A customer-oriented new service development process

The Authors

Ian Alam, Assistant Professor, Jones School of Business, State University of New York, Geneseo, New York, USA

Chad Perry, Professor of Marketing, Graduate College of Management, Southern Cross University, Queensland, Australia

Abstract

The purpose of this research is to answer the question: how can a new service development (NSD) program in the financial services industry be managed? More specifically, this research has two objectives: to explore the stages in the NSD process; and to explore how customer input may be obtained in the various stages of the development process. After a review of the new product development literature, the case study methodology involving in-depth interviews with managers and their customers is described. Analysis of the data showed that there were ten stages in the NSD process, and whether those stages were managed linearly or sequentially was a function of the size of the firm. In addition, how NSD managers obtained customer input in each stage, was uncovered. Implications for NSD managers include which stages to concentrate on, and how to capture customer input.

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Introduction

New service development

Little research has been carried out in the area of new service development (NSD). Although some researchers have paid attention to service innovation and new service success factors (for example, Jones, 1995; de Brentani, 1989, 1991; Easingwood, 1986; de Brentani and Cooper, 1992; Scheuing and Johnson, 1989), little is known about how new services are actually developed (Johne and Storey, 1998; Sundbo, 1997). Furthermore, innovation has traditionally been associated with tangible products. As a result, the literature about new tangible product development is rich, but this literature does not capture the intricacies of NSD (de Brentani, 1989) because of the unique service characteristics of intangibility, heterogeneity, perishability and inseparability (Lovelock, 1983; Shostack, 1977; Zeithaml *et al.*, 1985). That is, the NSD process may be different from the development of a tangible product (Martin and Horne, 1993; de Brentani, 1995; Easingwood and Storey, 1995).

A major point of difference between product development and service development is the involvement of customers in services (Ennew and Binks, 1996). Services tend to involve customers in their delivery, and the purchase of services tends to involve a longer commitment and therefore a more intimate relationship with customers (Alam, 2000; Harris *et al.*, 1999; Martin *et al.*, 1999; Sundbo 1997). Thus, customer orientation plays a more important role in service firms than in tangible product firms because of the four service characteristics noted above (Kelly, 1992; Hartline *et al.*, 2000). That is, customer input and involvement in

the service innovation process may be more useful than tangible products (Langeard *et al.*, 1986; Martin and Horne, 1995; Normann, 1991; Vermillion, 1999).

Emerging trends

Moreover, several emerging trends in the market place such as heightened customer expectations, advances in technology and new forms of competition arising from the Internet and e-commerce and increasing deregulation of many service industries are bringing increased competition to markets (for example, de Brentani, 1995; Bitner *et al.*, 2000; Lovelock *et al.*, 2001; Wymbs, 2000). Because of this competition, many service firms are developing new services but there is a lack of strategic focus on NSD and development competencies (Martin and Horne, 1993; Kelly and Storey, 2000). Therefore, the new service failure rate is high (Cooper and Edgett, 1996), caused by the lack of an efficient development process and up-front homework (for example, de Brentani, 1991; Drew, 1995; Edgett, 1994; Edgett and Jones, 1991) and the lack of customer orientation and input (Martin and Horne, 1995). That is, undertaking NSD provides challenges to service firms and their managers (Barczak, 1995). These challenges include deciding how to organize for NSD and how to develop new services that are responsive to customer needs. However past research has concentrated only on two broad issues: success factors of new services and normative NSD models. Considering the issue of a NSD model in particular, the literature is almost silent on the details of NSD stages and their interface with the customers. Consequently, we have an incomplete picture of the way new services are developed.

Against this background, the purpose of this research is to answer the research question: "How can a NSD program in the financial services industry be managed?" More specifically, this research has two objectives:

- 1. to develop models for new financial service development that includes the stages in NSD process; and
- 2. to explore the input that customers provide at various stages of the development process.

That is, this research attempts to identify key stages of the development process and ties them to customer involvement and input for the first time. Essentially, this research responds to the call for a new thinking about NSD process and draws inspiration from Barabba (1995) and Wind and Mahajan (1997) who have stressed the need for creating a new service/product development model that will enable customers to provide input throughout the development process. In addition, this research is delimited to business-to-business services because business-to-business transactions are by far the more numerous in a modern economy but are under-researched (Gummesson, 1994).

Structured processes of NSD

The findings of this research are expected to assist practitioners in developing successful new services by proposing structured processes of NSD and increasing practitioners' awareness of the need for collaboration with potential customers during a service development project.

The paper has four parts. First, it reviews the extant literature relevant to NSD and customer orientation. Then the research methodology is presented and data analysis techniques are discussed. Next, the findings are discussed and summarized. The paper concludes with a discussion of theoretical and managerial implications and directions for further research.

