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Co-Creation in Business Service Lifecycle Management

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Abstract

Co-creation between customers and providers has recently gained more attention by business service providers as a promising endeavour. The different perspectives of co-creation - innovation, sourcing and marketing - are well deployed. From a provider's point of view, the question of how to manage business services with respect to co-creation is vitally important. However, service engineering and service lifecycle management typically take a mostly internal, closed-loop approach, although a logical implication of acknowledging the value co-creation perspective on "service" would be to leverage customer and other stakeholder competences to the full extent. This paper aims at reconciling the perspectives of co-creation and makes a contribution by analysing where and how co-creation can be effectively utilised throughout the various stages of a generic business service lifecycle. The result will be a framework guiding companies in using co-creation when managing their business services.

Keywords

Co-creation, service lifecycle, service engineering, Business Service Management

INTRODUCTION

Service-orientation is interpreted in many different ways by various disciplines, including economics, marketing, operations, industrial engineering, information systems, computer science and many more (Maglio et al. 2010). According to Edvardsson et al. (2005), however, there are two general approaches within service research: service as a category of market offerings and service as a perspective on value creation.

The first understanding is compatible with the traditional notion of services as offered by the service sector and with the notion of services in the context of IT. In that sense, services have arguably become the dominant force in the economies of the world's most advanced nations and are increasing as an economic force in fast-growing and developing nations such as China, India and others. Hence, there is a growing need for both business practitioners and academics to improve the knowledge base about the different facets of service-orientation and to develop tools, techniques, frameworks and metrics to support excellence and innovation in services across industry sectors (Bitner et al. 2010).

The second understanding is based on Service-Dominant (S-D) logic, which has been positioned as an alternative to the traditional Goods-Dominant (G-D) logic and views "service" (in the singular) as the core of any economic exchange, where the co-creation of value with the customers who experience value-in-use is always involved (Vargo and Lusch 2004, Vargo and Lusch 2008). The evolving discipline of "Service Science" makes an attempt to use S-D logic as part of its theoretical foundation and explicitly positions itself as an interdisciplinary field that examines so-called service systems that interact and co-create value from many different perspectives (Maglio et al. 2010). As Edvardsson et al. (2005) put it: "The new focus in service research today is not on differences between goods and services, but on differences in how we want to portray value creation with customers (and other stakeholders) where the customer's perspective is emphasised."

From the abstract perspective on the creation of value-in-use for customers and active customer involvement as advocated by the S-D logic, "service" and "co-creation" are closely related concepts. However, on a more

concrete level, there is still a lack of integration of service management and engineering approaches on the one hand and forms of customer or stakeholder engagement and co-creation on the other hand (Johnston 2005).

S-D logic rightly has been criticised as being of little immediate managerial value, e.g. because it leads to a classification of all business processes in the service category (Chase 2010). Nevertheless, the strong focus on the importance of value-in-use and co-creation directs attention towards improving the conventional business service management view by increasing the level and quality of customer and other stakeholder involvement.

While co-creation literature emphasises the convergence towards one co-creation experience for provider and customer (Prahalad and Ramaswamy 2004), the area of co-creation itself is also fragmented with different approaches in the areas of innovation, sourcing and marketing. Moreover, a sound understanding of utilising and integrating different approaches to co-creation in holistic lifecycle processes for business services is missing.

Given this context, the contribution of this work is to reconcile the perspectives of co-creation and make a contribution by analysing where and how co-creation can be effectively utilised throughout the various stages of a generic business service lifecycle. The result will be a conceptual framework guiding companies in using co-creation when managing their business services to enhance the customers' experience of value-in-use as propagated by the S-D logic.

The paper has been organised in the following way. First, the paper gives a brief overview of the emerging discipline of Business Service Management describing the generic Business Service Lifecycle of business service providers. Second, the main perspectives for co-creation - innovation, sourcing and marketing - are discussed. Third, both views will be merged into a framework in terms of integrating co-creation in the business service lifecycle focusing on dimensions of co-creation in the different phases. Finally, conclusions are made including a critical acclaim of the proposed framework.

BUSINESS SERVICE MANAGEMENT

There is currently no generally shared understanding of the term "services" in academia or practice (Fasnacht 2009) and how they are distinguished from non-services. In this paper, the focus is on "business services" as autonomous transformational capabilities that are offered to and consumed by external or internal customers for their benefit (Rosemann et al. 2009). The prefix "business" stresses that such a service has a customer value, requires the ability to be managed internally as a corporate asset or product and that its implementation is technology-agnostic. Both non-automated business services (e.g. expert advice from a lawyer) and IT-enabled business services fall in this category.

