

PROFESSIONAL SERVICES REDESIGN: A CHALLENGE TO NEW SERVICE DEVELOPMENT MODELS

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Abstract

Service industry researchers argue that one of the core competences for a successful service company consists in its ability to change, innovate and incorporate new technologies in its production process. Most of the studies developed in these areas are focused mainly in mass service or service-shop industries. It is not very well discussed that some of the NSD challenges are related to the difficulty to anticipate and incorporate in the NSD process and in the new service's specifications the influences of its own characteristics: intangibility, heterogeneity, inseparability and perishability. For instance, the users' role as co-producer of service process can result in additional variability and unpredictability of demands and tasks that may affect significantly the delivery process; front-line personnel may be empowered to change some services' specification to achieve specific client's need. This paper aims to discuss how a new professional service can be affected by its own characteristics and it reveals the main obstacles that hinder the redesign of professional services.

Key-words: service operations management, innovation, new service development

INTRODUCTION

New service development (NSD) has attracted researchers' and service managers' increasing attention (Sundbo, 1997; Johne and Storey, 1998; Froehle *et al*, 2000; Menor, Tatikonda and Sampson, 2002). As a consequence of new technologies and changes in consumers' preferences and needs, the new services' effective design will turn even more important for service organizations' near future (Verma, Fitzsimmons and Heineke, 2002).

The increasing concern about innovation might be seen as a reflection of the current moment experienced by service organizations. The companies are looking for ways of differentiating their traditional from non-traditional competitive operations, in order to better satisfy their clients, attract new users and increase their deliveries (Griffin, 1997; Menor, 2000). Innovation is also important to public organizations. In the same way that private service companies have recognized innovation as their

competitiveness sustaining engine, the public organizations have used this practice to improve their services and to best attain the company mission and purposes.

Part of the challenges in creating a new well-succeeded service is related to the difficulty to anticipate and incorporate in the developmental process and new service's specifications, the influence of the services' four fundamental characteristics: intangibility, inseparability, heterogeneity and perishability.

"Services are usually produced, delivered, consumed and sold at the same time" (Edvardsson *et al*, 2000). Services, actually, are realized through the interaction of three elements: organization, worker and the client itself. The organization provides the whole resources (systems, rules, materials, installation facilities and others) that are used by workers (selected and trained personnel) to achieve the client's needs. The client takes part in the production process by expressing its needs or acting as service co-producer.

This means that the operation service system is an open system. Despite service marketers have used patterns,

scenarios, training programs, specific procedures and rules, the service production will always be subject to interferences brought forth by workers or clients at that service production moment. The control over interferences is only possible on the system technical-organizational elements. Some authors have well-described these aspects: “The client’s active participation in the production service and specification processes might induce the organization to run into entry variabilities and unexpected tasks that may significantly change an operation final product” (Silva, 1995); “Innovation projects depend upon intensive cooperation and participation of frontline personnel that might help in the project conception and adherence” (Mintzberg, 1989).

Such elements are especially important for the professional services, characterized mainly by the long contact time between client and organization, value primarily concentrate at front-line encounters and the customers’ active participation as co-producer. This type of service is also characterized by the service workers’ autonomy to customize processes according to the clients’ needs. These characteristics influences are expected to be even higher in case of service change or redesign, because, as the service is already offered, the users have already their expectations aligned to what is offered by the organization; and they know how to act as service co-producers and have particularly clear in mind how they can get what they want. Similarly, all the organizational support, consisting of rules, material resources and technology, is also aligned with the original services, and all the human resource body is trained and prepared to offer that specific service the way the clients are used to.

This paper aims to initiate an approach on this subject, yet little discussed among researchers. There will be an attempt to identify, from a theoretical construction, which are the service operation system critical elements that affect the professional service redesign and how these elements affect the service innovation project success.

NEW SERVICE DEVELOPMENT MODELS

Service redesign can be defined as the operation system development or modification that can provide previously unavailable offers to customers; it is characterized by a new service concept, changes in the organizational aspects and in the service result perception under the customer’s point of view (Lovelock, 1984; Gadrey, Gallouj and Weinstein, 1995; Tax e Stuart, 1997). Service redesign is a specific type of service innovation characterized by the reconstitution, rearrangement or substitution of processes involving a service. For that, the organization needs to evaluate its present systems – procedures used at the moment to produce and deliver services – in order to create alternative and more efficient forms of satisfying customers (Berry and

Lampo, 2000). The changing focus is in the organization and their components (Tax and Stuart, 1997).

