

5.23-BG01-5697

SERVICE DEVELOPMENT MODELS: A LITERATURE REVIEWMUHAMMAD AHMAD TAUQEER¹ AND KNUT ERIK BANG²**ABSTRACT**

The service sector is increasingly recognised as having come to dominate the business market globally. The aim of this study is to investigate and synthesise published literature related to service development models and frameworks, and to identify areas for improvement. The study evaluates the state of the art in service development models and frameworks between 2000 and 2017. The literature review reveals that, despite services being the major economic driver, limited research related to service development has been carried out. The research methodology used in the existing studies can be categorised as (i) conceptual, (ii) evidence-based and (iii) anecdotal. These models and frameworks present four generic service development steps, i.e., idea generation, business model, testing and launch. Among these, idea generation displays significant room for improvement.

Keywords: New service development; Service innovation; Service design; Service engineering, Literature review.

INTRODUCTION

Industry has witnessed a paradigm shift from product-centric business models to service-centric models (Spohrer et al., 2007; Spohrer and Maglio, 2010; Lusch and Vargo, 2011). The service sector plays a predominant role in developed economies, comprising 70% of the gross domestic product (GDP) and employability (Porter, 1985). The service market has increased globally and the major sources of revenue in the developed economies derive from the service sector, while developing economies are also swiftly growing towards services, and often characterise half of their GDP as services. Globally, nearly 64% of GDP comes from the service sector, according to the *World factbook* (CIA, 2009).

Due to globalisation and rapid technology development, modern markets have become extremely volatile. This has increased the demand for innovation and reduced products' shelf life. Through past experience, it has been observed that the service market is more sustainable than the product market (Chesbrough, 2011). Although the service market has already outperformed the product market, this difference is projected to increase to a level where services will absolutely dominate the market. Harvard Professor Theodore Levitt has explicated to his students that the customer is not interested in the product itself but the effect of the product (Christensen, Cook and Hall, 2005; Chesbrough, 2011). Similarly, Drucker stated: "what the customer buys and considers value is never a product. It is always utility — that is, what a product does for him" (Drucker, 2012, p. 57). These scholars set forward the conclusion that it is not the product that the customers are willing to pay for but the service that the product delivers to them.

Recently, many high-tech companies have shifted their business models from offering products to offering services. Aerospace engine producers like General Electric and Rolls-Royce have transformed their business models from selling jet-engine units to jet-engine operational hours, i.e., the utility aircraft that operators are looking for. Nowadays, even in technology companies, the prime revenue stream is from the services offered by the company. For instance, in the oil and gas business, the majority of companies are oil service

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companies and a greater portion of the business in these companies is to deliver services. The services provided by companies and personnel are specialised, based on technology, and range from the largest drilling rigs to the smallest measurement tools. Traditional manufacturing companies are also turning to providing mainly services and using their previous manufacturing capability as the means to gain competitive advantage in delivering technology-based services.

The paradox in the present scenario is that, despite the service sector being the major economic driver, only nominal research has been carried out in order to learn how to develop and innovate services. Saco and Goncalves (2008) have acknowledged that service design is still in a stage of evolution and the existing research work does not provide firm ground to understand the service development phenomenon. Service design lacks cohesive and explicit models and frameworks (Clatworthy, 2011; Ostrom et al., 2015). Therefore, there is a need to investigate the published knowledge and propose areas for improvement and expansion.

A few literature reviews have been carried out on service development. They do not fulfill the need because either (i) they are outdated or (ii) they present different statistics on service development literature and not the content insights.

The outdated literature reviews include those by Johne and Storey (1998), in which the authors evaluated articles related to service development published up until 1996. Similarly, Menor, Tatikonda and Sampson (2002) and Goldstein et al. (2002) performed literature reviews relevant to service design. De Jong and Vermeulen's (2003) literature review was related to organising for service development. These reviews had limited literature relevant to service development available at that time and are nearly fifteen years old.