Since business services have become focal units for the cost-effective creation of customer value and innovation, they are seen as building blocks for organisational and market arrangements in service networks and ecosystems. Furthermore, services provide the opportunity to further promote the widely postulated business/IT alignment, thus requiring the explicit management of business services in organisations. While Service Science takes a relatively broad view on "service systems", *Business Service Management (BSM)* has been advocated recently as the business discipline particularly dedicated to the *holistic management of services* in an organisation to ensure alignment between the needs of the customer and the objectives of the organisation (Rosemann et al. 2009).

Rosemann et al. (2009) propose a BSM Framework that has been developed as part of a project within the Australian Smart Services CRC research initiative and provides a reference model for the development of enterprise-wide service-related capabilities. The framework consists of four clusters. The core of this framework is (1) Service Lifecycle Management covering all stages from service initiation to service retirement. (2) Service Value Management ensures the creation of business value by services and the integration of service-centred activities into the corporate landscape. (3) Service Relationship Management covers the integration with customers and suppliers of services. All these activities are supported by (4) Service Enablement consisting of three management functions addressing quality, data and technology.

An essential component of the strategic side of BSM is *Service Portfolio Management* which explicitly considers the requirements of managing a large set of business services (Kohlborn et al. 2009a). It supports channelling service-related investments by the comparative analysis of services, e.g. to identify services of high strategic importance but poor performance and based on defined normative strategies. A service portfolio will also include services that are not developed yet, but only exist as service ideas. The feasibility of the initial service ideas needs to be analysed in order to make an informed decision about the allocation of resources to realise these ideas in alignment with the overall service portfolio. Since the need and opportunities for service innovation are identified and comparatively assessed in Service Portfolio Management, it is closely related to *Service Innovation Management*, which covers all activities related to the creation of entirely new services or the radical improvement of existing services. Service innovation particularly lends itself to an outside-in view aiming at the engagement of external parties (open service innovation, service co-creation), whether in the form of intensive and very selective partnerships or in the form of an open innovation with a large pool of participants (Web 2.0).

At the core of BSM lays Service Lifecycle Management, which addresses the need for a coordinated and systematic management of services in the different stages of their lifecycle: development (analysis, design, implementation and publishing), operation and retirement (Kohlborn et al. 2009b). From a service perspective, organisations thrive in service ecosystems where their services are used by others (external and internal service customers) and they make use of services of others (internal or external service providers). Therefore, activities related to Service Marketing and Sales and Service Purchasing are also considered, adjoining the core service lifecycle and having multi-facetted relations with the different service lifecycle phases.



Figure 1: The Business Service Lifecycle (Kohlborn et al. 2009b)

The Business Service Lifecycle comprises six phases as depicted in Figure 1. The Service Analysis phase captures all activities required for the identification and contextualisation of a service. Service Analysis can be driven by market requirements (e.g., what services could be profitable offerings?) and/or by various internal artefacts (e.g., strategy maps, process models, data models, application diagrams). In the Service Design phase, the conceptual service design is translated into a more detailed model of the service that can act as an appropriate specification for the actual development and reuse of the service. Service Design is focused on refining the service idea to a degree that the service itself can be implemented afterwards. Hence, more detailed service requirements have to be captured and an elaborate design has to be produced. The successful service design forms the essential input for Service Implementation. In this stage, the actual service is built either resulting in a piece of software with all technical service characteristics or in a marketable and fully executable non-technical business service. The Service Publishing phase comprises all activities concerned with the determination of access rights, costs, pricing models and sanctions in case Service Level Agreements are not obeyed. In the Service Operation phase, the service is in operation, actively consumed and provided. In the Service Retirement phase, the service has reached the end of its economic or technical competitiveness and will have to be taken out of the service portfolio on at least one side (provider or consumer).

PERSPECTIVES OF CO-CREATION

In our modern service-driven economies, traditional business services and IT services are more and more converging and customer demand for personalised service experiences is constantly growing. The fact that service-orientation is increasingly being applied not only to technical architectures but also at the business level to structure a provider's capabilities necessitates new holistic approaches to manage services as first-class corporate assets throughout their lifecycle. However, service engineering and service lifecycle management mostly take a very internal, closed-loop approach, not leveraging customer and other stakeholder competences to the full extent. On the other hand, successful examples such as Apple's App Store and Nike's new engagement platforms indicate that "co-creation" is changing product and service innovation from designing products and services for people to designing with people. The active involvement of customers themselves helps to better fit products and services to their individual needs. While marketing literature increasingly focuses on the S-D logic perspective revolving around the co-creation of value by enterprises and their stakeholders, traditional business and IT service engineering approaches are typically mainly driven from enterprise-internal perspectives. Business service providers will more and more have to become familiar with the thought that market research is no longer sufficient to meet customers' expectations. With the increasing availability and accessibility of symmetrical media technologies such as the internet, all stakeholders have now the possibility to participate in the conversation about business services (Bruns 2010). Customers do expect to have their opinion heard in an equitable way, be treated with respect by the provider, and play a more active role in the co-creation of business services.

