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Building an integrated service innovation Model: A case study of Investment Banking

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***Abstract*-Services innovation requires different organization and principles than product innovation. Service innovation is directly related to business models that support these services, i.e. services can only be successful in the long run with a viable business model that creates value for its customers and providers. This paper presents a theoretically grounded yet practical approach to designing viable business models for services, the integrated model provides a 'holistic' view on business models with five interrelated perspectives: new service concept, design, analysis, development, full launch, and three supportive dimensions: process enablers, new client interface, new service delivery system. It elaborates on critical design issues that ultimately shape the business model and drive its viability. Also, the study adopted a case study of Investment Banking to examine this model.**

Keywords: Service innovation, Business model, Service delivery system, Investment Banking

I. INTRODUCTION

While academics and business leaders could afford to ignore the study of service innovation in the past, when the U.S. economy was driven by manufacturing, the situation is changing. Recent statistics illustrate that services, in a wide spectrum of industries, are becoming a dominant force in the U.S. economy. The latest data from the Bureau of Labor Statistics (published in December, 2005) projects that the service-providing sector of the U.S. economy will see the highest employment growth by 2014. Services represent an enormous and growing part of the United States' economy. By most calculations, services now account for more than 80% of the total gross domestic product in the U.S. And the trend is global: Service workers now outnumber farmers for the first time, according to the January, 2007, issue of Global Employment Trends, a newsletter published by the International Labor Office.

However, few researchers have examined innovation in the services industry of investing bank. The key to thriving in this environment is meeting and exceeding customer expectations and finding new service models. Much of the thinking on innovation has focused on traditional products, not on services, but more attention is now being focused on this topic. Economists and academics are paying attention to such changing stats, evident in the increasing number of research papers written on service innovation. Service innovation simply reflects the new playing field of business. Technological advances, which allow for service innovation opportunities such as live instant-messaging with a consumer representative while shopping online, combined with consumers' increasing demands for faster and better services, have made service innovation an important part of top companies' competitive strategies.

This paper will examine services innovation in two blocks. The first block will cover key concepts for services innovation, including how services innovation differs from product innovation. The second block will introduce several tools and frameworks to apply those concepts to specific services situations. These include process design, process mapping and improvement, business models.

II. PRODUCT & SERVICE INNOVATION

A. Definition of service innovation

Reena Jana [14] proposed a helpful definition comes from Finland's research Agency, TEKES [19]: "Service innovation is a new or significantly improved service concept that is taken into practice. It can be for example a new customer interaction channel, a distribution system or a technological concept or a combination of them. A service innovation always includes replicable elements that can be identified and systematically reproduced in other cases or environments. The replicable element can be the service outcome or the service process as such or a part of them. A service innovation is a service product or service process that is based on some technology or systematic method. Service innovations can for instance be new solutions in the customer interface, new distribution methods, novel application of technology in the service process, new forms of operation with the supply chain or new ways to organize and manage services. "

A comprehensive definition of service innovation was proposed by Van Ark et al., [20]: Service Innovation can be defined as "a new or considerably changed service concept, client interaction channel, service delivery system or technological concept that individually, but most likely in combination, leads to one or more (re) new(ed) service functions that are new to the firm and do change the service/good offered on the market and do require structurally new technological, human or organizational capabilities of the service organization." This definition covers the notions of technological and non-technological innovation. Non-technological innovations in services mainly arise from investment in intangible inputs.

B. How service innovation differs from product innovation

There are three important ways that service innovation differs from product innovation [5]: 1. The actual providers and the service delivery staff are part of the innovation and the customer experience in labor-intensive and interactive services. 2. "Local" decentralized production capacity is necessary for services to require the physical presence of the customer. 3. Service innovators usually do not carry a brand name with a tangible product.

C. Six general guidelines for services innovators

Services innovation requires different organization and principles than product innovation. The study reviews six general guidelines for services innovators to follow [10]. Successful services innovation: (1) is diffuse, pervasive, involves the entire organization and emerges from many different places and people; (2) balances incremental innovation with radical innovation, (3) involves continual experimentation, with a disciplined approach to evaluation and return-on-investment; (4) is at times ‘infrastructure-push’ rather than market-pull’ in nature; (5) involves elements of theatre, to create, test and deploy new memorable experiences; (6) resolves the often-severe cultural conflict between open ‘blue oceans’ creativity and the culture of discipline.

III. SERVICE INNOVATION MODELS

The section discusses the progress of service innovation models.

A. Service Innovation Model

Barras [3] [4] provided a model of reverse product cycle was followed a three phases of the reverse product cycle and consisted of a first stage where the applications of the new technologies were designed to increase the efficiency of delivery of existing services; second stage in which the technology was applied to improving the quality of services and third stage where the technology assisted in generating wholly transformed or new services. Gallouj [7] took a discussion on the Barras’ reverse product cycle. He thought that a first of theses were incremental process innovations whose objectives were to improve the efficiency of service delivery. The second stage comprised more radical innovation process which led to the improvement of service quality and the final stage were involved product innovation that was new service.