In a newer era, statistical literature reviews, like that of Papastathopoulou and Hultink (2012), have been performed, with the main focus on publication statistics. The key features of the study comprise a compilation of academic journals that have published the highest number of articles, the distribution of articles in different periods, and the key research topics. Similarly, Biemans, Griffin and Moenaert (2016) carried out a literature review, in which top journals of service development literature were identified and their citations discussed. Different statistical analyses were performed to discover new service development topics per journal, number of articles on different service development topics, key researchers in this field, distribution of researchers in different parts of the world and high-impact articles. These literature reviews provide a deep statistical insight into how the research work has evolved over time, journals that are suitable for publishing service development articles, and leading researchers in this field. However, these studies lack evaluation of the content of the articles, characterisation of the content, summaries of the key findings and useful areas that remain unexplored, specifically in service development. These studies provide useful information to the researchers working in the field of service development, but inadequate knowledge is presented to entrepreneurs, startup leaders or service developers that want to learn methods and useful guidelines from the published literature.

The objective of the present study is to provide an insight into the existing models on developing services, to characterise research methods, orchestrate research findings and to suggest research questions (RQ) for further improvement.

The remainder of this paper is structured as follows: a brief historical perspective of product and service characterisation and the terminology used in the published literature to refer to the service development process are discussed in the following section. The subsequent section discusses the search methodology used in the present study, followed by results and discussion. Finally, limitations and future research perspectives are discussed and conclusions are drawn. RQ are developed throughout the following sections.

Characterisation of product and service

There has been discussion in the published literature, regarding characterising and distinguishing the product and service. Services cover a wide range of complex activities that are difficult to describe with a single definition. The definitions of service can be as simple as the action of benefiting or the conduct of providing an advantage to another and as complex as including the aspects of perishability, inseparability and intangibility to distinguish service from a product (Grönroos, 1978). From a historical viewpoint, the product was defined as anything that has tangible possession, ownership rights and reserves the ability to transfer ownership rights against a particular value. Similarly, services were classified as offerings that are intangible, perishable and, simultaneously, produced and consumed (Smith, 1776). A slightly different approach is to define a product as anything that can be offered to a market that might satisfy a want or need, whereas services are economic activities that bring about desired results to recipients (Kotler et al., 2006).

There are features which overlap products and services in these definitions resulting in a few items which cannot be precisely categorised as a product or service. The only distinguishing feature between products and services in the present time of complex products and services is tangibility. Products can be perishable and separable, for instance food products. Correspondingly, services can be non-perishable and inseparable like long-term remote maintenance services. However, distinguishing products and services based on tangibility is ambiguous. Modern products have elements of intangibility, for example, stock exchange shares. Similarly, services such as drilling services in the oil and gas industry and hotel services involve physical assets, for example, drilling rigs and hotel beds, respectively.

An idea, first suggested by Rathmell (1966) and further elaborated by Shostack (1977), is to distinguish product from service on a continuum, ranging from tangible-dominant to intangible-dominant. Here, tangibility includes physical elements and ownership. There would potentially be items towards the centre of the scale that are difficult to classify as a product or service. Nevertheless, this approach sets the basis for defining products and services. From the modern perspective, products and services can essentially be distinguished on a scale of the degree of intangibility associated with an item, and this definition serves as the source for understanding products and services. Therefore, services are defined as items falling towards the intangible-dominant side on a scale of tangible-dominant to intangible-dominant, where tangibility represents both physicality and ownership of the item.

RQ1: *How can items (products or services) falling in the centre of the intangibility scale be distinguished? How can the degree of intangibility be measured for products and services?*

Terms related to service development

Analogous to different perceptions of product and service definitions in the literature, different terms are also in evidence regarding service development and service innovation processes. The term ‘service design’ is present in abundance in publications referring to the process of service development from idea to specifications (for example, Zeithaml, Parasuraman and Berry, 1990). Service design is essential in order to keep up the innovation process (Sangiorgi and Junginger, 2015). Pinherio (2014) has discovered opportunities for startup leaders and entrepreneurs to integrate a service design framework in their initial stages of development. The theoretical relevance and the practical applications of service design are discussed by Sangiorgi (2009) and Kimbell (2011). Service design is a holistic approach for creating new services (Blomkvist, Holmlid and Segelström, 2010), involving assessment, ideation, deliberation, and implementation (Bitner and Brown, 2008). Service design has been developed by management fields such as marketing and operations management (Bitner and Brown, 2008; Cook et al., 2002).