Literature review

Acknowledging the importance of a systematic development process, a seminal study by Booz, Allen and Hamilton (1982) proposed a model for tangible product development of eight linear stages: new product strategy, idea generation, screening, evaluation, concept testing business analysis, development, testing and commercialization. Several improved versions of these development models for tangible products have followed. For example, the stage gate model considered new product development to be cross-functional, and recognized the importance of some parallel activities and up-front homework in a development process

(Cooper, 1993). Then a more flexible and informal model based on the principle of parallel processing of stages to reduce cycle time was proposed and termed as the third generation model (Cooper, 1994). Next, a fourth generation model added another dimension of internal and external networking to the development model (Rothwell, 1994). Similarly, Saren's (1994) "block approach" model acknowledged the importance of external linkages and transactions. Finally, a multiple convergent processing model that focused on information sharing through the convergent points during the new product development process was proposed (Hart and Baker, 1994). Thus the development process has evolved from one that moves sequentially to one in which the overlapping nature of various stages is recognized and interaction with customers and other sources are considered. In brief, there are several types of new tangible product development models that reflect the richness of this literature.

NSD models

New tangible product development literature

In contrast to this new tangible product development literature, only two NSD models based on empirical studies are available. The first model described eight linear and sequential stages of developing new services in financial, health services and hospitals (Bowers, 1987, 1989). This model was similar to Booz, Allen and Hamilton's model for tangible products described above. In turn, Scheuing and Johnson (1989) used a survey of 66 financial services to develop an expanded model of 15 stages: formulation of new service objectives, idea generation, idea screening, concept development, concept testing, business analysis, project authorization, service design and testing, process and system design and testing, market program design and testing, personnel training, service testing and pilot run, test marketing, full scale launch and post launch review. Although this second NSD model's 15 stages are more comprehensive, the model does not address the important issues of cross-functional teams, parallel processing of the development stages and cycle time reduction that have been highlighted in the new tangible product development models above. Thus, there is no model of NSD that matches the models of new tangible product development.

Service firm's managers

In addition, some studies have reported that service firms' managers have limited use for a formal process to manage the NSD process (Martin and Horn, 1992; 1993; Jones, 1995; Kelly and Storey, 2000). In contrast, other research reported the use of a somewhat formal NSD process (Edvardsson *et al.*, 1995). Thus, there is disagreement about whether service firms follow a formal or an informal development process. Moreover, although it has been argued that systematic development process contributes to the new service success (de Brentani, 1995; Cooper and de Brentani, 1991), whether the development stages should be undertaken in sequential order or concurrently remains open for debate (Johne, 1993). Admittedly, the literature acknowledges that service firms conduct some stages concurrently (Edgett, 1993, Jones, 1995), but it does not provide detailed insights about those stages that are conducted concurrently.

NSD and customer orientation

An axiom of new product development efforts is that to be successful a product must satisfy customers' needs (Voss and Voss, 2000; Crawford and Di Benedetto, 2000). As a corollary to this axiom, new tangible product development models described above proposed customer involvement and input as one key element of a model (for example, Hart and Baker 1994; Rothwell, 1994; Saren, 1994). In contrast, in the two models of NSD described above, innovation is presumed to be the sole province of service producing firms, even though interaction with customer is an important part of service innovation process and a key success factor of new services (Ennew and Binks, 1996; Martin and Horne, 1995). Therefore, there is a need to create a NSD model that incorporates the mechanism of customer-producer interactions during NSD with a view to developing successful new services (Barabba, 1995).

Customer-producer interaction

In essence, this customer-producer interaction during the service development process may be related to the broader concept of customer orientation (Jaworski and Kohli, 1993; Kohli and Jaworski, 1990; Narver and Slater, 1990; Slater and Narver, 1994). Customer orientation has been defined as "the set of beliefs that puts the customer's interest first" (Deshpande *et al.*, 1993, p. 27). Distinguishing customer orientation from customer-led philosophy, Slater and Narver (1998) argued that a customer-oriented business continuously creates superior customer value, by discovering both expressed and latent customer needs through the use of traditional as well as more proactive research techniques such as customer observation, selective partnering and experimentation. It has been accepted that firms should be customer oriented because customer-oriented firms are more likely to deliver better service quality and enhance customer satisfaction (Hartline *et al.*, 2000). Thus, this notion of customer orientation should be extended to NSD, because service producers[1] need to obtain customer inputs regularly for their innovation activities and programs (Slater and Narver, 1998). But applying this customer orientation concept to NSD raises two issues. First, no empirical study appears to have investigated the process of obtaining customer inputs in NSD. Second, a key concern of a customer-oriented firm is to determine the roles played by customers in a development process (Martin and Horne, 1995).