Gallouj [7] and Gallouj & Weinstein [8] proposed a characteristics-based model of service innovation which extended the model of Saviotti & Metcalfe [15] and Saviotti [16], taking Lancaster’s work as a starting point [4] [5] provided a service requirement for both the direct implementation of knowledge and competences which embodied in individual members not only of provider firms but also of client companies and technical factors that consisted of tangible or intangible knowledge such as computer or telecommunication systems for tangible and methods or legal expertise for intangible. The most important added into the model was client’ s participation. Through customer made direct use of his knowledge and competences, it represented in particular the various ways where the client himself was co-production or building service relationship with service firms. For example, the service characteristic of the repair service in the insurance policy: technical characteristics equated the back-office or front-office computer systems used when insurance policies were registered; the relationship between service providers and clients represented a episode in the case of market insurance services which involved taking out of a policy purchase and possibly the payment of compensation in the event of damage. Gallouj [7] and Gallouj & Weinstein [8] provided six models of innovation that was based on the characteristics-based model could be identified: radical innovation, ameliorative innovation, incremental innovation, ad hoc innovation, recombinative innovation and formalization innovation.

According to Johne and Storey [11], who reviewed numerous New Service Development studies, the service innovation literature is surprisingly poorly related to that on new product development - which has spawned a line of study on new service development (NSD). This often focuses on the managerially important issue of what makes for successful service innovation. Johnson, et al. [12] effectively translate the complex, iterative process model of Scheuing and Johnson [17] into a simpler, four-stage NSD process cycle: 1.Design - setting new service strategy and objectives, idea generation and screening, and concept development and testing 2. Analysis - business analysis and project authorization 3. Development - service design and testing, process system design and testing, marketing program design and testing, personnel training, service testing and pilot run, and 4. Full launch - full-scale launch and post-launch review.

They use all of the same steps as Scheuing and Johnson [17] except for marketing program design and testing, and identify process enablers as people, technology, systems, product, tools, teams and organizational context. Alam and Perry [2] combined some steps and eliminated others from the Scheuing and Johnson [17] to propose 10 stages model: (1) strategic planning (2) idea generation (3) idea screening (4) business analysis (5) formation of cross-functional team (6) service design and process/system design (7) personal training (8) service testing and pilot run (9) test marketing (10) commercialization. The stages presented by both Alam [1] and Gruner and Homburg [9] can be divided into three categories. (1) The planning stage or initiation stages (Kelly and Storey, 2000) (2) the development stage (3) the launch stage. Smaller firms ran three pairs of stages in parallel to speed up the development process.

Much literature on what makes for successful innovations of this kind comes from the New Service Development research field (e.g. [11]; [13]). Innovation researchers have stressed that much service innovation is hard to capture in traditional categories like product or process innovation. Thus den Hertog [6] who identifies four “dimensions” of service innovation as follows:

(1) New Service Concept: refers to a service concept that is new to its particular market – a new service in effect, or a new value proposition. Such as new types of bank account or information service, the organisation of shops in different ways (more or less specialised, more or less focused on quality or cost-saving, etc.) (2) New Client Interface: refers to innovation in the interface between the

service provider and its customers. Such as the greater involvement of self-service for clients visiting service organisations. This type of innovation could be as innovation in "servuction". (3) New Service Delivery System: also often relates to the linkage between the service provider and its client, since delivery does involve an interaction across this interface. Much innovation concerns the electronic delivery of services, transport and packaging innovations. An emerging concept of SDP is the idea of taking a "factory" approach to Service Innovation. (4) Technological Options: these most resemble familiar process innovation in manufacturing sectors. New IT is especially important to services, since it allows for greater efficiency and effectiveness in the information-processing elements that are, as we have seen, prevalent to a great extent in services sectors. We also often see physical products accompanying services, such as customer loyalty cards and "smart" RFID cards for transactions, and a wide range of devices for communication services.

In practice, the majority of service innovations will almost certainly involve some combination of these four dimensions. The combination of the four dimensions will vary across innovations. For instance: a new IT system (technology dimension) may be used to enable customer self-service (interface dimension) as in the case of a bank contacting its customers. Another interface innovation involving new IT is the ability to track one's order or the location of an item that one has posted or is expecting to receive. Services may be delivered electronically, as in the case of much online banking – or, better still, cash withdrawals from ATMs. A new service may also be offered, for instance allowing the client to examine various options and calculate what they would be paying with different types of account. A new service will often require a new service delivery system, and changes at the client interface. Drawing from the new product development (NPD) literature, service quality literature (SERVQUAL), and empirically grounded research with 53 service innovation decision makers, Song, Lisa et al. [18] develop a staged service innovation model (SIM) for decision makers. The empirical results show that integrating prelaunch service quality training into new service development process leads to successful service innovation.