‘New service development’ is also a commonly used term, analogous to ‘service design’ (Cooper et al., 1994; Edvardsson et al., 2000; Johnson et al., 2000). Similarly, Gummesson (1991) has defined new service development as the characterisation of service development in terms of drawings and flowcharts. This incorporates service research fields such as service marketing, service management and available technology (Patricio, Fisk and Cunha, 2003).

Service innovation also appears in the literature in different ways. For example, Edvardsson et al. (2000) referred to idea generation in the new service development process as ‘service innovation’, contrary to Sundbo (1998), who refers to service innovation as the entire process of new service development. Goldstein et al. (2002) reviewed the literature on the service concept and highlighted different nomenclature used in the published literature to refer to similar principles. Service innovation is dependent on technology and service design where both technology and service design are interlinked (Ostrom et al., 2015).

Service engineering is also adequately used to express service development in the published literature (Bullinger, Fähnrich and Meiren, 2003). Tomiyama (2001) studied how to establish service engineering that is intended to include the service content of product life cycles.

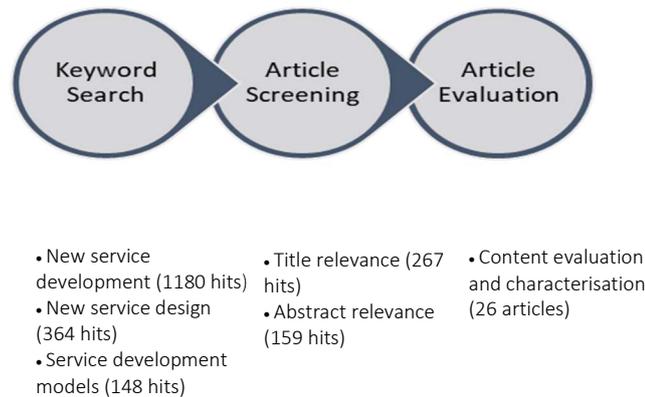
It is observed that the terms ‘service design’, ‘new service development’, ‘service innovation’ and ‘service engineering’ are used interchangeably in the published literature.

RQ₂: *How can service development terminology be standardised?*

SEARCH METHOD

As previously discussed, services are sustainable in comparison to products, and there is a need to study how to develop and bring innovation into services. In the published literature, several different service development models and frameworks are found. A systematic literature review is performed in the present study to evaluate articles published in the period, 2000–2017, with the key focus being to identify models and frameworks for the development of new services. The literature review is limited to academic journals, books and conference proceedings.

A three-step search methodology is used to identify relevant articles and publications (see Figure 1). This methodology is identical to that of De Jong and Vermeulen (2003). In the first step, Google Scholar, Science Direct and relevant academic journal databases were searched, using the keywords (‘new service development’, ‘new service design’ and ‘service development models’). Further, the search results were screened on the basis of title and abstract relevance. Those titles and abstracts that were ambiguous and those that had passed the screening test were further evaluated in the third step, where the content of the article was analysed. The articles that reflected service development steps or a service innovation methodology were considered of primary importance. Through the screening mechanism shown in Figure 1, 26 articles were found to have significant information regarding service development and innovation. They are listed in Table 1 and are further discussed. Although there have been significant valuable studies, reflecting useful perspectives of service development, they are not included in the present study, since the knowledge regarding the development of new services was limited.

