MAKING IT REAL: SUCCESSFUL SERVICE INNOVATION THROUGH INTEGRATED SERVICE IMPLEMENTATION

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1. Introduction

Over the last decade, the transition towards an experience economy made service innovations ubiquitous and essential for creating economic growth and wellbeing. Despite the literature has shown that similarities exist across new product development (NPD) and new service development (NSD) practices and capabilities, frameworks for the strategic management of service innovation remain scarce (Papastathopoulou and Hultink, 2012). Specifically, limited knowledge exists on service implementation, namely the activities and practices for successfully converting the service concept into a viable and marketable new service offering (Menor, Tatikondsm and Sampson, 2002).

For companies this lack of knowledge leads to poorly implemented services and, subsequently, the inability of fully capturing the performance potential of service innovation.

For instance, Medsupply[1] is a company that sells medical supplies to wholesalers, hospitals and other care organisations. Due to decreasing margins and weak brand image Medsupply's top management acknowledged the need of strengthening the relationship with their clients by becoming a solution provider and, thus, shifting the core of their offering to a portfolio of new services. In six months ten service concepts were developed, tested, and approved for implementation by top management. However, only two service concepts were fully implemented and introduced to the market. Despite the normal mortality rate in innovation projects, late project failure might be attributed to a product-oriented approach to the service implementation stage. Consequently, the following questions arise: what could have been done to strengthen the implementation capability of Medsupply? What should service development teams do to make sure that service concepts are successfully implemented with a strong connection to user insights and company capabilities? What should companies do to fully integrate service innovation in their organisational processes, structures, and value delivering systems?

This paper contributes to addressing these questions by using an inductive case study approach to characterize optimal service implementation and identify success factors in service implementation. Since our study is based on acknowledging that service implementation differs from product implementation and requires a distinctive approach, we begin by using existing literature to highlight significant differences between NPD and NSD. Subsequently, we focus our empirical study on the implementation of service innovation by describing our methodology and presenting the findings of fourteen in-depth expert interviews and four case studies of service innovation projects. We conclude with a discussion of the findings and managerial implications.

2. Literature review

Innovation literature has widely recognized that new services require a different development approach than new products (de Brentani, 2001; de Jong and Vermeulen, 2003; Johne and Storey, 1998; Papastathopoulou and Hultink, 2012; Stevens and Dimitriadis, 2005). Most previous studies aimed at characterizing the distinctiveness of NSD compared to NPD focused on the fuzzy-front end (de Brentani, 2001), on the design of new services (Menor, Tatikonda, and Sampson, 2002), and on how to pursue effective market orientation (Kirca, Jayachandran, and Bearden, 2005).

Despite service implementation is regarded as the most critical stage in new service development (Schneider and Bowen, 1984), limited research attention has been given to its peculiarities, namely to the service-specific activities and practices for successfully converting the service concept into a viable and marketable new service offering (Menor, Tatikondsm and Sampson, 2002). These activities include working out and refining the service delivery system and its support processes, prototyping and testing the service touchpoints, training employees to deliver and support the new service, and adapting the existing business models to the new service delivery system.

Implementation activities are largely affected by the distinctive characteristics of NSD, including its outcome's intangibility, the heterogeneity of service delivery

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[1] One of the case studies in our empirical investigation.

system's components (e.g., the various channels, touchpoints, processes, business models), and the inseparability of service production and consumption. For instance, the intangibility of the service concept challenges its consistent understanding by the different parts involved in the implementation, and thus its effective translation into a service delivery system (Menor et al., 2002). Thus literature has explored the idea of a 'blueprint' or other similar means for 'tangibilizing' new service concepts to effectively support the implementation stage (Shostack, 1987).

Additionally, the inseparability between service production and consumption requires simultaneous process and outcome innovation and, consequently, simultaneous creation and implementation of the new service offer (Stevens and Dimitriadis, 2005). In their longitudinal multiple-case study, Stevens and Dimitriadis (2005) found that the link between creation and implementation of a new service has a high impact on organizational processes, to the point that changes in the organizational structure might be required. This is due to the stronger interdependences in NSD decision-making in comparison with NPD, and the subsequent need to routinize intense cross-functional collaborations. The simultaneous creation and implementation has implications also for organizational learning activities, which need to be anticipated for preventing employees' cognitive conflicts due to the behavioural changes normally associated with the introduction of a new service (Stevens and Dimitriadis, 2005).