New service development (NSD) is a complex process constituted by a serie of activities, tasks and information flow necessary to a company to create a concept, develop, evaluate and implement intangible new products, valuable to their clients (Bowers, 1985; Edvardsson, Haglund and Mattsson, 1995; Goldstein *et al*, 2002). An effective NSD process has necessarily four essential characteristics: objectivity, precision, method aid and fast launching of possibility (Shostack, 1984). Although such characteristics may be easily accepted, several studies showed that organizations tend not to use sophisticated and formal development processes (Edvardsson *et al*, 2000; Menor, 2000).

The complex NSD process might be made easier, if conducted according to models proposed in the literature, since these models may allow to: (i) consider all development steps, their characteristics and requirements (Scheuing and Johnson, 1989); (ii) better coordination of different steps among the innovation processes involved (Johne and Storey, 1998). Other authors have also shown that a more formal development process might enable a company to launch of a new service to the market in a shorter period of time (Froehle *et al*, 2000), what is an important advantage under the present severe and competitive stressing scenario.

Bowers (1985), Lovelock (1984) and Easingwood (1986) were the first authors to recognize the importance of having the new service creation and implementation processes separated. From these ideas, other authors have proposed new frameworks to systemize these processes.

The traditional NSD models follow a project linear logic constituted by independent and subsequent steps with fixed objectives (Scheuing and Johnson, 1989), very similar to the product development model of Bozz-Allen and Hamilton (1982). Other models better define the new service design complexity in terms of process information requirements (Shostack, 1984), specification of who must be involved in it (Alam, 2002; Matthing, Sanden and Edvardsson, 2004) and questions involving the link among service concept, design and processes (Edvardsson and Olsson, 1996; Goldstein *et al*, 2002).

The modern models have expanded the traditional models’ target and recognized that NSD is a non-linear process, in which several steps need to be simultaneously carried out (Edvardsson, Haglund and Mattsson, 1995) and that other dimensions must also be included in the service operation analyses, such as: strategy, culture, service implementation and large scale expansion politics. The model proposed by Edvardsson *et al* (2000) consolidates the traditional theories with the modern NSD concept, constituting one of the most complete and embracing theory about innovation process.

Some limitations of the present models

Although a large variety of service organizations is found (Johnes and Storey, 1998), most research studies related to the NSD model application are based on private company studies, mainly from financial, communication and transport segments (de Jong and Vermeulen, 2003). These studies present important contributions to these research areas; however, the low variety of investigated segments decrease the contribution potential, once the analyses and results stay limited to the referred mass service industry specific context. Thus, the nowadays existing new services development models are only suitable to investigation results carried out with highly standardized services, which have the main focus at technical resources interface and that can be well projected and controlled. In such cases, the new service development come close to the new product development and the models end up restricted to the design and technical specification process of a new service.

On the other hand, the opportunity of analyzing how models behave within diverse and dynamic services is lost; mainly, in those services of fragile rules and specifications, marked with higher client participation as co-producers and with professionals of higher interpretation and decision power.

The theories proposed by Edvardsson *et al* (2000) aggregate the main concepts concerning the NSD process, starting from the idea generation until the new service implementation. These author's model proposal of innovation process that strongly considers the relations between the service operations system and its components, such as organizational culture, clients and workers, represents one of the most complete and appropriate referential on NSD process management.

Nevertheless, Edvardsson *et al* (2000) have particularized their studies and analyses to specific service operations, as it occurs to great part of service innovation researchers. These authors have developed a NSD model evaluating innovation within the following segments: information services for transporters, chemical product sale services, air transportation, insurance, and electric power. There was an evident concentration upon competitive services which have the main focus at technical resources interface (mass services), and that are characterized by high regulation degree, high production volume with low specialization, little client-user participation in the process and low autonomy workers.

The narrow target analyses range do not positively contribute to evaluate how NSD behaves within highly dynamic service operations, mainly those having the client-user active participation in the production system by expressing their needs or acting as service co-producers.

Once the option was to study a professional service, this work will contribute to investigate if the NSD frameworks are prepared to deal with these challenges. It is assumed that the service operation system four main characteristics – intangibility, inseparability, perishability and heterogeneity – result in elements that might positively or negatively affect the process of service innovation or redesign, influencing its performance after the service implementation. This assumption frontally impacts the classical point of view about NSD development – come from manufacture – that is seen as a continuous activity flow and is originated from the identification of client expectations; it reaches the climax with a technical specification pool definition that scientifically determine the new service frameworks: surrounding configuration, service scripts, process standard period of time, specific transaction systems, pre-shaped services, among others.

