The 6th Multidisciplinary Academic Conference in Prague 2016, Czech Republic (The 6th MAC 2016)

Exploring Service Innovation Process in a Small Business Services Firm

Dr Vessela V. Warren
University of Worcester, Worcester, UK
Email: v.warren@worc.ac.uk

Prof Barry J. Davies
University of Gloucestershire, Cheltenham, UK
Email: bdavies@glos.ac.uk

Abstract

This case study research reports on a small and medium-sized (SME) business-to-business (B2B) services firm implementing a novel new service development (NSD) process. It provides accounts of what occurred in practice and considers the implications for this and other firms' innovation practices. This longitudinal case study (18 months) was conducted "inside" the case organization. It covered the entire innovation process from the initiation to the launch of a new service. The primary method may be viewed as participant observation. The research involved all those participating in the innovation system in the firm, including decision-makers, middle managers and employees at lower hierarchical levels and the firm's external networks. Implications for researchers and managers focusing on structured innovation models for the services sector are also presented.

Key words: innovation, services, new service development, SME

Main Conference Topic: Economics, Management and Marketing

1. Introduction

The service sector has grown exponentially over the last 20 years (Gallouj & Savona, 2008). Services have replaced most manufacturing activities in the most advanced countries' economies (Fitzsimmons & Fitzsimmons, 2005; Chesbrough & Sphorer, 2006). In UK, the service sector accounts for 80% of the UK GDP (ONS, 2014). However, *service innovation* is a neglected area of study by scholars and practitioners alike (Chesbrough & Sphorer, 2006). Innovation has been explored extensively in the context of the manufacturing sector (e.g. Abernathy & Utterback, 1978; Christensen, 1997; Benner & Tushman, 2003). Innovation in the context of the broader service sector continues to remain unexplored and relatively immature, as Tether, Hipp and Miles (2001) suggested a decade or more ago. The key exception is some work conducted in financial services development (e.g. de Brentani, 1993; Edgett, 1993, 1996; Storey & Easingwood, 1996; Akamavi, 2005). This paper is positioned theoretically within the limited innovation management research on services.

The paper, first, provides the theoretical background of the study. Next, the research methodology adopted and the case study organization are outlined. It then explores the attempts made by the case participants to systematize the development of new services by

implementing a structured service innovation process. The paper, finally, illustrates the emerging innovation practices that bring a greater improvement to the service innovation activities.

2. Theoretical Background

Much previous research recognizes the importance of formal and structured innovation processes to companies (Booz et al., 1982; Easingwood, 1986; Bowers, 1989; Scheuing & Johnson, 1989; Griffin, 1997; Johne & Storey, 1998; Cooper & Edgett, 1999; Crawford & di Benedetto, 2003; Akamavi, 2005). There is an extensive body of literature on models for the development of goods (e.g. Booz et al., 1968, 1982; Crawford, 1987; Pessemier, 1977; Cooper, 1986, 1994, 2001). In particular, Cooper's "stage-gate" model (Cooper, 2001) is well-recognized amongst scholars and practitioners.

There is clear evidence in the literature that structured innovation models for goods are widely implemented in the manufacturing sector. These processes are key to the improvement of the manufacturing firms' innovation productivity (Cooper, 2001). The literature however lacks process models that specifically address new service development (NSD). Moreover, very little is known about how innovation processes are organized and managed in the service sector (Sundbo, 1997; Tether, 2004, 2005), in contrast to the manufacturing sectors where a great deal of literature exists (Miles, 2000; Tidd et al., 2001).

The literature review revealed that there is a lack of research investigating how innovation activity is undertaken within business services firms and there are hardly any empirical studies which examine systematic business service innovation in an SME context. Therefore, it is unclear whether a systematic approach to service innovation, or indeed the implementation of a model such as the "stage-gate" (Cooper & Edget, 1999; Cooper, 2001) is useful for business services firms. The literature fails sufficiently to recognize the need to for research on *applying* NSD process models to help improve their adaption and adoption by service firms.

The literature lacks emphasis on NSD *processes*, despite the recognized need for systematic new service development processes. A review of the service development literature revealed that more research is needed into new service development within business services firms. In particular, research is required on applying models for development of new services empirically, in order to build knowledge and understanding based on practice. This study provided rich material concerning the application of cutting edge methodologies such as the "stage-gate" in the context of an SME B2B service firm. The case study supported the development of both theoretical perspectives and empirical insights.