Figure 1. Three-step search methodology

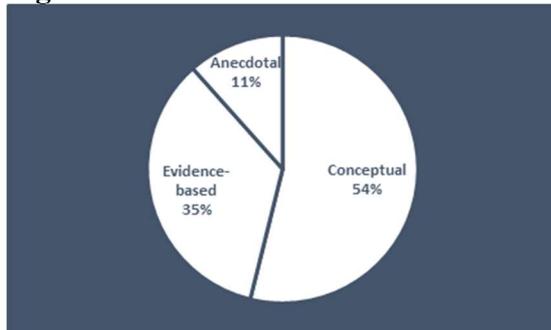
RESULTS AND DISCUSSION

The published literature that passed the screening mechanism (see Figure 1) is compiled in Table 1. Firstly, the screened literature is characterised, based on the methodology of research work used in each of these studies. The types include conceptual, anecdotal and evidence-based studies. In the present case, a conceptual study is regarded as one in which the service development model is developed based on existing concepts, theories and inferences but testing of this model is not performed. An anecdotal study is one which is based on anecdotes or data collected through quantitative, qualitative or mixed-method sources that are not directly relevant. An evidence-based study is one in which the model or framework is developed either conceptually or anecdotally and tested and corrected based on the test results. The distribution percentage of the screened articles in each of these categories is shown in Figure 2. It can be seen that the majority of the service development models available in the published literature are of a conceptual nature. Anecdotal studies are fewer in number, since most of them are filtered out in the screening mechanism described in the previous section. This is because a large number of anecdotal studies emphasised only a few phases of the service development process and not the entire process, as well as being less relevant to the subject matter under study. Table 1 provides the researchers working in the field of service development with an overview of the research methodologies used in different studies.

RQ₃: *What are the methods and ways for validating conceptual and anecdotal studies in service development?*

Table 1. Different types of studies carried out for service development models

Conceptual study	Anecdotal study	Evidence-based study
Johnson et al. (2000)	Neu and Brown (2005)	Alam and Perry (2002)
Manzini and Vezzoli (2003)	Jaw et al. (2010)	Blazevic et al. (2003)
Aurich et al. (2004)	Parasuraman (2010)	Olivia and Kallenberg (2003)
Perks and Riihela (2004)		Matthing et al. (2004)
Stevens and Dimitriadis (2004)		Hipp and Grupp (2005)
Verganti and Buganza (2005)		Aurich et al. (2006)
Lindahl et al. (2006)		Yang (2007)
Gottfridsson (2009)		Lee and Chen (2009)
Kindström and Kowalkowski (2009)		Zomerdijk and Voss (2010)
Den Hertog et al. (2010)		
Holopainen (2010)		
Clatworthy (2011)		
Jin et al. (2013)		
Teixeira et al. (2017)		

Figure 2. Distribution of service development models listed in Table 1

The service development models include conceptual models that present a process cycle, comprising of a sequence of steps that assist in the service development process, such as in the work of Johnson et al. (2000). They developed a new service development process cycle, which offers a concise model, presenting design, analysis, development and launch as the milestones of new service development, and further credit people, system and technology as the drivers to achieve successful development of new services. Conceptual models emphasising the product service system are also considered relevant. For example, Manzini and Vezzoli (2003) developed a framework which involves new stakeholders for a collective economic interest. The framework suggests a strategic design that implies that the business focus will be shifted from selling only physical products to jointly offering a system of products and services, together with other stakeholders, to fulfill clients' demands. Certain examples of product service integration are presented. In addition to the service development steps identified by Johnson et al. (2000), Manzini and Vezzoli (2003) also show the importance of including a sustainability plan in the service development process. Likewise, Aurich, Fuchs and DeVries (2004) present a generalised framework for service design and a concept evolving in the direction of product service systems. The framework suggests that the product and service design processes will be modularised into sub-steps and the overlapping features identified. The integration of overlapping features will result in new services and product service systems. The authors further suggest that quantifying the performance of the newly developed systems with the traditional product systems would serve as the assessment criteria for the newly developed system. The model presented by Aurich, Fuchs and DeVries (2004) sets the basis for product service systems. However, limited assistance is available in terms of developing new service ideas. These models are amongst the earliest chronological models and present service development steps, implications and aspects that can influence the process. However, these models are of a generalised nature and reflect no precise strategy for implementing them in different organisational settings. The process of service development would essentially differ between a manufacturing company and a software company. Therefore, there is a requirement to discover methods and techniques that can transform generic service development models for particular organisational settings.