Three key issues

In brief, three key issues emerge from the review of above literature. First, little effort has been made to propose NSD models in the extant literature. Second, our knowledge of the nature of NSD stages in service firms and how they are managed is still limited. Finally, despite the importance of customer-oriented innovation activities, many service firms do not obtain customer input into their NSD projects, consequently less is known about the roles of customers in a service innovation. In order to gain insights into these three issues and to develop a cogent understanding of managerial practices associated with NSD, the case studies of 12 financial service firms were examined as described next.

Research methodology

The literature review above directed us to theory generation in the area of NSD, so a rigorous qualitative research methodology of case study was adopted (Parkhe, 1993; Perry, 1998; Yin, 1994). This choice of case study is justified on two grounds. First, the review of extant literature confirmed that NSD is a fairly new area of research and thus there is a need for more theories in the area (Johne and Story, 1998). Qualitative methods such as case studies address theory building rather than theory testing (Bonoma, 1985; Parkhe, 1993; Wilson and Vlosky, 1997; Adams *et al.*, 1998). Second, there is a need to delve deep to gain an understanding of the complex phenomenon. The depth and detail of qualitative data can be obtained only by getting physically and psychologically closer to the phenomenon through in-depth interviews (Carson and Coviello, 1996; Merriam, 1988). The approach used is consistent with the procedures recommended for theory generation by several scholars (Deshpande, 1983; Eisenhardt, 1989; Hunt, 1990; Peter and Olson, 1983; Zaltman *et al.*, 1982) and utilized by researchers in marketing (Drumwright, 1996; Kohli and Jaworski, 1990; Workman *et al.*, 1998; Homburg *et al.*, 2000).

Three dimensions

To select cases, a population was specified to limit the extraneous variations and to sharpen external validity (Wilson and Vlosky, 1997). The population of interest was Australian financial services organizations. Only financial services firms were chosen to control the inter-industry variability and because of an increased level of service development activities in that industry. A purposeful sample of 12 organizations (Patton, 1990) was selected based on three dimensions that were a priori thought to influence the findings:

- 1. firm size;
- 2. ownership, that is multinational and Australian firms; and
- 3. types of service firms.

That is, the organizations chosen might not be representative of the total population but they represented firms that varied on three dimensions noted above and so are relevant to this research. This is in keeping

with one of the goals of qualitative research, which is to portray the range and depth of the phenomena, which in turn is important to developing theory (Bonoma, 1985; Drumwright, 1996). Additionally only three innovative types of new services were selected: new-to-the-world innovations; new service lines and line extensions. We selected firms with at least 50 employees, because pilot case studies showed that this minimum firm size was necessary to ensure an established NSD process in the company. The average total revenue of the firms was \$500 million. The types of services developed by these organizations were business insurance, cash management systems, group pension plans, direct equity investment, money market products, online foreign exchange trading, mutual fund investment and stocks and securities products.

This research is about NSD at program rather than project level. That is, all NSD programs of a business unit or division were the reference point for respondents when answering questions about NSD. The main reason for this macro focus was that service firms often have an overarching culture that guides their service development activities. This culture often influences a firm's orientation towards overall programs of product/service development. Further, previous studies have successfully used a program level approach (for example, Barczak, 1995).

Data collection

E'îte interviews were the main source of data collection because the purpose of this investigation was to probe the processes used by managers and practitioners in developing new services in their respective firms. The term "e'îte interview" is commonly used to refer to interviews of the managers/decision makers as opposed to consumers (Dexter, 1970). This e'îte interview is designed to understand the decision makers' perception and to encourage them to reveal their notions of what is relevant (Drumwright, 1996). A total of 36 e'îte interviews were conducted, that is, three interviews per organization. The respondents for each case included two managers of the firm and one business customer of the new service developed by the participating organizations. All the three respondents were key informants because they were closely involved in NSD activities and had an understanding of the entire development process from idea to launch. The potential informants were identified from industry directories and were contacted by e-mail and faxes. The technique of snowballing assisted in the identification of three key informants in each case (Moriarty, 1983). That is, informants were asked to identify other people within the company and a business customer who had been involved in the NSD process. The manager informants were mostly product managers, marketing managers, CEOs, product development managers and vice president of their respective firms, while the customer respondents were mainly proprietors and managers of their respective firms.