In order to identify possible impacts of the integration of co-creation in Business Service Lifecycle Management, one should be aware of the three main perspectives of co-creation. The main ideas of these perspectives will be described in the following.

Innovation

Innovation can either take place in the development of a new service or the improvement of an existing service. Most concepts in literature focus on the first type of innovation. Chesbrough (2003) proposes a new paradigm called Open Innovation. He claims that closed innovation happening in R&D departments can no longer be sustained and a new business model is needed. Tasks formerly executed only inside the boundaries of the firm

are opened up to contributions from the outside. Although offering a good motivation for co-creation, Chesbrough stays on an abstract level concerning the distinction between different lifecycle phases.

Sawhney et al. (2005) describe several Internet-based mechanisms for customer involvement at different stages of the product innovation process. They distinguish back-end vs. front-end stages and different levels of customer involvement. Front-end stages of the process are idea generation and concept development stages, while back-end stages refer to product design and testing. Customer involvement can either be of high reach or high richness, the first representing the number of customers involved whereas richness describes the extent of information gained by the interaction.

An extended notion to cover innovation, development, production and distribution as well as consumption is introduced by von Hippel (2007). The focus of this work however lies in the proposal of horizontal innovation networks which consist only of users and operate independently of manufactures. There is a close link to the Open Source concept described above, but the main contribution is the implication that such horizontal networks can compete with commercial products and hence offer an alternative to unsatisfied customers. For business services, this thread is especially important. Expert consultancy services, for example medical or legal advice, are offered for low or even no cost on the Internet. The trustworthiness of such services is of course another issue which cannot be elaborated on further in this context.

Piller and Ihl (2009) present the most advanced concept of co-creation in innovation. Based on the open innovation concept they consider – amongst others – reflections on the internal organisational structure and approaches for searching, identifying and educating customers. However, just like Sawhney, Piller and Ihl limit their distinction of lifecycle phases to front-end and back-end stages.

Sourcing

For *sourcing*, figuratively speaking, the means of co-creation are skills and knowledge of people. The collaboration of customers and producers has a multitude of different names, the most popular currently being crowdsourcing and mass collaboration, while the underlying idea has been around for much longer. Stating the history of customer involvement is not the aim of this paper. Rather the milestones which bear implications to our topic are presented.

Referring to Open Source projects, Benkler (2001) uses the term peer production which he claims may be superior to traditionally market-based production in some information production activities. Since both human capital and information inputs are unbounded, he argues, economies of scale are more easily captured in peer production than by commercial providers alone. The question of why customers participate is addressed by Benkler as well. The incentive problem, he suggests, "is trivial if a sufficient number of individual contributors can be networked and their various-sized contributions [...] can be integrated into a finished product" with this number being the only limitation in peer production. This problem also lies at the heart of business service co-creation. If all customers would volunteer to dedicate large amounts of their time and resources to participate in the interaction with the provider, co-creation would be a self-propelling process with no effort required on the side of the provider. In marketing this already is the reality, with the provider as the conductor of the communication orchestra. The input required from the customer in co-creative construction of services is much higher and long term-oriented. Thus, motivation has to be analysed at a much different level.

Crowdsourcing combines the crowd, meaning amateurs and hobbyists, with outsourcing, the practise of transferring tasks to third-party suppliers in an effort to save costs (Howe 2006). One of the prime examples mentioned by Howe is the website iStockphoto, where everyone can contribute pictures which are sold to buyers for small amounts but potentially in large quantities. With the advance of digital camera technology, the quality and availability of equipment has become affordable to everyone and contribution has become easy. However, opening up co-creation to everyone might not be the optimum in all cases (Pisano and Verganti 2008), thus crowdsourcing cannot be seen as the answer to the variety of demands in co-creation.

Tapscott and Williams (2006) see mass collaboration as a new economic model of production based on community, collaboration and self-organisation. Hierarchy and control do not disappear but become less important in the value creation process. They proclaim that their new mindset of collaboration, called wikinomics, goes beyond crowdsourcing as it requires fundamental changes in the organisational structures of the cooperation and economy. While Tapscott and Williams manage to give a good summary of existing examples, their work mostly lacks foundation based on scientific theory.