3. Methodology

The empirical research was a longitudinal case study over a period of eighteen (18) months. The focus investigated ways of improving a firm's innovation practices through the implementation of novel business processes. Case study is an important approach for business and management researchers, in particular. It allows researchers to focus on a specific situation and explore in-depth particular events, activities or interactive organizational processes (Stake, 1995; Remenyi et al., 1998). These cannot be studied by survey or through experiment (Saunders et al., 2013), as these methods typically and purposely separate the phenomenon from its context. The case study assessed business innovation practices, before and after the implementation of a structured innovation process.

In this longitudinal research, mixed inquiring techniques were used to produce a "detailed investigation" (Hartley, 2006, p. 323) of firm's current innovation practices. This case study also offered an opportunity to observe and participate in the implementation of novel business processes for the development of new services. This is a particular contribution, as there is little research evidence concerning this in the innovation management literature. Qualitative applied methods that were used in this research included: participant-observation, direct-observation, interviewing participants, either individually or in groups, and document analysis. The research project involved strategic decision-makers, middle managers and other employees, and the firm's external networks.

This approach allowed investigation of two aspects: exploration of the *consequences* of the implementation of a novel service innovation process, and assessment of the issues involved around implementing a systematic new service development process itself. An in-depth understanding of the different perspectives and experiences of issues related to the innovation activities and situations in context was generated. This allowed pitfalls for process implementation to be identified, and perceptions of the current innovation practices developed by participants. In this way, the need for research on systematic new service development processes is addressed. Also, models for development of new services within business services firm settings are applied. This paper provides accounts based on practice.

4. The case study of Delta

The case study firm, Delta's main business was to deliver business support services to the private sector on behalf of the UK public sector organizations (e.g. local government). Delta represented a unique case because the firm delivered predominantly services on behalf of the public sector, and had not developed its own business services for commercialization.

Delta has experienced initial competitive advantage and has been successful in its market place for over 10 years. However, they had not been proficient in growing other lines of business. They were experiencing performance difficulties due to the economic and financial situation worldwide and the cutbacks announced by the UK government.

Delta had a real need to diversify its customer base. It chose to directly target SMEs with its own commercial services, in order to reduce its reliance on public sector contracts. The company recognized that it lacked expertise to address key issues in implementing best practice in service product and process innovation. It wanted to achieve a fully integrated service design process. Delta's owners approached a local HEI and developed a project plan for the design and implementation of a novel business process. The process was for service innovation, identified as the primary driver for business growth in the private business-to-business (B2B) arena.

5. Exploring Delta's service innovation practices

Research into the firm's current innovation practices was undertaken. This revealed that, overall the firm seemed relatively well organized in terms of business development structure for the public sector. Operations, processes and procedures all supported the delivery of *public sector* contracts/projects. During early phases of the research, it seemed that Delta had an established, but unstructured and "ad hoc" process for identifying, selecting and developing competitive tenders. Delta's tender process was the core of the firm's innovation practices. Each new project required fresh design thinking, where stages and decision points in the tender process flowchart resemble the "stage-gate" innovation process.

Participants, without exception, considered that Delta needed to change. They had tried to develop and deliver their own new services; but failed at this several times. Delta's staff ascribed this to a lack of leadership and particular skills. Therefore they expected that the NSD process implementation would help Delta in this aspect. With the organization's expansion with public sector contracts, there were already some emerging problems of communication between the different departments. A confusion around what the organization was and who they are was evident. The staff perceived that the company did not have a clear strategy, processes or systems. Delta was thought to lack people in place that could contribute to the development of new services within the private sector.

This context-specific situation had implications for the implementation of a service innovation process. However, our concerns were related to the fact that Delta had not developed their own business services since its foundation and the attempts recently made had failed. We were concerned whether the senior managers of Delta fully understand and acknowledged the commitment that was required from them and the organization in order to implement a new service innovation process. Delta's senior management were worried about issues such as the ending of major contracts and cuts in public funding; they looked in response to, (essentially), quick profit gains. This led them to under-estimate the challenges that NSD processes bring.