E'lite interviewing

In keeping with accepted practice for e'lite interviewing, we kept the format of interview quasi-structured because this allows the flexibility and gives respondents scope to delineate their views more freely. We used an interview protocol[2] to ensure a consistent pathway to analyzing the interview data (Yin, 1994). Most questions were open-ended but some asked the interviewees to place their responses on a five-point Likert scale, with "very important" and "not an issue" as anchors. The interview protocol was developed using prior theory in the area of NSD and in consultation with several academics and practitioners who had substantive or methodological expertise. This interview protocol was tested in a pilot case study that was not included in the sample. Each interview lasted about two hours. The approach for conducting the interviews incorporated several guidelines for theory generation through qualitative research (Belk et al., 1988; Thompson et al., 1989; Drumwright, 1996). First, the interviews started with general introduction to make the respondents aware of the purpose of the interview and interview agenda. This was followed by nondirective and more general questions. Next, the respondents were asked to tell the story about NSD in their own words. Then the interview became more structured when a number of predetermined questions as given in the interview protocol were asked. These interview questions were designed to probe; the process and sequence of NSD activities; importance of various stages of the NSD; types of customer input obtained; details of NSD stages in which the input from customers were obtained, purpose and objectives of customer input; and the activities of customers at various stages of the development process. All the interviews were tape-recorded and detailed notes were taken. During and after the interviews several documents and archival records were consulted to enable triangulation: reports, letter, memoranda, minutes of meetings, proposals,

progress reports, schematic representations of the NSD process, review procedures, test marketing report, service blueprints/design, market introduction brochures, service information leaflets, NSD manuals and communications between the firms and customers.

Case descriptions

Comprehensive case descriptions were drawn accommodating all the interviews and the detailed analyses of the documents and field notes, which resulted in hundreds of pages of transcripts. The managers finally reviewed the transcripts and descriptions related to their firms. Interview data were analyzed using the *NUD*IST* software program and manual methods (MacMillan and McLachlan, 1999; Richards and Richards, 1991). Using this software, the transcript of each interview in each case was carefully reviewed, along with field notes and documents. The summary statements were then organized in text files and key quotations were noted (Patton, 1990) because extensive use of quotations adds transparency and depth of understanding (Drumwright, 1996). Finally, the quality of research depends upon the attention given to the issues of validity and reliability. Procedures suggested by Yin (1994), Miles and Huberman (1994) and Rust and Cooil (1994) were followed. For instance, a chain of evidence was established, two external auditors (faculty colleagues) reviewed the data to ensure that the interpretations of data were accurate and reliable, a case study database was maintained and triangulation of evidence was done.

Analysis of data

Pattern matching

All the cases were analyzed in a set to explore if they fall into clusters that shared certain patterns (Miles and Huberman, 1994). This analysis was done primarily through pattern matching (Yin, 1994) of matrices of data (Miles and Huberman, 1994). A synthesis of the responses to the question about how the respondents went about developing a new service and what occurred during a development project, showed that the services were developed over the ten stages as shown in Table I: strategic planning, idea generation, idea screening, business analysis, formation of cross-functional team, service design and process/system design, personnel training, service testing and pilot run, test marketing and commercialization.

Frequency and importance of NSD stages

Different NSD stages have different levels of importance as measured by their frequency of use and related interview data. The stages of idea generation and commercialization were carried out by all the organizations (the total column of Table I). These two stages were among the most important stages in the process – as one of the respondents noted:

The stage of idea generation is the starting block for the project and the last stage of commercialization is the finishing line of the project, and both start and finish are more important that those middle stages.

Speed was the major concern

Three other stages of service design and service testing, and the formation of cross-functional teams were also considered as important. In contrast, test marketing was the least important activity because companies tended to ignore this stage to accelerate the overall development process, as one manager stated:

For the sake of urgency, we skipped test marketing and went ahead with the launch of the product.

That is, speed was the major concern for the respondents.

To probe deeper into the importance of each of the ten stages of NSD, we asked the managers to rate all the stages according to their importance on a scale of 1 to 5. <u>Table II</u> represents the mean importance of the ten stages of NSD.

Table II confirms that idea generation is the most important stage of a NSD process followed by the stages of idea screening and formation of cross-functional team. Test marketing was the least important stage in the development process. This finding supports the importance of each stage measured by the frequency of use discussed above and summarized in Table I. The managers also provided documents and archival records in support of their responses concerning the importance of development stages. For example, inter-office memo and other communications among various departments confirmed a very intense idea generation and screening processes in all the firms. Furthermore, minutes of meetings about the NSD activities showed the importance of formation of cross-functional team, while a file containing several blueprints of the potential new services provided insights into the importance of service design process. Finally the copies of promotional campaign, correspondences with the distributors and brokers confirmed the intensity of NSD-related activities at the commercialization phase of the development process.