INFLUENCES OF SERVICE'S FUNDAMENTAL CHARACTERISTICS ON PROFESSIONAL SERVICE REDESIGN

Intangibility

Services are performances instead of objects. They cannot be seen, felt, experimented or touched in the same way the tangible products are. The intangibility is not only the most recognized characteristic in the literature and cited as the differential between products and services, but also the critical distinction from which all the other three characteristics are emerged (Zeithaml, Parasuraman and Berry, 1985; Lovelock and Gummesson, 2004).

Bateson (1979) apud Lovelock and Gummesson (2004) made the distinction between physical and mental intangibility: the first refers to the impossibility of service to be seen, felt and touched; the second, represents the client difficulty to imagine its content and result. The mental intangibility degree inherent to a specific service operation is not necessarily related to its own physical intangibility. For instance, a health service has a high mental intangibility degree, once the user do not frequently know what his problem is and what will be done to solve it. But he can evaluate the surrounding physical conditions in which he is placed, the instrument quality used, the doctor's clearness to pass him information. These are, among others, physically tangible characteristics.

The main intangibility criticism consists in the difficulty to customers know, evaluate, interpret and decide for a concept and/or a service operation for the first time without having experienced it before (McDougall and Snetsinger, 1990; Lovelock and Gummesson, 2004).

Especially in the case of a professional service redesign, this criticism is even higher. When a client frequently uses

a specific service, he has in mind the whole information resulted from his previous experiences. This information consolidates his expectations concerning the original service. He knows what the results of different offers are, what the service process is, and even though, what the operational system deficiencies are at that moment. The client-user feels safe when asking for a specific service to the organization, once he knows, at first, how things are going to be.

When going through a service redesign process, it is common to have changes in the service concept that invariably shall include new purposes, and in the operation system that may need to achieve new results. These facts significantly change the client perception and he goes through comparison between the new offers and what he had available before. Even though the organization attempts to inform the client about the new service values, he is expected to be reticent in relation to them, since he has not experienced enough to adequately judge them (the new service values).

In order to guarantee his demands to be satisfied, the client-user may relate himself with the company following the previous operation system logic, avoiding the adaptation to the new system. In professional systems, where customized services are often used to satisfy specific client needs, it may happen that the client asks for, directly or indirectly, the service to return to the original way, because he relies on it:

Influence 1: The client-user has difficulty in previously evaluating the service operation redesign benefits in comparison with the original service, and because of that, he can act by the original logic, misleading the new services' procedures.

Inseparability

Meanwhile products are first produced and thereafter sold and consumed, services are first sold and then produced and simultaneously consumed (Zeithaml, Parasuraman and Berry, 1985). The inseparability between production and consumption is linked to the service operations' interactive nature, especially during the "moment of truth". A service offering may neither be separated from its operation systems (personnel that do the tasks) nor from its service receivers (people or things).

As client needs to be present during the production of many types of services, such as: transportation, hair cut, medical consultation, theater and others, the inseparability forces the client to be closely in contact with the production

process and its "technical nucleus" (Bowen and Ford, 2002), that is, workers and even though another clients (Lovelock and Gummesson, 2004). In services like telecommunications, medical treatments, bank services and fast-foods, the client participates as co-producer, doing tasks and vital activities for the service concretization (Mills, Chase and Margulies, 1983; Namasivayam, 2003).

As an active participant of production process, the client-user needs to deeply know his role, tasks and the ways to do them. Several companies have prepared themselves to help the client to understand his role and to build the necessary competences in order to act as service co-producer. Nevertheless, few organizations are aware that they have a diversity of client profiles that might not be attained and included in the production process through standardized actions.

As concerned to the service redesign, when the realized changes directly impact the client-user role or his understanding about his activities as co-producer, the new operation performance may be affected and show consequences similar to the ones described in the literature. Besides, the fact of having a pre-existing reference prior to the redesign might induce those clients that were not attained by the NSD to act under the previous logic; this fact could result in an even greater interference over the remodeled operation system.

Influence 2: The client-user takes part in different levels and forms of the productive process as service co-producer.

Other factors originated from the inseparability might also affect the organization service results. As already discussed, a service is first sold and thereafter simultaneously produced and consumed. Objectively, this means that a company does not get the service operation process and results before the service is delivered to the client. The quality control is always posterior to the service consumption.