B. An integrated service innovation model

In summarize above models, the study builds an integrated service innovation model (figure 3-1) and through a case study of Investment Banking to examine this model.

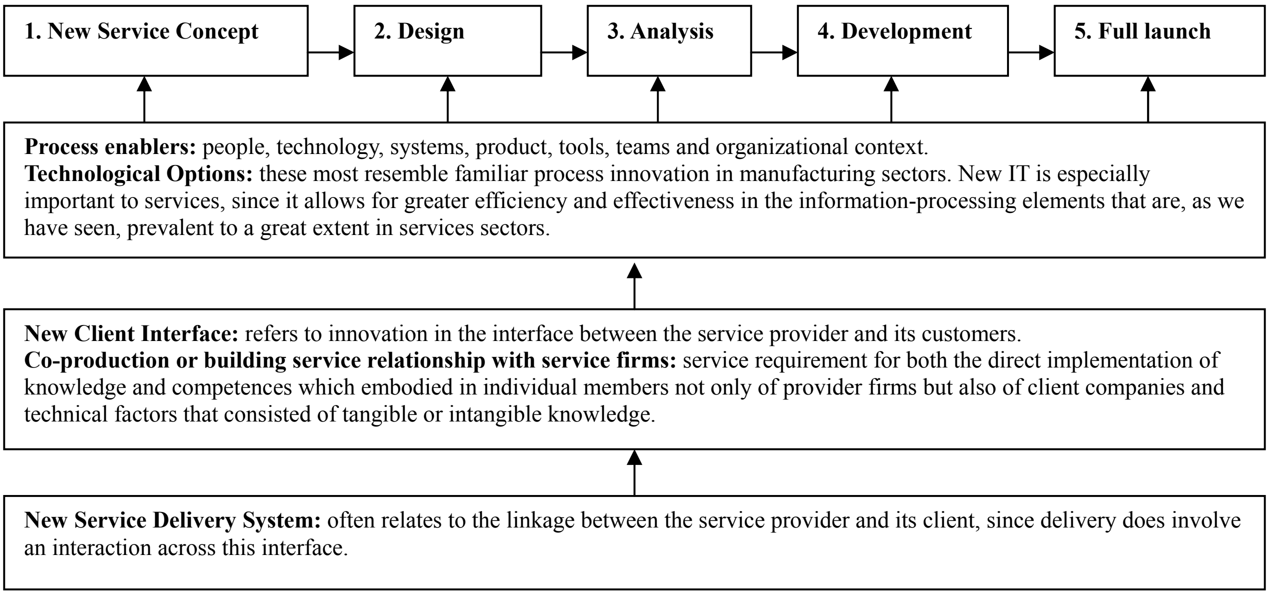

Figure 3-1: An integrated service innovation model

IV. CASE STUDY

HSBC is one of the world's largest personal, commercial and investment banks. To remain ahead of the competition, HSBC is constantly looking to implement innovative new or enhanced propositions and transactional services to enhance customers' experience when managing their money. One such innovation was the introduction of full self-service banking in HSBC branches. This was introduced to reduce counter queues and speed up transactional processing, while freeing up branch staff to spend more time engaging with customers and meeting their financial needs. Implementing this change involved reversing how space was used in branches so that at least 80% of the space is now dedicated to customers. To ensure the 'human touch' was maintained with customers, branch sales floor management was introduced with all staff spending time with customers in the banking halls. As a core part of these changes the bank heavily invests in retraining and team building to prepare staff for the physical and cultural changes introduced with their new branch environment.

HSBC finds that human factors are one of the biggest challenges to address when trying to introduce such fundamental changes as these. HSBC said that it looks at customers' motivational drivers and builds these into the design of new propositions. As an example, HSBC wanted to introduce a self-service deposit system for cheques. However, customers indicated they would only use the machines for small deposits as they wanted certainty and affirmation that their deposits would get accepted and processed. The result is a cheque scanner in each machine that prints a picture of every cheque deposited on the customer receipt – thus helping to build customer confidence and trust. In developing new propositions HSBC starts with customer and market insight. This insight is applied throughout the implementation stages of design, communication and delivery. The company also supports these insights through mining its extensive customer database to really 'get under the skin' in understanding what makes customers 'tick'. Both personal and commercial customers have very different financial needs depending on their stage in life/ business maturity, aspirations, individual financial circumstance – HSBC focuses on delivering relevant banking to meet customers' needs. 'One size fits all' is no longer an option in the highly competitive banking sector. For example, HSBC built a proposition based on insights into the lives of international travellers who live and work in different countries and need borderless banking facilities. To address their needs, HSBC developed its 'International Premier' product. This enables the customer to see all of their accounts wherever they are in the world and manage their money at the touch of a button. Behind the scenes this involved investment in product and legal infrastructure but the service offering to customers makes it all look effortless.