Sequential and parallel stages

Response to questions

In responses to the question about whether the managers followed strictly sequential or parallel stages, the cluster of large organizations reported sequential process while the cluster of small organizations reported some parallel and overlapping stages in a somewhat more informal development process, as summarized in Table III.

That is, all the large organizations followed a bureaucratic, sequential NSD that contained checkpoints at the end of every stage, where go/kill decisions were taken. The main rationale given by the respondents behind these sequential stages was that efficiency of the process was a key issue. For example, one respondent noted:

In a structured sequential process, each task is conducted efficiently that minimizes the chances of errors and omissions. Although it is a slow process, there is always a trade off between quality of work and time it takes. All our projects had a set time limit and we always finished within that time limit unless there were any unforeseen events.

Conduct of sequential stages was also found to be a general custom in some large organizations. That is, the NSD stages were conducted sequentially more due to the historical or cultural reasons – as one respondent remarked:

We have been conducting sequential activities for all of our NSD projects. I guess it's a norm rather than anything else.

For example, case C, a large firm had a 33-page manual containing the details of ten stages that should be carried out in a development project.

Three pairs of stages

In contrast, the small organizations conducted parallel activities for three pairs of stages. The first pair of stages was strategic planning and idea generation, the second pair was idea screening and business analysis and the third pair was personnel training and service testing and pilot run (third column of Table III). The main reason behind these parallel activities was the speed in the development process that was needed to keep pace with rising competition and innovation activities of other firms. As one respondent noted:

All projects involve parallel activities one way or other; even in a small or trivial project such as making a cup of tea, you conduct parallel activities, don't you? To complete a task quicker, you must resort to some parallel processing.

Role of the customers

The second objective of this research was to investigate the role of customers at various stages of the development process. So, we asked the managers about the importance of customer input and involvement. There was a general unanimity that customer involvement was necessary for developing a superior and differentiated service with better value for customers. Another benefit of customer input such as reduced development cycle time was also emphasized. In this context one manager noted:

Developing a superior service is important but a faster NSD process is also crucial in service industries. Customer involvement can speed up the development process and you don't even need parallel processing of stages. Since the main ideas come from the customers themselves, there is no need to be bogged down at various market research exercises.

Proactive involvement

While probing the issue of customer orientation further, we found that the most service firms were proactive in customer involvement as noted by one of the respondents:

We hardly found any instance of customers coming to us with any idea or information, all the time we had to go to them and acquire input.

Moreover, managers took efforts to maintain a long-term relationship with the main customers and consulted with them regularly for several NSD projects. To triangulate this evidence, we asked the customers to describe their roles in the innovation process. Most of the customers reported that they participated fully in several NSD projects. In this regard, one customer remarked:

Customers are the rich source of information and their input may technically decide success or failure of a new service. Indeed, we were involved from the day one.

Customer input

The managers obtained customer input mainly through periodic meetings between customers and NSD team, customer observation and occasional in-depth interviews at various stages of the development process. During these meetings and interviews the customers performed several activities relevant to NSD. Therefore, to explore further the role of customer in NSD, we asked all the respondents (both selected customers and service producers) to list the actual activities carried out by customers at various stages of the development process. Later the respondents checked and crosschecked the activity list for errors and accuracy. Overall, the customers contributed to all of the stages because they reportedly performed at least one activity at all of the stages of the development process. In particular, the three stages of idea generation, service design and service testing and pilot run reported the highest frequency of customer input, that is, detailed customer input might be critical and more important at these three development stages. Confirming this finding, a manager remarked:

Idea generation is the starting stage where the service gets its first crude shape. This shape becomes more accurate and concrete at the designing and testing stages in which final modifications are done to meet customer needs and requirements. Thus, we actively requested customer input at all these key stages.

Discussion and implications

In recent years, service firms have become very active in developing new services (Johne and Storey, 1998). Given the growing popularity of innovation activities in service firms and the importance of customer orientation in facilitating marketing objectives, this attempt to integrate two different research streams is timely and significant. The main objective of the research was to develop a customer-oriented model of NSD – that facilitates customer input and involvement in the development process. Three basic findings emerged from the data analysis of this research: the importance of various stages in NSD models; two models about those stages; and customer input into various stages of the development models. Each of these is discussed in turn.

Stages of NSD model

Two models of NSD

The extant literature contains merely two models of NSD, one is a eight-stage model (Bowers, 1987; 1989) and another is a 15-stage model (Scheuing and Johnson, 1989). In contrast, the number of stages in new tangible product models is between seven to ten. In turn, this research found that there are 10 stages of NSD that can be incorporated into a model. More specifically, we identify two versions of this ten-stage model, one is linear and the other contains some concurrent stages. These two versions are shown in Figure 1.

