Part III
Technological Developments in Service Innovation

Role of Web 3.0 in Service Innovation

The exponential growth of data and the web has seen a focus on new ways of understanding the world. Semantic Web is a new and emerging technology with wide and exciting application into areas like health-care, research, marketing, and IT itself. It is a major step forward in Web evolution and is already finding application in consumer technology such as mobile phones (Siri in iPhones, for example), and not just in esoteric research. Web 3.0 could also help develop geographic variations in the nature of innovation. At the core, Semantic Web is a means to improve interoperability between systems, applications, and data sources.

Highlight *Research at University of London and German Research Centre for Artificial Intelligence is trying to bridge the "semantic gap" between what people understand and what computers can manage. Semantic analysis of multimodal video at a conceptual level aims to index segments of interest of videos. In reaching this goal, it requires an analysis of several information streams, say audio, video, and annotation. At some point in the analysis, these streams need to be fused. A recent trend in semantic video analysis is generic indexing approaches, using machine learning (Snoek et al. 2005).*

Service-Oriented Architecture as a Driver of Dynamic Capabilities for Achieving Organizational Agility

With rapid change sweeping through the globe—agility and ambidexterity is a much sought state for an organization. Service-oriented computing (SOC) has emerged as an architectural approach to flexibility and agility, not just in systems development, but also in business process management.

Highlight *The integration of internal systems was identified as a core business driver for SOA by a majority of firms in a broad industry study. This is consistent with existing studies on the use of SOA for application integration (Baskerville et al. 2005; Legner and Heutschi 2007; Yoon and Carter 2007) that indicate that an SOA-based infrastructure facilitates easier application and enterprise system integration.*

Disruptive Digital Innovation in Healthcare Delivery: The Case for Patient Portals and Online Clinical Consultations

Innovative, disruptive models of healthcare delivery that leverage current information, communication and decision technology platforms in novel ways have the potential to change the practice of healthcare delivery and management.

Highlight *Medical consultations through internet technologies, referred to as eVisits, can be delivered using synchronous communication (e.g. video chat) or asynchronous communication via email or message service. The latter is an increasingly adopted form of online medical service, and is regarded as a digital innovation that has the potential to transform healthcare delivery.*

Technology-Driven Service Innovation in the Banking Industry

The Australian financial system witnessed far-reaching financial reforms during the early to mid-1980s, following the recommendations of the inquiry into the financial system (Campbell review) to significantly deregulate the financial sector and allow foreign banks to enter so as to bolster competition. Sixteen foreign banks were invited to participate in the newly deregulated financial sector but even today much of the banking business in Australia remains concentrated in the hands of the big four banks (who collectively hold approximately 60 % market share). Despite this concentrated ownership, the increasing competition from non-financial institutions and the big advances in technology and communications has intensified further competition in the industry.

Highlight *With the advent of smart phone technology, new mobile payment apps have come on to the market. Westpac announced in April 2014 that it had launched a 'tap-to-pay' service for its customers using Samsung mobile phones using Near Field Payment (NFC) technology. NFC allows the user to transmit and receive information securely using their mobile phone to facilitate contactless payments of goods and services. Apple's iPhone 6 is also rumoured to have NFC payment technology on-board when released. CBA initiated a similar system late in 2013 for Google Android smartphone users and in March 2014 Cuscal, a 'transactional banking, liquidity and capital management products provider' for Australian credit unions and other financial institutions, released its trial of a Samsung mobile phone with NFC payment capability.*