levels
  – characterized by mutual trust between the partners at multiple levels
  – characterized by high reciprocity among partners

• **Collaborative Organisational Learning**
  – Acquiring new capability
  – Enhancing existing skills
  – Contextual capability and knowledge management
  – Learning and leveraging resources through sharing information and knowledge.

• **Collaborative Innovative capacity**
  – continuous supply of good ideas
  – cross industry idea fertilisation fosters solutions to challenges, problems or issues
  – collaboration between partners facilitate the process of learning thus providing innovative capability.
• **Customer Engagement – co-creator of value**
  – Co-opting gives greater contextual ability to explore opportunities and options
  – Engaging with the customer helps evaluate and align service offering attributes
  – Use of virtual customer communities helps to detect opportunities and service solution options -

• **Collaborative Agility**
  – Increasing speed of delivery - operational
  – Resource capacity planning - resource
  – Achieve agility across organisational boundaries –partnering

• **Entrepreneurial alertness**
  – anticipating new opportunities and threats - strategic foresight and systemic insight
  – questioning existing business models
  – keeping an alertness system running to identify potential scope of business

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## Summarised findings of Case studies

<table>
<thead>
<tr>
<th>Area</th>
<th>Virtual Critical Care Unit (ViCCU)</th>
<th>Mobile handsets</th>
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</thead>
<tbody>
<tr>
<td>Strategic intent</td>
<td>• Innovation in service delivery</td>
<td>• Supply chain efficiency</td>
</tr>
<tr>
<td></td>
<td>• Commercialisation</td>
<td>• Increased market responsiveness</td>
</tr>
<tr>
<td>Nature of the partnership</td>
<td>• Service Value Networks</td>
<td>• Dyadic collaboration - Service Value Networks</td>
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<tr>
<td></td>
<td>• At par relationships between four specialist organisations</td>
<td>• Leader follower relationship</td>
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<tr>
<td>Challenges</td>
<td>• Cultural difference was a key challenge for the collaboration</td>
<td>• Managing intellectual property</td>
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<td></td>
<td>• Differences in organisational structure and decision making</td>
<td>• Alignment of strategic goal and technical expertise deployment</td>
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<td>• Business processes create obstacles for timely decision making.</td>
<td>• Managing organisational culture, values and belief systems</td>
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<td>Implications</td>
<td>• Agile partner relationship with customers and suppliers facilitates building dynamic capability.</td>
<td>• Management considerations scale and scope were found to influential</td>
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<td></td>
<td></td>
<td>• Technical expertise and agile partner relationship facilitates building dynamic capability.</td>
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Dynamic Capability in Service Value Networks


Dr Renu Agarwal
Dr Renu Agarwal

University of Technology Sydney

Contact details:
renu.agarwal@uts.edu.au
M:0419 463 953