RQ4: *How can generic service development models be transformed for a particular organisational setting?*

Conceptual models that also include customer engagement (other than conventional service development steps) are also present in the literature, such as Lindahl et al. (2006), who have highlighted the importance of customer involvement while designing service and have combined the customer dimension with the service development model. These authors have discovered an important service development benefit: customer engagement. However, these studies fail to provide customer engagement tools, for different types of customers and

organisational environments, that can help collect fruitful information at various stages of the service development process.

RQ₅: *What are the methods for engaging and learning from customers at various stages of the service development process in different organisational environments? For example, Alam and Perry (2002) have given two suggestions: customer interviews and periodic meetings. How useful are these methods?*

Perks and Riihela (2004) and Stevens and Dimitriadis (2004) have conceptually developed models that reveal several parameters, which influence the nature of inter-functional activities and the outcomes of service design and combine organisational learning with new service development. Den Hertog, Van de Aa and De Jong (2010) have developed a comprehensive model for new service development and solutions. The model highlights dynamic capabilities, i.e., new service concepts, new customer interaction, new business partners, new revenue models and new delivery systems that can benefit organisations in their innovations and the development of new services. The authors believe that the successful service providers outperform their competitors within these capabilities and gain a competitive advantage. Holopainen (2010) has established service design architecture and applied it to a pragmatic study that explores how professional designers develop services. He discovered that service design has no optimised solution, and one layout from several possible solutions needs to be selected in order to proceed in the development process. Jin, Chai and Tan (2013) have found new service development success factors: strategy management, process formalisation, knowledge management, and customer involvement. It is theorised that a higher competence in grasping these processes positively influences the service development process. Correspondingly, Grenha Teixeira et al. (2017) have integrated management and interaction design used in organisations to develop a framework for service design. According to the authors, this interdisciplinary method enables the creation of innovative services and advances interdisciplinary service research. These models and frameworks have included organisational learning, dynamic capabilities, service architecture and interdisciplinary methods to advance service development. These parameters need to be studied simultaneously to select those that are vital, since it is impractical to focus on all these parameters in an organisation.

RQ₆: *What are the criteria for selecting the vital parameters for service development models available in the published literature?*

Studies also include evidence-based conceptual models that have been successfully implemented in organisations. Alam and Perry (2002) determined new service development process stages and suggested that customer engagement can be achieved through interviews and meetings. Blazevic, Lievens and Klein (2003) discovered that a medium level of project learning is the ideal condition for service innovation. The authors highlighted the importance of the co-location of project knowledge and decision makers and discovered that the pressure of time-to-market has negative repercussions for innovation process. Oliva and Kallenberg (2003) studied how services could be integrated into products, the process for carrying out this integration and the challenges integral in the transition to services. Qualitative data from eleven different capital equipment manufacturers developing new services for their original products were investigated, and the findings reveal that a deliberate service development process is required in order to shift the customer market from products to services. The study further revealed that the shift from products to a service development process involved no technological difference but a different business model. Matthing, Sandén and Edvardsson (2004) experimentally proved that the information from a customer is much more valuable than that from a professional service designer; therefore, the service development model should collect feedback from the customers. Hipp and Grupp (2005) introduced a new topology to innovate in services, and their study revealed that the perspective regarding

innovation differs between the manufacturing sector and the service sector. Aurich, Fuchs and Wagenknecht (2006) developed a phase model that can assist develop technical services and integrate products and services. The model has been successfully implemented in an investment goods company. The model includes five phases: project study, concept development, service modelling, service testing and service adaptation. The phase model provides a brief overview of the major phases of the technical service development, along with the product. Yang (2007) developed a framework for an organisation's approach to service development in a parallel engineering environment. The framework comprises of several design stages that include process design, quality design, production-management design, capacity design, management design and technical design. These designs can be systematically implemented in a project to advance the performance of the new service. Lee and Chen (2009) revised a model to analyse the customer gap which reveals to managers the direction of service development. Zomerdijk and Voss (2010) presented six service design principles, which are derived from case studies of different organisations. Although these principles are not of a generalised nature, they can serve as a guideline for a number of organisations.