Delta's initial innovation practices were based on their tendering experience. Despite some similarities between the tender processes and the stage-gate process for NSD (in terms of having stages where certain activities are executed and gates which act as decision points), these differed in terms of uncertainty and risks.

Delta was previously unsuccessful in launching new private sector services. From this experience, an analysis of their results and reflection on the situation, we believed that Delta had no understanding of what "service innovation" involved. At least, there was no understanding of how to do it in a systematic way. Delta would not be able to achieve success in launching new services, unless it implemented some form of structured innovation practice. It seemed that Delta was busy in delivering governmental services ever more efficiently, and lacked the systems and processes, people and skills to engage in innovation practices aimed at new services for business.

In reality, Delta's specific context demonstrated that a new business service could not happen *within* the firm's existing service development and delivery system. It seemed that none of the elements of their current innovation practices could be retained and used in the new NSD process, in our view. New, creative ideas for private sector services were unlikely to flow from the existing public sector oriented process. What emerged was, in this case, an insight amongst Delta's senior managers that not just the existing service design and delivery system needed to be changed, but the organization's business model needed to be completely transformed. A radical change was required to deliver new private sector business services; this necessitated a novel NSD process.

At strategy workshop for senior managers the key problems/ issues with their current innovation practices were discussed. At this workshop, case examples were reviewed of best innovation practices such as a "stage-gate" process. Awareness was built of the need of something similar for Delta, due to inadequacies and limitations of the firm's current innovation process. An approach to implementation of an NSD process was then presented to the board of directors, together with the process specifications and the proposed work plan for board agreement and sign-off.

Following the strategy workshop, the senior managers started to recognize that the company was not well "equipped" to compete in new markets with new products. After the initial failures in developing new services, the senior managers understood that the company was not realizing the benefits of innovation. Therefore, they decided they had to change their actions and behaviours and increase their commitment in the face of current challenges. They recognized the need to improve execution in order to yield positive results from the innovation process. Finally, they recognized that a new process acting as a "vehicle for change" might help them achieve their growth ambitions.

Most importantly, managing the organization's perceptions/expectations of the process and then achieving decision-makers buy-in and commitment to the process was, they decided, crucial (Cooper & Edgett, 1999). The changes introduced with the implementation of structured processes for new service development and response to the changes in their external environment needed to be widely embedded in the organization.

Delta's senior management recognized that their own commitment was important in achieving the firm's strategic objectives, reflecting the views in the literature. Most importantly, the leadership team's involvement in and commitment to the new innovation process was critical to the success of the service innovation implementation initiative. This recognition echoed the views in the literature.

Cooper (2001) stresses the view that senior management must commit to a systematic and disciplined approach to the development of new products and the launch of them in the market place. Similarly O'Conner (1994) reported the findings of research in manufacturing firms that have already launched their "stage-gate" process and found out that one of the key components affecting the implementation of such a process is related to *"managing the organization's perceptions/expectations and commitment to the process"* (O'Conner, 1994, p. 184).

A preliminary design of Delta's innovation system, including procedures, sample documentation and tools were developed to support the different activities involved in such a process. These were presented and approved by Delta's board. The resources required for the implementation of the process were also approved. The innovation activities included: idea generation, idea selection, writing a business case and decision reviews. Other aspects of the new system implementation such as project planning and management, team work, learning and creative thinking were also addressed with in-house training.

The innovation process was formally launched and in the following months wider communication initiative via email and face-to-face meetings was undertaken in order to let all employees know about the new innovation process and to obtain buy-in, at all levels of the organization.

A major development in the firm's innovation practices was the introduction of "creative challenges". The "creative challenges" were advertised internally either through monthly newsletters or leaflets; the aim was to recruit volunteers to take part in developing the proposed ideas for new services. The teams taking part in the "creative challenges" were partly formed by including those who have proposed the ideas and partly by those who volunteered to take part. This initiative was underpinned by the intent to enable an organizational culture of teamwork, innovation and learning.