Some of the ten major development stages found in this research are the same as reported in one form or another in the existing service development studies (Bowers, 1987, 1989; Scheuing and Johnson, 1989). But this research is the first to identify two models of ten development stages. Moreover, one of this research's ten stages, the stage of formation of cross-functional team has not been reported in the earlier NSD models. Cross-functional cooperation in NSD will result from this newly found stage of formation of a cross-functional team, and so this stage links to previous research about that cross-functional cooperation in NSD (Lievens *et al.*, 1999) and in new tangible product development (Gupta and Wilemon, 1990).

Idea generation and screening stages

Besides cross-functional cooperation, management seems to pay more attention to the idea generation and screening stages of the development process of financial services. The result is not surprising given the fact that financial services are basically ideas or concepts rather than a tangible entity. The more ideas a firm can generate, the greater the probability of pursuing a successful one. Given this need for a large number of ideas for service development, it seems important for service firms to undertake comprehensive idea screening efforts. Such activity can eliminate weak ideas and retain those with strong potential. In turn, the result about the test marketing being the least important stage concurs with previous studies that found that test marketing was not important in a NSD process (for example, Barczak, 1995; Mohammed and Easingwood, 1993). As with tangible product industries, it is likely that the time, cost and risk of imitation limit the use of test marketing (Crawford and Di Benedetto, 2000). In brief, this research sheds light on the importance of various stages of the development process. In particular, the stages of formation of a crossfunctional team, idea generation and idea screening seem to be more important than other stages of a NSD process.

Linear and parallel models

Two models

Consider the two models found in this research in more detail. Which of the two models shown in Figure 1 is more appropriate, the linear or the parallel? Although the literature acknowledges that service firms conduct parallel development stages, they do not provide details about the specific stages that should be carried out simultaneously. In addition, whether development stages should be linear or parallel remains open for debate, because the linear sequential model is considered inadequate for NSD by some researchers (for example Scarbrough and Lannon (1989)), while others consider the linear model to be one of the success factors for new services (Cooper and Edgett, 1996; de Brentani, 1989; Edvardsson and Olsson, 1996; Lievens *et al.*, 1999). In turn, this research settles that debate and proposes that ideally the managers should establish a linear system that contains a formal process for conducting development activities from idea generation to commercialization. However, they may complete some of the stages concurrently to fast track the overall development process. In particular, three pairs of stages can be conducted simultaneously: "strategic planning and idea generation"; "idea screening and business analysis"; and "personnel training and service testing" (Figure 1).

In brief, this research has identified two models of NSD, one containing linear sequential stages and another containing some parallel stages. This research has also identified the development stages that can be considered for parallel processing. Thus, the findings extend the existing models of both new services and

tangible product development (for example, Bowers, 1987; 1989; Cooper, 1994; Hart and Baker, 1994; Scheuing and Johnson, 1989) and also add new dimensions to these models by highlighting specifically the stages that can be carried out concurrently.

Customer input and orientation

Important insights

The market orientation literature suggests that a customer oriented development process yields a superior innovation and greater new product/service success and argues for customer input throughout the development process (for example, Jaworski and Kohli, 1993; Lukas and Ferrell, 2000; Slater and Narver, 1994). Similarly the new product/service development literature provides evidence that customer interaction can increase product/service success (for example, Gruner and Homburg, 2000; von Hippel, 1988; Martin and Horne, 1995). While the above literature provides important insights into the role of customers in new product/service development, they are not explicit on how the concept of customer orientation can be incorporated into a NSD process, that is, at what stages of the NSD should the customer input be obtained? Based on this research's findings about customer involvement and actual activities performed by the customers during the development process of new services, we propose a model incorporating customer input at various stages of NSD process as shown in Figure 2. By drawing our conclusion based on field research of overall NSD programs of several service firms in one service industry, we are reasonably confident that overall theme of customer-oriented NSD process reported in this research is not isolated to specific projects or firms.

Managerial implications

Structured sequential process

Although subject to further refinement and testing, the results have implications for service managers and firms operating in financial services industry. First, managers frequently confront a question: should they follow a sequential NSD process or conduct parallel stages? This research's findings suggest that ideally they should conduct NSD as a structured sequential process, however, some stages may still be carried out concurrently, if there is a need to develop a new service quickly. That is, a parallel model can be more useful in competitive markets such as the financial services market studied in this research. Indeed, studies have highlighted that service developers are often pressed for time to develop new service quickly because innovations are copied quickly in service industries (Johne and Storey, 1998). In that case, managers will be able to select those stages for concurrent processing highlighted in this research (Figure 1). Second, the managers should pay more attention to the idea generation stage in the development process because idea generation is the most important development stage of new services. Besides idea generation, idea screening and the formation of a cross-functional team in NSD are other key stages of the development process.

