

innovationcultures



Understanding value creation in the
21st Century
Services Innovation

by Inta Cinite, PhD

researchreport
● core concepts



innovationcultures

● a nexus for change agents

Introductory extract - for evaluation.

Dear Colleague,

Although innovation management is emerging as an essential discipline, what often comes to mind is the imperative to accelerate product innovation cycles. Yet 70 to 80% of North America's GDP is driven by services. Coupled with a healthy annual growth rate, any focus on innovation should also include the implications of services innovation.

This **innovationcultures researchreport** will provide you with an overview of the services innovation landscape. It is part 1 of a series, providing core concepts. Based on leading management literature and industry studies, a meaningful context emerges for understanding the nature of services and implications for innovation. From the diversity of services, to the significance of knowledge intensive services and innovation approaches — these insights will inform your services innovation strategies.

More important than any single innovative idea, however, is the notion of developing a systematic approach and an organizational structure that enables ongoing innovation. In services, human capital strategies are critical for encouraging the kind of cross-functional collaboration that leads to successful outcomes and ultimately a culture of innovation.

We'll also highlight that it is time for the role of government policies to be updated — as support has typically come with a product development bias that is not consistent with the realities of a services economy. And finally, leadership challenges will be reviewed with a look at the ability to manage the risk and rewards of innovation that are critical for ultimate sustainability.

In closing, as the domain of services innovation matures, we recognize that the next step will be the formalization of methodologies — and we encourage you to look out for our forthcoming program on **Services Design Strategies** which will explore best practices for developing successful service innovations.



Teresa Di Cairano
Director, innovationdesign

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Intervista Institute develops executive leadership programs and knowledge resources on emerging concepts in enterprise strategy and innovation. Our clients include FP/Fortune 500 and large government organizations.

A nexus for change agents, **innovationcultures** is a knowledge service that enables enterprise transformation and fosters an ongoing innovation capability.

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Services Innovation

Understanding value creation in the 21st Century

by Inta Cinite, PhD

In the February, 2001 issue of *Fast Company*, a series of articles about the dotcom boom bust was introduced with an exclamation “The new economy is dead! Long live the new economy!” The term “the new economy” has become a buzz word in today’s business discourse and has been given different meanings by different people.

While for some, “the new economy” describes advances in information technology and the proliferation of Internet-based small businesses, it has been widely recognized that fundamental changes in the economy are a shift towards the service sector and a focus on innovation as the critical means of attaining competitive advantage.¹ And this new economy never died!

The paradox is that modern economies are not commonly regarded as economies of innovation in services as if “services and innovation were two parallel universes that coexist in blissful ignorance” as F. Gallouj has observed.²

Services — a major contributor to the economy

An undeniable fact is that services dominate advanced economies.³ In the US, services represent over 80% of the country’s GDP and labour force.⁴

In Canada, over the past five years, the share of services in the GDP has been increasing rapidly to reach 70% in 2006. The annual growth rate of employment in services has been 2.2–2.8%, which is higher than the economy on average, reaching 77% of the workforce in 2008.⁵

What do we mean by services?

Services can be broadly defined as deeds, processes, and performances or constellations thereof, that are provided to customers in exchange relationships among organizations and individuals. Services can also mean customer services that support an organization’s offerings, and services derived from a tangible product such as the transportation provided by an automobile. They may include the offerings of critical industries such as healthcare, education, and telecommunications and, among other things, they can enhance the value of manufactured products, or, in combination with tangible products, they can provide a total solution to the customer.⁶

As opposed to goods producing industries, services have unique characteristics that may impact the ways a sector innovates, types of innovation initiatives it selects, and the most optimal innovation methods it uses. For an overview of these characteristics, see Appendix A.

“ An undeniable fact is that services dominate advanced economies.⁴ In the US, services represent over 80% of the country’s GDP and labour force.⁵ In Canada, over the past five years, the share of services in the GDP has been increasing rapidly to reach 70% in 2006. ”

“ At one extreme of the spectrum are highly routine activities requiring people with few skills and involving basic technologies, tasks that many regard as degrading and are often called McJobs. ”

Diversity of services

Services are too diverse a notion to make general statements that apply across the board. The situation is similar to the proverbial five blind men who touched a different part of an elephant and drew conclusions about what this animal looks like. Certainly, he who touched an ear got a very different idea than the man who touched the tail.

For some people, services may mean shopping assistance and the local car wash, while others associate services with financial planning and business consultancy. At one extreme of the spectrum are highly routine activities requiring people with few skills and involving basic technologies, tasks that many regard as degrading and are often called McJobs. At the other extreme are knowledge and advanced technology-intensive activities — the so called MacJobs.¹⁰

Therefore, the once widely accepted Pavitt's (1984) taxonomy of industries where all services were lumped together into one category — supplier-dominated firms — became completely unacceptable in the 1990s. Since then, there have been several attempts to develop a separate taxonomy for services that would address the diversity of the sector.