Despite some initial, valuable insights, a clear understanding of critical service implementation's activities and their integration with the other NSD stages is lacking. The empirical study described in the following paragraphs aims at providing a basis for identifying key drivers of effective implementation of new service offerings.

3. Methodology

Research design and data collection

We adopt a qualitative research design to collect empirical data on drivers of successful service implementation. As noted by Lee (1999), qualitative research designs are particularly well suited for studying dynamic, interactive processes.

We combined expert interviews with a multiple case study design (Eisenhardt, 1989; Yin, 2003). Thus we conducted 10 in depth interviews with expert in service innovation (both academics and business professionals) and studied 4 NSD projects in-depth. Each expert interview lasted approximately one hour, and was focused on the interviewee's experience in service implementation and his/her perceptions on important factors to successful service implementation. These factors were written down on individual cards by the interviewee or the interviewer and, in the subsequent exercise, clustered organized and prioritized according to the preference of the interviewee.

As to the case studies, for each case we interviewed 4 key informants, including the project leader, business stakeholders and service internal and external designers, for a total of 16 interviews. Table 1 provide additional information on the cases.

Insert Table 1 around here

Additionally, secondary sources such as project documentation (briefs, reports, presentations, supporting visual material) and informal observations were also integrated in the data collection. The interviews were semi-structured and open-ended.

The interview guide focused on the following topics: (1) respondent's background, and his/her role in the project; (2) project's content, including objectives, stakeholders and main implementation steps; (3) the critical moments in each project; and (4) the results and evaluation of the projects.

We taped and transcribed the interviews, which lasted from 60 to 90 minutes each. After each interview, the interviewer developed field notes, impressions and conclusions (Eisenhardt, 1989). In order to avoid respondent biased and unintended social behaviours, we followed the guidelines of Miles and Huberman (1994) by clarifying our study objectives and data collection process to the interviewees, and by ensuring the confidentiality of conversations and results. Since our data collection effort relied heavily on retrospective reports, we followed the suggestions of Miller, Cardinal, and Glick (1997) and Miles and Huberman (1994), and implemented some precautionary and/or corrective actions. First, we encouraged free reporting, allowing respondents to not answer a question if they did not remember clearly. Second, we triangulated answers by asking the same questions to multiple participants. Third, we integrated the responses with secondary data, both during and after the interview.

Data analysis

The analysis followed several steps, according to he guidelines of case study and qualitative data analysis methodology (Eisenhardt, 1989; Miles and Huberman, 1994). First, in line with our research questions, the first author analysed each case separately and selected quotes exemplifying key aspects of service implementation and critical moments in service implementation. Based on the selected quotes the first author completed an initial list of the main themes, constructs and insights for each case. This resulted in a first coding scheme for further refined. Subsequently, for increasing the reliability of within-case analysis and for conducting cross-case analysis, each author coded one case (using the provided coding scheme as a guideline), and the results were compared and combined during three collective sessions (Eisenhardt, 1989; Yin, 1994). We used the 'analysis on the wall' approach as an appropriate technique for capturing the richness of the data set (Sanders and Stappers, 2012). The cross case-analysis refined the list of codes, by adding new entries or by collapsing existent entries into others. From the emerging codes we established tentative relationships between constructs. We then refined these initial relationships through replication logic, regularly re-examining each case to contrast and validate the occurrence of certain constructs. We also compared relationships and constructs with extant literature to emphasize similarities and differences, increase the internal validity of the results, and refine recurring themes and constructs. The iteration between data, literature and analysis was repeated several times. The results of this iterative process are presented and discussed in the following paragraphs.