Developing services that match customers' needs

Finally, managers should put more emphasis on developing services that match customers' needs. Thus, they should adopt a customer-oriented approach to NSD and obtain customer input in their NSD programs. Figure 2 provides detail of the activities that customers may perform at various stages of the development process, which managers can use as a checklist of the customer activities for their NSD programs. Concurring with Slater and Narver's (1998) suggestion that business should learn to complement traditional market research tools of surveys and focus groups with advanced techniques of customer observation and selective partnering for their innovation activities, we propose that the managers should look beyond simple market research and develop a planned and formal process of obtaining input from customers for their NSD projects. Thus, managers should be proactive in developing a long-term relationship with customers and treat them as partners in their quest for successful new services.

Limitations and recommendations for further research.

Tentative findings

The findings of this research have several limitations that also indicate opportunities for further research. First, this study used in-depth field interviews in a small number of cases in the financial services industry only, therefore the findings presented here should be considered tentative. Caution is required in generalizing the findings beyond the sample and industry concerned. Further studies could test the models by a large-scale quantitative survey or by a longitudinal experiment with a broader research sample. Second, the cross-sectional nature of this research might have produced biased results. However, to minimize this bias, the respondents were asked for names of participants and dates of events throughout the interviews to keep them grounded in the particulars and thus to aid their recall (Adams et al., 1998). Moreover, multiple informants were interviewed and their reports were compared with information from other data sources such as documents and archival records to check for accuracy and consistency. Third, we studied only businessto-business services, therefore a replication of this research in other industries including consumer services, professional services and tangible products is needed for the advancement of literature. Fourth, our sample is confined to the Australian firms, therefore the generalization of the findings beyond Australia should be made with caution. An international replication of this research may provide interesting insights. Finally, there is one issue, which is beyond the scope of this research that would seem to merit further study. The relationship between customer input at various development stages and new service success was not tested in this research. Thus, further empirical research is needed to enhance our understanding of this relationship between customer input and new service success.

Conclusion

The focus of this exploratory research was to examine the process of NSD in the financial services industry and to probe the role of customers at various stages of that process. The findings of this research stressed the need for new ways of thinking about and conceptualizing NSD activities. It is hoped that this paper has illuminated the ways new service can be developed with customer involvement and provided insight into some of the key stages of the development process. However there remains much to learn about the customer-oriented NSD process and how this process can be used most effectively in developing successful new services. In particular, there are several questions left unanswered: Are the two models identified in this research appropriate for different service industries? Which of the two models identified in this research is more appropriate for different types of innovations (such as, discontinuous versus continuous innovations)? What are the specific relationships between NSD cycle time and a parallel NSD model? What steps should the manager take to become more customer oriented or how should customers be involved in NSD? What customer characteristics should be considered for customer involvement in NSD? What are the performance implications of a customer-oriented NSD process? Given the theory-building objective of this research, we have restricted our focus to the development of a general framework of customer-oriented NSD process. However, we hope that more empirical investigations and analysis of these questions will follow this research. Finally, we believe that those service firms that adopt customer-oriented NSD process will be those that will lead their industries in twenty-first century.

Executive summary and implications for managers and executives

Little research into new service development

Much has been written about new product development, but little of this relates to the development of new services. Services differ from other products because they are more intangible, heterogeneous and perishable. Customers tend to be involved in the delivery of services. Moreover, the purchase of services tends to involve a longer commitment, and therefore a more intimate relationship with customers. Customer involvement in the innovation process for services may therefore be more useful than for tangible products.

Heightened customer expectations, technological advances and new forms of competition arising from the Internet, electronic commerce and deregulation of industries such as telecommunications and air travel are leading to increased competition among service providers. Many firms are, in consequence, developing new

services. But the failure rate is high. This is partly because of inefficient development processes and too little consumer involvement.

Alam and Perry explore new product development in the financial services industry in Australia, and examine how customer input may be obtained in the various development stages.

New service development stages in financial services

The research shows that the services are developed over the ten stages of strategic planning, idea generation, idea screening, business analysis, formation of cross-functional team, service design and process/system design, personnel training, service testing and pilot run, test marketing and commercialization. Idea generation, idea screening and formation of a cross-functional team appear to be among the most important stages. Test marketing is considered the least important. Companies tend to ignore this stage to accelerate the overall development process.