While brand, trust and reputation are clearly at the core of HSBC's business, investment in new technology also plays a major part in underpinning innovation. For its self-service banking, HSBC collaborated with a number of technology companies to develop and install customer friendly machines. The companies involved benefited in their own innovation work by having HSBC as a lead customer. Recently the company has worked with Apple to deliver banking on the i-phone to customers of First Direct. It is now just started a pilot scheme in some small branches where high-resolution videoconferencing technology has been introduced. This allows staff to get easy access to HSBC specialists, which not only makes them more effective and efficient, but also cuts down considerably on travel. HSBC encourages mobile and digital working wherever possible. HSBC has recently introduced green (paperless) banking and believes this is an area the government could play a greater role in recognising and encouraging through legal changes enabling wider acceptance of electronic signatures, and placing the choice with consumers on how they want to receive statements, notices and Terms & Conditions. HSBC now offers its customers two green choices: they can choose a 'light green' option, where they receive no paper statements, but do have cheque books or a 'dark green' option, which is entirely paperless. One of the main barriers to more customers taking the dark green option appears to be schools as they are the main recipients of cheques!

The China Post (October 20, 2010) news staff HSBC voted best cash management bank in Asia in poll. John Laurens, Head of Global Payments and Cash Management, Asia Pacific, indicated: "We are investing in our global payments and cash management franchise at unprecedented levels, evidencing our commitment to our clients to continue to lead the industry by providing them with the best team of cash management professionals to partner with and the very latest in service innovation and product technology." HSBC has the best customer service of all UK high street banks, according to a report published on 21st April 2009 by brand and innovation strategists Prophet. Out of the 10 leading retail financial service providers examined, HSBC came top for "customer experience" both in branches and online. HSBC also came top for its speed and quality of service. HSBC won praise for its friendly customer welcome, for its personal, attentive and knowledgeable staff, its branch environment and its online banking service.

V. CONCLUSIONS

The case study identifies 11 fundamental enablers of innovation in the investment banking industry: client demand for services that span boundaries; broad and deep client relationships; tight integration between service design and execution; the vision of innovation articulated at the top, people, technology, systems, product, tools, teams and organizational context. Services are all about the people, and if the people don't have a mindset embedded with notions of innovation, then innovation is not going to happen. Because people play such an important role in services innovation, innovation in services is far more influenced by hiring and promotion decisions, leaders' behavior, and formal firm-wide reward and incentive systems than innovation in product or technology firms.

This paper discusses whether and how product-based businesses can transition to services-based businesses. Innovation in services is not the same process as innovation in products. Services are intangible. They often are consumed as they are delivered. In fact, the customer often co-creates the service experience with the supplier. Technology can enable new models of services businesses. Information is both the key input and the key output for many services businesses. The selection, deployment and management of technology in services are thus a critical element for business success. Standards, architectures, and platforms are essential tools to create leverage and scalability for services businesses. When services businesses are largely people-based, their ability to grow depends on the ability to hire and retain sufficiently talented people. If, however, a firm can incorporate its knowledge so that others can build upon it, the services business can grow beyond the constraints of its internal personnel.

Business models are vital to realize value from services businesses. The study has quite precise about defining a business model, and explore a variety of methods for articulating, designing, and managing business models in services. Technologies are emerging to help model business processes in useful ways. They can enable a richer exploration of alternative business models that might differentiate the business from competitors. Consumers' increasingly higher expectations demand business models in which services are seen as added value to products from cars to personal electronics to clothing, so it's not just technology companies that can benefit from service innovation. Modern economies depend on innovation in services for their future growth. Service innovation increasingly depends on information technology and digitization of information processes. Designing new services is a complex matter, since collaboration with other companies and organizations is necessary. Service innovation is directly related to business models that support these services, i.e. services can only be successful in the long run with a viable business model that creates value for its customers and providers. This paper presents a theoretically grounded yet practical approach to designing viable business models for services, the integrated model provides a 'holistic' view on business models with five interrelated perspectives: new service concept, design, analysis, development, full launch, and three supportive dimensions: process enablers, new client interface, new service delivery system. It elaborates on critical design issues that ultimately shape the business model and drive its viability. The study suggests four fundamental enablers likely apply to other professional services industries such as consulting, law, and accounting. "Innovation in investment banking has been breathtaking — not because of radical innovation, but because of an accumulation of hundreds and even thousands of small innovations. In services, innovation is a marathon, not a sprint. Services innovation is not just a new product that you can hold in your hand, but a new approach.

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