4. Findings

Given NSD's interconnected and complex nature, it was difficult to isolate service implementation as a distinct NSD stage and its related success factors. Service implementation emerged as an on-going, iterative activity, accompanying and supporting many other NSD activities, and comprising different and changing actors. Thus, effective service implementation is the outcome of coordinated efforts along three dimensions:

- The organization of the people involved in a NSD project.
- The alignment between the firm and the NSD project.
- The NSD project management.

The findings will be presented along these three dimensions.

4.1 The organization of people

Our data suggest that effective implementation requires an *early and timely involvement* of all the actors that will be impacted by a NSD project (especially in the implementation stage). Such involvement translates into a dynamic NSD team, encompassing several and varied members, constantly changing during the entire project.

Making such a dynamic team operating requires *a well-thought choice of a project leader* and adequate support in the top management. As to the project leader, besides the general competences required by this role, he/she should have specific skills for successfully dealing with the dynamism of NSD projects and their need for an early integration of implementation activities. Specifically, they should be able to effectively communicate to and persuade different actors, including top management and back-end and front-end employees. The communication with the top management might be challenging, since our data shows how the language and content commonly used in service design and implementation (e.g., the service blueprint) might diverge from the language and information needs of the top management, thus hampering a full understanding and support for the project. A good project leader should find a fit between different languages and facilitate such critical communication channels. Furthermore, the project leader should plan and manage the NSD project and team with a loosely coupled approach, where a 'trial and error' approach (with early, gradual implementations of part of the new service) is adequately paced with clear go/no-go decision-making moments. Given such dynamism and compelxity, the choice of the project leader should consider not only his/her competencies but also his/her position in the organizational structure. Specifically, the project leader should: (1) have access to the technical knowledge and competences required for the implementation of the new service since the beginning; (2) have good knowledge of the informal organizational context, in terms of individuals' and groups' interest; (3) be able to influence the technical and political context through good connections with the power centres in the organization.

Linking the NSD project to the personal interests of top management, for instance by having a NSD project champion, might facilitate the latter. The *commitment of the top management* ensures that the NSD team members and employees involved in service implementation can dedicate the right amount of time to the implementation activities occurring in different stages, especially given the higher learning efforts required by service innovation. Specifically, employees need to learn the tools and methods that allow them to effectively contribute to NSD early stages, and the new tools and procedures for delivering the new service.

Support from top management is not limited to the initial commitment, but needs to be renewed and maintained throughout the entire project, especially in those critical moments in which organizational and structural changes might emerge as necessary for service implementation. Thus, the project leader should pursue frequent and clear communication to the top management and their direct involvement in critical decision-making.

4.2 Alignment between the firm and the NSD project

Our data show that, to facilitate firms' commitment and top management's support throughout the entire NSD (thus, including the implementation), an alignment between the project and the firm needs to be achieved in multiple dimensions.

First, effective integration of implementation since NSD early stages and the structural changes that such integration might determine require an *open organizational culture,* oriented towards innovation and tolerant towards uncertainty and change. Our cases suggest that, especially when a firm has mainly a manufacturing tradition, effective NSD and implementation require a corporate environment that encourages and supports openness, creativeness, and "stepping out" beyond the norm. In order to create such an innovative climate individual innovativeness should be stimulated by the interaction with external partners, information sharing across departments, and employees' involvement. If information is frequently and timely shared rather than protected between departments, cognitive barriers to innovation-driven structural changes are reduced, development mistakes are prevented and, ultimately, implementation becomes more effective. Appropriate tools for knowledge sharing also increases employees involvement in and ownership of the NSD project and its outcome. In an organisational culture that promotes participation (for instance by freeing employees' time to dedicate to NSD), employees are encouraged to be creative and contribute to the NSD team's innovative efforts. As a result, being innovative becomes part of the work and employees get used (and open) to change, thus creating a better setting for implementing even the most radical service innovations.