Understanding the nature of services

From 1978 to 2005 a number of taxonomies have been proposed to categorize types of services in the economy. The bases for categorizations are formed from various understandings of the nature of services. These perspectives come from classifying services according to their degree of standardization, skills level, frequency of transactions with customers, effected transformations and/or degree of technological innovation. For an overview of services sector taxonomies see Exhibit 1.

“ At the other extreme are knowledge and advanced technology-intensive activities — the so called MacJobs. ”

Innovation approaches in different service industries

Different modes of innovation can occur in virtually all service industries and functions although to varying degrees. Based on their characteristics, each service category may require a different approach to innovation.

Due to the diversity within the services sector, differences with respect to innovation sometimes seem greater within the sector than between some service industries and some manufacturing industries.¹⁸ For example, the nature of process innovation is not the same for a hotel service, a consultancy service and a financial service.

There are findings and propositions from the literature that link categories of services to certain types of innovation across the knowledge intensity spectrum (starting from the high end of knowledge intensity to the low end). It should be noted, however, that the empirical evidence in this respect is scarce and the findings of the few studies do not allow for a high degree of generalization. Possible types of innovation are reviewed in Appendix B.

Modes of innovation

As a result of his comprehensive empirical study of innovation in services, F. Gallouj¹⁹ came to the conclusion that different modes of innovation, including radical, ameliorative, recombinative, and formalization, can occur in virtually all service industries and functions although to varying degrees.

Opinions with respect to radical innovation, however, vary. It is argued that most firms are more adept at making incremental improvements to existing lines of products or services rather than creating breakthrough innovations, although only the latter is believed by some experts to lead to constant growth in today's markets.²⁰ At the same time, there are reminders not to underestimate the power of accumulated small innovations.²¹ Although most types of innovation can be used in all services, there are some types that are more likely to happen in certain service categories — these are reviewed below, and summarized in Table 2.

Table 2. Types of innovation most frequently used in certain service industries based on findings of Gallouj (2002) and Sundbo (1999).

Types of Services > Innovation approach	KIBS* overall	Consulting	Financial services	Hotels, retail, catering	Manual services	Operational services
Incremental			X	X	X	
Ad hoc	X	X		X	X	X
Anticipatory	X	X				
Process	X				X	
Associative		X	X		X	
Formalization	X	X			X	
Reverse product cycle	X		X			

* KIBS — Knowledge Intensive Business Services

Innovation in knowledge intensive services

Knowledge intensive services, especially the so called “knowledge intensive business services” or **KIBS**, are the most likely to engage in active and rigorous innovation and spend significantly more resources on innovation than other service firms.²²

With respect to technology, KIBS can be divided into two groups:

1. **Traditional professional services** such as marketing, advertising, training, financial, legal, and office services, accountancy, management consultancy, etc. that are users of new technologies,
2. New **technology-based KIBS** such as computer networks, telecommunications, software development, training, science-based and R&D firms, and to some extent management consultancy, and design that are agents in new technology development.²³

The following types of innovations were observed in knowledge intensive business services (KIBS):

Ad hoc innovations

Gallouj²⁴ found that KIBS, especially management, advertising, and legal consultancy service firms, are more likely to engage in customized/tailor-made or ad hoc innovations which are unprogrammed and emergent. Providers of such services not only produce their own innovations, but also participate in the innovations produced by their clients.

Anticipatory innovations

Another widely used type of innovation in KIBS was found to be anticipatory. In such cases, firms encounter certain difficulties since the innovation does not yet meet a manifested need. In fact, the need itself is anticipatory. Indeed such firms are accumulating knowledge that may well be useful in the future. This requires strong marketing and communications capabilities. In addition, such ephemeral innovations are hard to protect.

Formalization/process innovations

The third most popular type of innovation was objectifying or formalization, that is, finding the appropriate mechanisms, tools, methods, and documentation to make intangible innovations more visible and more tangible (or even standardized). In addition, Tether and Hipp²⁵, in their study of German service firms, found that high knowledge intensity firms were more likely than others to introduce process innovations.

Reverse product cycle innovations

Another peculiarity of innovation in KIBS is the so called reverse product cycle²⁶ as opposed to the traditional industrial product innovation cycle that starts with a product innovation and continues with related process innovations over a period of time.

In services, the cycle often starts with an incremental process innovation in the back-office (e.g., improved service efficiency or decreased cost) with the help of a new technology, followed by a radical process innovation in the front-office to improve service quality employing even more new technology.

Finally, these process improvements give rise to a radical product innovation (i.e., a new service). In Gallouj’s banking example, this process involved computerization (mainframe) of banking and personnel records to start with, then advanced computer capabilities allowed the bank to significantly improve services to its customers, that ultimately led to a new service — home banking. First and foremost, this “reverse product cycle” model applies to financial (banking and insurance), accountancy, and administrative services, and it is not certain if it would also work in other types of services.