***RQ7:** What are the different methods used to validate the service development models and how can they be improved?*

There are also service development models present in the published literature that are based on anecdotes. They include that of Neu and Brown (2005), in which the authors studied Fortune 500 companies and suggested a framework to successfully develop business-to-business services. According to the authors, external environment, strategy-environment fit, human resources, structure, measurement and rewards, and strategy formation are key for service development. Jaw, Lo and Lin (2010) developed a conceptual framework to understand the effect on new service development of four service characteristics, i.e., inseparability, heterogeneity, perishability and market orientation. The model is further used to examine different service firms in Taiwan. The results depict that heterogeneity, perishability and market orientation positively influence the advantage of service firms in comparison to physical goods. Parasuraman (2010) developed a service innovation framework by synthesising and extending the concepts from the existing literature relating to productivity, quality and innovation. The proposed framework concludes that service productivity, quality and innovation should be considered together while designing services. An isolated focus on these parameters results in suboptimal services. The framework suggested by the author addresses the importance of productivity, and quality and innovation assessed together in general. These studies show that the existing models have an emphasis on considerations that may influence service development. They highlight parameters that must be taken into consideration while developing service and which throw light on service design. However, there has been an under-focus on service idea generation in these studies.

***RQ8:** How can innovative service ideas be established by organisations, startup companies and entrepreneurs?*

Through the literature review, it can be summarised that the larger number of service development models are of a conceptual nature, while a few are derived from anecdotes about successful organisations or qualitative data. The majority of the available models are for organisational settings and suggest recommendations to the managers and leaders to adapt strategies that may result in new service creation.

Orchestrating

From the literature review, six major steps are identified in the service development process. These are planning, idea generation, business analysis, testing, launch and sustainability plan; see Table 2. The existing literature is unanimous as regards these steps; however, different

terminology is used in different articles to refer to these steps. It is also found that the existing literature readily provides guidelines for the planning, business analysis, testing and launch stages: see the corresponding articles listed in Table 2. However, idea generation and sustainability planning need further exploration. Discussions of these in the articles are significant, but practical guidelines that can be implemented in an organisational setting are lacking. For instance, Matthing, Sandén and Edvardsson (2004) experimentally proved that the ideas generated by customers are better than those of professional service developers, but a precise methodology to collect these ideas is not presented. Similarly, a sustainability plan is highlighted as a necessity for service development in several studies, but, in the service development models, practical approaches to implementing a sustainability plan show room for improvement.

RQ₉: *How can innovative service ideas be established by organisations, startup companies and entrepreneurs?*

Analogous to the orchestrating of service development steps, seven service development actors are also identified. They are iterations in the service development process, technology, customer engagement and satisfaction, learning, information, communication, and stakeholders. These are identified as they are the most recursive actors that influence the service development process and there is substantial discussion of them in different publications: see Table 3. These actors play the key role while developing services: see the reference articles in Table 3. Generally, these actors influence managerial viewpoints, which give substantial assistance in service development. Technology is also considered an important actor, but few methods of developing technology-based services have been investigated. Grenha Teixeira et al. (2017) have recently attempted to combine management and technological aspects (interaction design) in service design, but further research into developing services from the newly developed technologies is vital.

RQ₁₀: *How can technology-based services that integrate present and future technology trends be developed?*

From the published literature, it is evident that the service development literature lacks a generally accepted school of thought. The terminology, knowledge base and research methods are still in an embryonic stage. The orchestration of research established in the present study is of a generalised nature because of these challenges. A standardisation of terminology may assist in advancing the research work in a more thoughtful and organised way. Secondly, different researchers have developed this knowledge base based on the findings from their own locale. This has created a diverse knowledge base but one lacking coherence.