In addition to the alignment with the company culture, effective service implementation can only be achieved if the NSD project is clearly *aligned with a firm's general goals and strategy*. For instance, our data suggest that organizational and structural changes resulting from the implementation of a new service are more easily embraced if they do not change (or eventually strengthen) the core business of the company. Additionally, the future vision and the general strategy of the innovating company need to be taken into account during the entire NSD project, for instance by frequent discussion with the top management and by the integration of the NSD outcomes in a roadmap for guiding both short term and long term implementation. Aligning the NSD project with the vision and strategy of a firm makes the project relevant to key stakeholders, and thus create a sense of urgency that makes service implementation timely and effective. The NSD project should also be aligned with a firm's existing portfolio of concurrent projects and existing products and services, especially to explore and pursue synergies, which would make organizational changes required by new services' implementation more acceptable and profitable. Finally, NSD project's targets should be aligned with and explicitly linked to the firm's overall performance targets (including financials), in order to get top management's attention and maintain its commitment throughout the project.

Finally, an effective implementation requires project alignment with the organizational structure, namely its correct positioning within the organization. Specifically, our cases show that effective implementation can be achieved when a project is positioned either internally (planned, managed, and executed mainly by a firm's own employees) or externally (planned internally but managed and executed by external actors). However certain conditions determine whether a project should be internal or not, and should be taken into consideration by key decision makers during NSD project planning. Based on our data, a project should be positioned internally when the organization comes from a manufacturing tradition and aims at a thorough

and durable shift towards a service dominant logic in its strategy and offering. Similarly, since internal NSD projects lead to higher organizational learning, if a company wants to pursue market orientation and user-centeredness internal projects are more effective. Finally, internal projects are also more appropriate when the envisioned effect of their implementation on organizational structure and processes is high. When the opposite of the above-mentioned statements is true, an external positioning is advised.

4.3 The NSD project management

As mentioned at the beginning, the NSD process differs from the NPD processes given the intrinsic characteristics of services and their implications in terms of project complexity, lack of linear structure, and integrated implementation. Thus, as highlighted by our empirical investigation, NSD project management needs to be adapted to such circumstances and incorporate some distinctive principles and approaches.

In line with previous research, our cases show that *a design approach* is particularly effective to handle the complexity of NSD. The design approach is characterized by multiple iteration loops and user centeredness. Iterations imply that, the NSD project is executed through a number of repetitions of the same sequence of linear steps, with a progressive refinement of the final outcome through a 'trial and error' approach. Iterations include implementation and have a less strict and conclusive nature than the more traditional stage-gate approach. Consistent with the principles of service dominant logic (Vargo and Lusch, 2004), user centeredness implies that user needs and behaviours are the main drivers of NSD and that users themselves should be involved in the co-creation of the new service.

Such design approach (user-centred and based on iterations) is often new to the stakeholders and the actors involved in NSD projects, especially if the innovating firm has a manufacturing heritage. In order to improve service implementation, our data suggest that the *design approach should be clearly understood* and accepted since NSD early stages, and repeatedly refreshed and reinforced during the project to reduce resistance, maintain commitment, and facilitate organizational learning. Thus, in the planning and execution of an NSD project, the project leader should balance activities aimed at generating a new service with activities aimed at educating stakeholders (including top management), team members, and employees in the service design approach.

Similarly, in other to achieve the previously mentioned balance of language and ways of working between NSD team and top management, the iterative and dynamic service design approach should be combined with some *clear milestones and go/no go decision-making moments*. Such clear milestones would blend the benefits of the creative and divergent design approach, with the benefits of the structured and rational approach commonly used in managerial problem solving. Such milestones should be clearly defined upfront and should see the involvement if top management, as a way of both keeping the NSD project aligned with a firm's expectations, and maintaining top management's commitment and project ownership.

Achieving such a balanced approach in decision-making helps reducing the perceived uncertainty of NSD projects. Whilst uncertainty characterizes any innovation project, in service innovation the perceived uncertainty is intensified by the intangible nature of the outcome, which can hinder a shared understanding of the project outcome and its accurate and thorough implementation. Faced with the intangibility of the service,

the actors in our cases used a variety of *actions and tools for* reducing the perceived intangibility and, thus, *enabling effective service implementation*. The frequent use of visualizations and materializations of the emerging new service (or parts of it) (e.g., the blueprint, customer journey map) makes the NSD outcome more tangible and helps team members' understanding, discussion and alignment. A similar result could be achieved by visual representations of the project itself (e.g., project journey, project stakeholder map), in terms of key activities, key stakeholders, and their dynamics over time.