Associative and incremental innovations

Financial services were found to have used associative innovation (i.e., combining existing elements in new patterns) to a higher degree than other services. Financial firms also tended to use more incremental innovation, especially the addition of supplementary functions.²⁷

“ Consistent with the general trend in services, less knowledge-intensive business services prefer incremental innovations. ”

The series of small experiments to improve customer service and develop new services carried out at The Bank of America in 1999 exemplify this approach.²⁸ Incremental innovation is especially typical of investment banking, an industry that has undergone tremendous innovation over time without making any radical leaps. Instead, hundreds of small advances each month accumulated to culminate in a huge transformation.²⁹

Innovation in less knowledge intensive services

As mentioned above, most types of innovation can be practically used in any service category, including the less knowledge intensive. However, these industries, particularly the supplier-dominated firms, are in stark contrast to KIBS in that they are less technology-intensive, receive their innovations from outside the sector, and have very little R&D of their own.³⁰

Nevertheless, there is good evidence that these services do not lag too far behind others, although they do innovate differently than KIBS.³¹ Consistent with the general trend in services, most non-KIBS prefer incremental innovations. This was observed in hotel, catering, transport, cleaning, retail services and packaging of goods and services.³²

For example, cleaning services innovate by introducing new chemicals, new cleaning methods, etc.³³ It has been observed, though, that retail services tend to be less innovative.³⁴ In Gallouj's study,³⁵ all service industries but retail used associative innovation, that is: creating a new product or process by combining existing components in a different way.

An example of associative innovation is the Danish logistics firm Frans Maas which combined storage, transportation and planning of just-in-time delivery of parts from suppliers to an assembler into a new service.³⁶



Ad hoc or tailor-made innovation is also often used in less intellectual activities than KIBS, for example, in hotels, catering, retailing, operational services, neighbourhood services, repairs, etc.³⁷ The difference lies in the nature of how ad hoc innovation is applied in these services. In lower knowledge intensity services, ad hoc innovation is easier to describe, has easier access, and stems from the combination of standardized modules as opposed to KIBS where activities are more complex, unique, and difficult to describe and define.³⁸ For example, cleaning and repair services have high client interaction and participation, and may require the service provider to resolve client needs as they emerge using his/her judgement.³⁹

Pockets of innovation within low knowledge-intensity services

The service sector involves functions from the most routine and mundane to the most sophisticated and highly professional. Moreover, this diversity can be found within a single service industry.

As opposed to certain service industries where knowledge intensity is pervasive throughout the organization, there are generally low or medium knowledge intensive industries with “pockets of innovation” or high knowledge intensive functions that are very innovative.⁴⁰



For example, the retail industry overall does not require high knowledge intensity and is not highly innovative, but there are some functions which certainly are. For example, Wal-Mart is known all over the world as a pioneer of a sophisticated integrated inventory management system that was developed in-house using advanced information technology.

Similarly, rail, broadcasting and telecommunications industries all have their own laboratories, testing sites, and training programs.⁴¹ Another example is the food industries that have their own R&D laboratories — “micro pockets” of innovation. Furthermore, most companies in any industry have computer services or even information technology departments that are highly knowledge intensive and can drive innovation in corporate operations.

Senior executive teams in any industry can generate innovative business models, an activity requiring high intellectual capacity, but the question is how deep the innovation competence penetrates the rest of the company. Possibly the management team is only an innovative pocket in an otherwise non-innovative company. Ignoring these pockets will continue the general myopia of viewing services as lacking innovative capacity.⁴²

Challenges of leading innovation

Notwithstanding the innovation imperative, there are many organizations that either do not attempt to innovate or fail if they try. More than a half of 2500 senior executives from 58 countries reported disappointment with the financial returns of their company’s innovation investments.⁴³ Irrespective of the industry, respondents to the Boston Consulting Group, McKinsey & Company, and Booz & Company global surveys believed that most companies do not have the leadership, systems or tools to successfully and consistently innovate.⁴⁴

At the executive level there might be a commitment to innovation as reflected in the annual reports and CEO’s letters to the stakeholders, but at lower levels, employees might not feel like innovators or feel that they are working for an innovative company.⁴⁵

This indicates that innovation in such companies is a buzz word rather than a core competence. In fact, to make innovation happen is a complex challenge, and many companies might not know how to go about it.⁴⁶

Creating value in the 21st century

The challenge of any innovation program is to create tangible value for the organization, its clients and its stakeholders. As we have seen, innovation approaches do vary, and can emerge at many levels within an organization. A thoughtful strategy to value creation in this 21st century must therefore center on a systemic, organizational approach to ongoing innovation. Various leadership and management models to this end are discussed in the following sections, and more broadly in Intervista’s **innovationcultures** program as a whole.

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