Table 2 Service development steps in a nutshell

<p>(i) Planning</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Manzini and Vezzoli (2003) • Aurich et al. (2004) • Aurich et al. (2006) • Lindahl et al. (2006) • Yang (2007) • Kindström and Kowalkowski (2009) • Teixeira et al. (2017) 	<p>(iii) Business analysis</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Aurich et al. (2004) • Perks and Riihela (2004) • Lindahl et al. (2006) • Yang (2007) 	<p>(v) Launch</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Aurich et al. (2004) • Lindahl et al. (2006) • Kindström and Kowalkowski (2009) • Holopainen (2010)
<p>(ii) Idea generation</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Manzini and Vezzoli (2003) • Aurich et al. (2004) • Perks and Riihela (2004) • Aurich et al. (2006) • Lindahl et al. (2006) • Yang (2007) • Kindström and Kowalkowski (2009) 	<p>(iv) Testing</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Aurich et al. (2004) • Perks and Riihela (2004) • Aurich et al. (2006) • Lindahl et al. (2006) • Holopainen (2010) • Teixeira et al. (2017) 	<p>(vi) Sustainability plan</p> <ul style="list-style-type: none"> • Manzini and Vezzoli (2003) • Verganti and Buganza (2005)

Table 3 Service development actors identified in the literature

Actors	Relevant literature
<p>Iterations in service development process</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Perks and Riihela (2004) • Stevens and Dimitriadis (2004) <p>Technology</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Neu and Brown (2005) • Verganti and Buganza (2005) • Aurich et al. (2006) • Den Hertog et al. (2010) • Jin et al. (2013) <p>Customer engagement and satisfaction</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Alam and Perry (2002) • Olivia and Kallenberg (2003) • Aurich et al. (2004) • Matthing et al. (2004) • Hipp and Grupp (2005) • Verganti and Buganza (2005) • Lindahl et al. (2006) • Gottfridsson (2009) • Lee and Chen (2009) • Den Hertog et al. (2010) • Parasuraman (2010) • Zomerdijk and Voss (2010) • Clatworthy (2011) • Jin et al. (2013) • Teixeira et al. (2017) 	<p>Learning</p> <ul style="list-style-type: none"> • Blazevic et al. (2003) • Matthing et al. (2004) • Stevens and Dimitriadis (2004) • Den Hertog et al. (2010) • Holopainen (2010) • Jin et al. (2013) <p>Information</p> <ul style="list-style-type: none"> • Blazevic et al. (2003) • Aurich et al. (2004) • Perks and Riihela (2004) • Stevens and Dimitriadis (2004) • Neu and Brown (2005) • Jin et al. (2013) • Teixeira et al. (2017) <p>Communication</p> <ul style="list-style-type: none"> • Blazevic et al. (2003) • Neu and Brown (2005) • Parasuraman (2010) • Jin et al. (2013) <p>Stakeholders</p> <ul style="list-style-type: none"> • Johnson et al. (2000) • Manzini and Vezzoli (2003) • Perks and Riihela (2004) • Stevens and Dimitriadis (2004) • Hipp and Grupp (2005) • Neu and Brown (2005)

CONCLUSION

It is concluded that conceptual, anecdotal and evidence-based methods are used in the published literature to develop service development models and frameworks. Conceptual models are greater in number as compared to their evidence-based and anecdotal counterparts. The mainstream published models address organisational issues and suggest recommendations for the managers and leaders to adapt strategies that may result in new service creation. It is also inferred that the service development stages agreed by most of the scholars comprise planning, idea generation, business analysis, testing, launch and sustainability plan, amongst which idea generation and sustainability planning have the potential to be improved. The study further reveals that there is scope for studying methods and techniques to develop technology-based services based on the newly developed technologies. The literature on service development is not systematic and lacks coherence. Studies standardising terminology and defining the research agenda are required so that a thoughtful knowledge base can be established. Also identified in the present study are ten research questions that have the potential for valuable future research.

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