5. Discussion and concluding remarks

Service implementation is critical to the success of firms' efforts in service innovation. Given the scarcity of related research, developing a better understanding of how service implementation should be planned, managed and executed is of great relevance to both researcher and practitioners. Our first, empirically-driven contribution to this matter is a different perspective on service implementation as an integrated activity throughout the entire NSD process, rather then the last NSD phase starting after the service is fully developed. Thus, *integrated service implementation* implies that implementation needs to be addressed continuously and iteratively throughout the project and concurrently with the actual development of the new service. When an iterative (design-driven) approach is used, the boundaries between development and implementation fade as the development of the service is often paired with testing and evaluation of the service (or parts of it). During such testing, for instance by means of pilot projects, the initial steps of service implementation already take place. Additionally, - and contrarily to the most common practices in NPD – the iterative approach prolongs the development stage, since progressive implementations keep feeding information back to the previous stages even after the service is launched in the market. Such integrated perspective on service implementation (and subsequently on the entire NSD process) corroborates previous research stating that, because of the systemic nature of service management, sequential development models do not work effectively in service innovation (Gebauer, Krempl and Fleisch, 2008; Stevens and Dimitriadis, 2005).

Findings from this research also indicate that service implementation is influenced by many actions and decisions taken in the planning and early stages of a NSD project. Some of them focus on the role of key people in the NSD process, while the others focus on the management and positioning of the NSD project within and organization. Our results suggest that people are at the heart of service innovation, and their behaviours, interaction, learning and commitment are crucial for effective service implementation. This conclusion in line with previous research stating that people involved in NSD and an adequate, flexible structure for NSD are the key drivers of service innovation performance (De Jong and Vermeulen, 2003). Our empirical research enriches previous contributions by suggesting that people might be even more important than structure in successful NSD, not only because with their ideas they act as the initiators of service innovation, but also because it is their knowledge exchange and continuous interaction that keeps an uncertain, dynamic and complex process like NSD effectively going till its full implementation.

Despite our findings represent a rigorous initial attempt to fill the gap in service implementation research, the study is based on case-study research, thus the external validity (generalizability) of the service implementation drivers could not be assessed. Future research would benefit from insights obtained from additional case studies and

quantitative data. In addition, the study is limited by the fact that it concentrates on European companies. Applying the results to other regions could further enhance the transferability and generalizability of the results.

Despite such limitations, innovation managers and service practitioners might consider our findings useful under different aspects. In terms of managerial implications, the identification of success drivers in service implementation will lead to the development of a set of tools and procedures for implementation, which are currently missing in the toolbox of service innovators or simply borrowed by the product development domain. These tools and procedures will enable the design of robust service delivery processes, quick and error-free ramp-up of a new service, and ease of replication of service delivery. Additionally, these tools will facilitate top management support in key moments and alignment with company's capabilities and strategies.

Additionally, another important lesson of this paper is that managers who believe that successful innovation is always related to technology find themselves deceived. Innovation in services can be driven by other dimensions like people (as users and innovators) and the firm's capability of adopting a more flexible approach to NSD by means of an integrated implementation. Since technology is not always a dimension, it becomes clear that innovation in services might be continuous, more widespread in the organization, and frequently introduced in the market.

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Table 1. The sample

Project	Project content	Client (CL)	Data sources
Project A	Develop a service for trucks' fuel-efficient driving	Sector: Truck building, selling and maintenance Large-sized (> 250 employees)	4 interviews: SBU director, project leader, service designer, IT consultant
Project B	Develop new services for intermediaries and healthcare providers	Sector: Medical supplies Medium-sized (50-250 employees)	4 interviews: general director, marketing manager, project leader, service designer
Project C	Develop a service for smart energy consumption and monitoring	Sector: Network operator responsible for power grids Large-sized (> 250 employees)	4 interviews: marketing director, project leader, service designer (2)
Project D	Develop new digital services	Sector: Home care provider Medium-sized (50-250 employees)	4 interviews: general director, project leader, service designer, IT consultant