Even taking into account a well-projected service, competent and appropriate production systems and motivated and well-trained personnel, a service organization cannot ever guarantee to all their clients that the service performance will happen exactly the way it was planned. For two reasons as follows: (i) the client-user may demand some service variations to satisfy his specific needs; (ii) personnel with autonomy may change some operation aspects to offer a service that they consider the best to the client or they rather do through certain procedures. As the organization, many times, is not able to foresee these changes before they are concretized, the convergence of them with the organization's purposes and goals cannot be evaluated.

Such remarks are especially relevant to professional services. The low professional service specificity aligned with the personnel technical know-how make possible to offer highly customized and complex service solutions to customers (Johnston and Clark, 2002). In this situation, the company needs to rely on a worker's or group of workers' personal judgment that are, theoretically, the most appropriate references to decide which is the best solution to each client-user.

The workers' autonomy may positively influence the service redesign process when the operation system project presents faults that might impair the new service production. Therefore, the workers may adapt or even create new procedures, case to case, to guarantee the service goals. On the other hand, when the workers' convictions, values and professional desires are not aligned with the organization purposes and actual customers' needs, the service shall be negatively influenced. When the organization is not able to formally identify such disagreements, situations may occur in which the professionals neglect the organization's logic and go through work acting according their own concepts and perceptions (Mintzberg, 1989; Mintzberg, 1995). For the professional service redesign, these situations may represent an escape from the new concept of service and operation processes, impairing the new service adherence to its project purposes.

Influence 3: The worker may change some operation system aspects and deliver the service to the client without previous organization's awareness.

HETEROGENEITY

The service operations are characterized by a high potential of surrounding variability. This means that the service quality and even the service essence (concept, operation and result) may vary from worker to worker, client to client and day to day. The heterogeneity is especially critical for operations that require intensive work (Zeithaml, Parasuraman and Berry, 1985), like the professional services.

The workers' performance instability is the main source of service operation heterogeneity (Lovelock and Gummesson, 2004). Several workers may bring themselves related to the client during the production process and each of them may do this in a different way, creating a problem of treatment inconsistency. Besides, the professional performance may significantly alter from one day to another, causing variations on service quality.

Furthermore, two distinct clients may have different perceptions about the same service operation, under the same conditions, since different customers have different

expectations in relation to a specific service operation and may demand the organization in unique ways, originating exclusive results and experiences.

A solid organization has mapped its main sources of variations from workers as well as from client demands. When the company goes through a service redesign process, especially of those services that need changes in their configurations and frontline workers' roles, there is frequently the need to realign the organization; that is, to get the personnel having in mind the new service characteristics and its benefits compared to the previous model. During this period of adaptation, clients as well as workers may differently react, being sceptic, confuse, or against the new service (Tax and Stuart, 1997).

The adaptation period enhances the level of variations, from the workers that are not yet technically or psychologically prepared to work under new conditions, as well as from the client that may use the opportunity to impose some of his most specific demands.

Influence 4: Different clients have different expectations about the new service.

Perishability

Services are perishable when they cannot be saved and stored for posterior use (Edgett and Parkinson, 1993), resold or returned to the company (Lovelock and Gummesson, 2004). For instance, a dentist cannot store one hour of his time if no patient look for his service at that specific moment. A hotel cannot store a daily-room. If it is not sold, thus, it is lost forever.

Services cannot be produced and stored to be available when required. When a service is not used when available, the service offering capacity is wasted (Ng, Wirtz and Lee, 1998).

Without the possibility of storing up the exceeding service to supply future demands, the service organizations are seriously affected by demand fluctuations. For instance, shore hotels have most of their rooms' empties during the winter and excess demand during the summer, beyond their accommodation capacity.

After an organization service redesign process, during the transition period, an expressive productivity decrease is expected due to the personnel adaptation process and higher heterogeneity created by clients. In this case, a significant increase in waiting lines is expected, what might impair the new service acceptability, because it might be immediately associated to the lines' increase.

Influence 5: Service operations are subject of significant demand fluctuations.

DISCUSSION AND CONCLUSION

Mass services and service shops depend basically on technical elements to well-succeed. Imagine making an international call without satellite-linked telephone centrals or turning on a lamp without connection to an electrical distribution net, or even, asking for fried potatoes in a Mc Donald's restaurant that does not have the famous potato-fryer machine. For such type of services, the technical resources are crucial, mandatory, for people's work. More than tools, these resources are the production system frameworks and, many times, the peoples' work is conceived as the operation system coadjuvants, acting where the machines cannot do it, making bridges between different steps and resources or interconnecting the client to the organization.