Parallel and sequential development

Large organizations report carrying out the stages sequentially, with checkpoints at the end of every stage, where "go" or "kill" decisions can be taken. Small firms report some parallel and overlapping stages in a somewhat more informal development process. For the sake of speed, small firms may pair up strategic planning and idea generation, idea screening and business analysis, and personnel training and service testing.

The role of the customer

The research reveals unanimity that customer involvement is needed to develop a superior service with better value for customers. Customer input can also help to reduce development time. Customer input appears to be most important at the idea generation, service design and service testing stages. Customer input is obtained mainly through meetings between customers and the development team, observing customers and occasionally carrying out detailed interviews at various stages in the development process.

Managerial implications

The research suggests that service managers should ideally conduct new service development as a structured, sequential process. However, some stages may be carried out concurrently, if the new service has to be developed quickly.

Managers should pay most attention to the idea generation stage in the development process, and should strive to develop services that match customers' needs. Managers should look beyond simple market research and develop a planned and formal process of obtaining customer input for their new service development projects. Managers should treat customers as partners in their quest for successful new services.

(A précis of the article "A customer-oriented new service development process". Supplied by Marketing Consultants for Emerald.)

Notes

- 1. The term "service producers" means service firms and their managers who participated in this research. Generally a service firm is termed as "service provider" or "service supplier", however, in the context of new service development, service producer seems a better term.
- 2. Interview protocol is available from the first author.

	Cases												
Stages	A	В	C	D	E	F	G	Н	I	J	K	L	Total
1. Strategic planning	1	_	1	1	1	_	1	1	_	_	1	_	7
2. Idea generation	1	V	V	1	V	1	1	V	1	1	1	V	12
3. Idea screening	1	V	V	1	V	1	_	V	1	1	1	-	10
4. Business analysis	-	~	•	~	•	V	~	-	1	_	~	1	9
5. Formation of cross- functional team6. Service design and	•	,	•	v	v	•	v	•	,	v	-	•	11
process/system design	V	1	V	V	1	V	V	_	1	V	V	1	11
7. Personnel training 8. Service testing and	•	•	•	-	•	•	•	•	•	-	-	•	9
pilot run	•	•	V	•	•	•	•	1	_	•	•	•	11
Test marketing	_	1	1	1	1	1	_	1	_	_	-	_	6
10. Commercialization	V	V	1	1	V	V	V	1	V	1	1	V	12
Total	9	9	11	9	10	9	8	8	7	6	7	7	

Table I. Summary of data about the stages of new service development, by case

Table I.Summary of data about the stages of new service development, by case

Stages of the development process	Mean importance		
1. Strategic planning	2.1		
2. Idea generation	4.7		
3. Idea screening	4.1		
4. Business analysis	3.2		
5. Formation of cross-functional team	3.6		
6. Service design and process/system design	3.5		
7. Personnel training	1.9		
8. Service testing and pilot run	2.4		
9. Test marketing	1.7		
0. Commercialization	3.4		

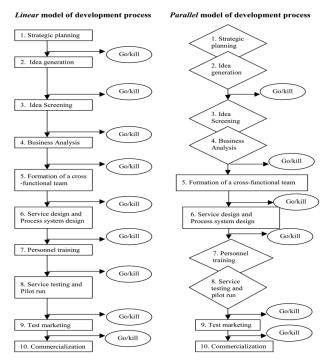
Table II. Importance of various stages of NSD

Table II.Importance of various stages of NSD

NSD stages	Large organizations	Small organizations
1. Strategic planning	Sequential	Parallel
2. Idea generation	Sequential	
3. Idea screening	Sequential	Parallel
4. Business analysis	Sequential .	
5. Formation of cross-functional team	Sequential Sequential	Sequential
6. Service design and process/system design	Sequential	Sequential
7. Personnel training	Sequential	Parallel
8. Service testing and pilot run	Sequential	
9. Test marketing	Sequential	Sequential
10. Commercialization	Sequential	Sequential
Total sets of parallel activities	0	3

Table III. Sequential and parallel stages of new service development

Table III. Sequential and parallel stages of new service development



Key: Rectangle box: sequential stages; diamond box: overlapping/parallel stages

Figure 1.Two models of new service developmenttci

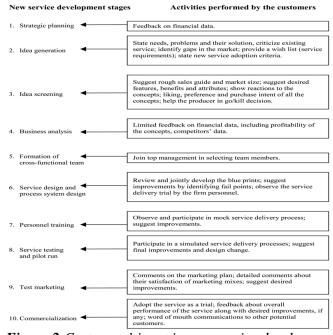


Figure 2. Customers' input in new service development processtci

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