The "creative challenges" were launched by selecting the most promising ideas from the "Idea bank". This "Idea bank" had resulted from prolific idea generation and ideas solicitation activities. A dedicated email account for the collection of ideas from staff and "Idea bank" where ideas were stored and handled were set up. Existing projects were also brought into the "Idea bank"

Various conversations with staff to try to change the organizational culture and to develop a culture of innovation were undertaken. But we felt this could have been done only if senior managers took ownership and led this process change. We expressed this concern with one of the managing directors who agreed and decided to affirm the business development director as an "innovation champion". The business development director's position within the company helped the programme to evolve and the number of ideas put forward from the staff increased.

Other middle and senior managers within the company became involved, such as the marketing manager, human resources and head of enterprise, who also empowered other staff to contribute with new ideas to the NSD process which was often referred to as an "innovation machine". Here we could say that Delta's "innovation machine" was clearly "ignited" by the positive and powerful contribution of many from across the organization at different levels and functions.

Following the launch of the new service innovation process, in less than one and a half months, the project proposal was approved for implementation and in less than three months a new business division was set up and the new service was formally launched.

6. Implications

With the implementation of the new structured process, the service innovation activities within Delta saw a great improvement. This perspective was endorsed by Delta's staff and our external/ internal views. There were four explanations. Firstly, the introduction of structured innovation process itself. The process that was developed and implemented based on the "stage-gate" model was useful for Delta, an organizaton that was wholly inexperienced in designing and developing new business services. The firm improved areas that did not work in places, standardized approaches to idea selection, project approval and decision-making by using the tools that were provided for them. Then Delta successfully implemented and launched new business services. This was possible because they had improved their innovation practices, and moved towards a more systematic approach, and succeeded in managing their new NSD process. Secondly, the case firm improved the usefulness of the standard "stage-gate" process by implementing the techniques of "creative challenges", by using competing teams, and employee engagement from different departments. Thirdly, Delta adapted the new process by adding flexibility when required, by executing innovation activities and stages in parallel, by adding frequent (often informal) project milestones and by explicitly signing-off decisions. Lastly, the process received support and seemed well on the way to becoming embedded within the organization.

7. Conclusions

This paper provided a better understanding of the applicability of an adapted "stage-gate" NSD process in the context of a B2B services firm. The process brought a new level of awareness within the service firm toward service innovation, and a greater synergy among different stakeholders and departments across the organization. The introduction of a structured NSD approach had a major impact on Delta, in terms of: the development and

launch of new business services; new ways of business planning; developing the company's own capabilities and skills across the organization, and fostering a culture of innovation. Clearly, this case shows that formal and structured innovation processes are important and useful to B2B services firms. Service innovation involves complexity of activities, decisions and internal and external interactions; indeed, it is questionable whether innovation can be sustained over a long time period without such systematic processes. Service firms, independently of their size, therefore may well benefit by adopting a structured approach for NSD on a consistent basis.

Dr. Vessela V. Warren is a Lecturer in Operations and Project Management, Worcester Business School, University of Worcester. She holds a BSc in Economics from the University of Bologna, Italy, MBA from University of West of England, UK and DBA from University of Gloucestershire, UK. She has several years' experience in business start-up, strategy and internationalization. Her main research focus is in innovation, services, SMEs and knowledge transfer.

Prof. Barry J. Davies is an Emeritus Professor, Faculty of Business Education and Professional Studies, University of Gloucestershire. He was previously MFI Professor of Retail Marketing at Manchester Metropolitan University. Prior to becoming an academic, he worked in department and chain store management. He received his formal business education at the Universities of Bolton, Central Lancashire, Lancaster and Cranfield. His research centres on service environments and interactions within them.

8. References

Abernathy, W. J., and Utterback, J. M. (1978) *The Productivity Dilemma: Roadblock to Innovation in the Automobile Industry*, Baltimore: John Hopkins University Press.

Akamavi, R. K. (2005) "A Research Agenda for Investigation of Product Innovation in the Financial Services Sector". *Journal of Services Marketing*, Vol. 19, No. 6, pp 359-378.

Booz, Allen and Hamilton Management Consultants (1982) *New Products Management for the 1980s*. New York: Booz, Allen and Hamilton Management Consultants.

Bowers, M. R. (1989) "Developing New Services: Improving the Process Makes it Better", *Journal of Services Marketing*, Vol. 3, No. 1, pp 15-20.

Chesbrough, H., and Sphorer, J. (2006) *Services Science: A Research Manifesto*. Haas School of Business, UC Berkeley and IBM Research.