However, in professional services, a different relation between work and technical resource is required. Work takes place as the key-piece in the process and resources are in second place, because the workers help to identify the client needs or to manage procedures already implemented. It does not mean that, in this case, technical elements are dispensable, since they are the way used by the organization to improve the service operation and input in the clients' experience, elements that reinforce the organizations' characteristics and make transparent its service concept. However, in this operation system, the technical elements lose the first mandatory place and the professionals assume a more important position to manage the processes that will constitute the service to be delivered to the client.

As reported by several authors, the main professional service characteristic is that its accomplishment depends essentially on technical knowledge and differentiated abilities. These attributes can only be found in qualified professionals that may become competent references, able to make technical evaluations and find the best solutions or options for customers' problems (Mintzberg, 1989; Silvestro *et al*, 1992). According to these characteristics, it is possible to infer that professional services are marked by a strong professional autonomy within the operation system. This autonomy is extended to the relation with the client-user and to the specification process that in professional services occur in the frontline.

In the case of service redesign, the client-user participation in the production process is altered and, consequently, if the worker or the client were not aware enough about their new role in the process, or were not convinced about the new service innovation benefits, they may act under the original service logic. This situation indicates the need for: (i) training

customers on the new logic and (ii) creating alternative procedures to minimize the impact of their unknown roles. Simultaneously, there is the need for: (i) personnel selection, training and know-how attainment according to the new process and new role for the client-user, to whom they will interact with.

The professional service innovation project must be directed under three main aspects: (i) service concept definition aligned to the organizational strategy and culture; (ii) technical element project aiming to give operational support to the service concept and integration to other system elements, especially customers and professionals; (iii) personnel selection, training and know-how attainment.

According to Edvardsson *et al* (2000), the cultural and strategic alignment is the starting point for the organization to develop a well-succeeded new service, especially in professional services. The professional service organization culture and values are the elements that get together different people and points of view around a common purpose. From these elements, the organization is capable to develop mechanisms to consolidate their personnel's everyday work, in such way that they can transfer a unique and clear message about the organization mission, values and service concept to the whole society and especially to their customers.

The process design is secondary, once the personnel are highly qualified and have decision-making autonomy about it. The organizational unity is basically maintained by sharing convictions that permeate all actions in the production process. Therein is the importance for the organization to have clear established which its mission, culture and values are, mainly when expanding activities and developing a new service.

Specifically in the case of professional services, the technical element aspect is also an important key-piece. As previously discussed, in mass services or service-shops, when there is no alignment between service concept, work and techniques, the production processes do not happen at all, and it stays evident for all involved people that a problem exists and needs to be solved.

In the case of professional services this is not so clear. Even though having deficient resources, the workers may have alternative ways of escaping from difficult situations and go ahead with the service process. Nevertheless, the alternatives are not always the best for the organization that might run a serious risk of having its service significantly modified according to the workers' personal judgment.

Furthermore, in professional services, the technical elements are the only path for the organization to input its own identity, values and mission on their service offerings, independent of their personnel's competences (that may go to the competitors at any moment).

More than projecting good technical systems, the professional services need systems to provide new frameworks to the professionals and make easier the relation between customers and the production process (by translating their needs, stimulating his participation as co-producers or increasing the experience tangibility). The main challenge for a new professional service projectist certainly is to project the integration of three operation system figures – customers, workers and techniques; this is an even higher challenge than the design of the three elements separated.

The last point is concerned about the work and its aspects. Professional service is the “service of know-how”, and thus, it is highly dependent of their personnel qualification and engagement. The service project must take into account the different work aspects and not only the worker as a link between two distinct production process steps or as a person following the script-book. The new service project must regard effort and time in profile definition, discussion on punctual and continuous forms of competence development (techniques, abilities and attitudes) and work definition not only as one more operation system element, but also under the professional’s optics, which are directly involved in the process. Other work knowledge areas like ergonomics and psychology might decisively contribute in this project stage.

Considering all these factors, a new professional service project must transcend the linear development traditional approach, which is originated from a group of customers’ desires/demands and is accomplished with a bunch of technical specifications that can be seen with the service concept translation.

Professional services present fragile technical specifications. Professionals always will get the “final word” in service operations, despite the organization attempts to establish behavior manuals, work rules and defined processes. And this fundamental difference must be considered during the development project of a new service.

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