Christensen, C. M. (1997) *The Innovator's Dilemma: When New Technologies Cause Great Firm to Fail*. Boston: Harvard Business School Press.

Cooper, R. G. (1986) *Winning at New Products*. Reading, MA: Addison-Wesley Publisher.

Cooper, R. G. (1994) "Perspective: Third-Generation New Product Process", *Journal of Product Innovation Managemen*t, Vol. 11, pp 3-14.

Cooper, R. G. (2001). *Winning at New Products: Accelerating the Process from Idea to Launch*, (3 ed.). Cambridge, MA: Perseus Publishing.

Cooper, R. G. and Edgett, S. J. (1999) *Product Development for the Service Sector – Lessons from Market Leaders*, New York: Perseus Books.

Crawford, C. M. (1987) *New Products Management*, (2nd ed.), Richard D. Irwin, Chicago, IL.

Crawford, C. M. and Di Benedetto, A. (2003) *New Products Management*, (7th Ed). Boston: Irwin/McGraw-Hill.

de Brentani, U. (1993) "The New Product Process in Financial Services: Strategy for Success", *International Journal of Bank Marketing*, Vol. 11, No. 3, pp 15-22.
Easingwood, C.J. (1986) New Product Development for Service Companies, *Journal of Product Innovation Management*, 3 (4), 264-75.
Edgett, S (1993) "Developing New Financial Services within UK Building Societies", *International Journal of Bank Marketing*, Vol.11, No.3, pp 35-43.
Edgett, S (1996) "The New Product Development Process for Commercial Financial Services", *Industrial Marketing Management*, Vol. 25, No. 6, pp 505-515.
Fitzsimmons, J. A., & Fitzsimmons, M. J. (2005) *The Role of Services in an Economy. Service Management: Operations, Strategy, and Information Technology*, (4th ed). McGraw-Hill: New York.
Gallouj, F., & Savona, M. (2008). *Innovation in Services: A Review of the Debate and a Research Agenda*. Springer - Verlag.
Griffin, A. (1997) "PDMA Research on New Product Development Practices: Updating Trends and Bechmarking Best Practices", *Journal of Product Innovation Management*, Vol. 14, pp 429 - 458.
Hartley, J. (2006) *Innovation and Its Contribution to Improvement, A Review for Policy-Makers, Policy Advisers, Managers and Researchers*, London: Department of Communities and Local Government.
Johne, A., and Storey, C. (1998) "New Service Development: A Review of The Literature and Annotated Bibliography", *European Journal of Marketing*, Vol.32, No.3/4, pp 184-251.
Miles, I. (2000). Services Innovation: Coming of Age in the Knowledge Base Economy. *International Journal of Innovation Management*, 4(4), 371-389.
Office of National Statistics (ONS), (2014) "*An International Perspective on the UK - Gross Domestic Product*" [online], http://www.ons.gov.uk/ons/dcp171766_360847.pdf
O'Conner, P. (1994) Implementing a Stage-gate Process: A Multi-company Perspective, *Journal of Product Innovation Management*, 11 (3), 183-200.
Pessemier, E. (1977) *Product Management*. NY: John Wiley Publications.
Remenyi, D., Williams, B., Money, A. and Swart, E. (1998) *Doing Research in Business and Management: An Introduction to Process and Method*. London: Sage.
Saunders, M., Lewis, P. and Thornhill, A. (2013) *Research Methods for Business Students*, 5th ed., Harlow, Pearson Education.
Scheuing, E. E., and Johnson, E. M. (1989) "A Proposed Model for New Service Development", *Journal of Services Marketing*, Vol.3, No. 2, pp 25-34.
Stake, R. E. (1995) *The Art of Case Study Research*. Thousand Oaks, CA: Sage Publications.
Sundbo, J. (1997) "Management of Innovation in Services", *The Service Industries Journal*, Vol.17, No. 3, pp 432-455.
Tether, B., Hipp, C., and Miles, I. (2001) "Standardization and Particularization in Services: Evidence From Germany". *Resarch Policy*, Vol. 30, No. 7, pp 1115-1138.
Tidd, J., Bessant, J. and Pavitt, K. (2001) *Managing Innovation: Integrating Technological, Market and Organisational Change*. Chichester: John Wiley & Sons.