Marketing

As *marketing* is inherently customer-centred, there is an abundance of suggestions on how the customer can be actively involved. One of the milestones of co-creation in this domain is viral marketing. The term was coined by Rayport (1996) and refers to a self-propagating marketing message actively passed from one member of the

customer community to another. A key issue is the fact that the customer might not even be aware of the commercial nature of the message which might be hidden behind content seemingly unrelated to the brand or provider from which it stems. The customer thus might unintentionally act on behalf of the provider, which in most cases sets viral marketing apart from true co-creation as active collaboration has to be based on consent from both sides to participate. However, in certain cases, a customer could contribute a viral message to the marketing campaign of a provider.

Thomas (2004) extends the notion of viral marketing by introducing buzz marketing which he defines to be "the amplification of initial marketing efforts by third parties through their passive or active influence." He proposes to transform so-called uncodified buzz, i.e. information passed on by customers after encountering a new product or service, into codified buzz which is incubated, fostered and underwritten by the provider. The extensive repertoire of tools for this transformation includes, amongst others, trial versions, observable usage, guarantees, customer communities, hosted chat rooms, affiliate programmes and many more. Surprising customers with the ultimate buzz, i.e. delivering exceptional or unanticipated value, will result in the highest levels of customer satisfaction by the elements of positive effect and arousal. While this holds valuable implications on the importance of customers' emotional needs during interaction with the provider, Thomas' view is limited to the marketing perspective.

Customerisation is introduced by Wind and Rangaswamy (2001) as the next stage in the evolution of mass customisation. They claim that it combines mass customisation with customised marketing where advertising messages are transformed from one-way ads to an interactive, customised communication process (Wind and Rangaswamy 2001). The main contribution of this work is the emphasis on capturing marketing from the customers' perspective and the importance of IT support to attain this goal. The main drawback is the limitation of customerisation to the closed search space.

Brand enthusiasts and evangelists are the drivers of citizen marketing (McConnell and Huba 2006). Supported by social media, every citizen, amateur or professional, can create content on behalf of providers, brands or products and thus influence others. McConnell and Huba show positive as well as negative examples of this process in which customers take over the ownership of brand meaning, thereby disrupting marketing traditions. Again, the active role of the customer is highlighted but does not extend beyond marketing aspects.

INTEGRATING CO-CREATION AND BUSINESS SERVICE MANAGEMENT

Basic idea

Within the previous section the three main perspectives of co-creation have been discussed. There is quite a large amount of literature describing co-creation in each perspective. Nevertheless, the link between the different perspectives during the lifecycle of a business service is not clear. A service provider managing business services has to know at which stage which perspective is most helpful and which type of customer should be involved in co-creation. Having the core focus of all three perspectives in mind, we propose to integrate the perspectives as depicted in Figure 2.

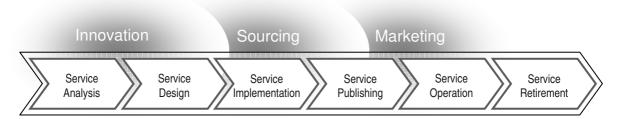


Figure 2: Integrating the Three Perspectives of Co-creation and the Business Service Lifecycle

Innovation is most decisive for the analysis and design of business services. Here, new ideas are demanded to identify the needs of customers and possible ways to fulfil those needs. A provider should integrate customers to incorporate their ideas of the proposed service at the earliest stage possible. If customers are integrated in the first two phases, fewer corrections will be necessary in the latter phases to receive a successful business service over its whole lifecycle. Once the basic design of a service is fixed, incremental improvements of the service are possible, but they cannot be declared as real innovations. In case of the necessity of major improvements of the service, e.g. process innovations, the actual service will reach the stage of retirement. Still, it will be used as input for the renewal of the service, i.e. declared as a new service as major parts will change.

After a service has been designed, *sourcing* is very helpful in deciding how the service should be implemented within the service provider. Here, the provider can (partially or even completely) transfer the responsibility for

the implementation to the customer. Customers contribute their skills and knowledge to the service's implementation. The provider supplies tools and provides advice on how to successfully implement the business service.

Once the implementation has been completed, the publishing and operation phase are driven mainly by the marketing perspective. The customer is asked to help spread the word about the service when it is introduced to the market and in the long term also continuously over the operation phase. The main concern of the provider is to channel these customer contributions into a favourable direction.

The result of integrating the different perspectives is that co-creation can be conducted in all phases of the Business Service Lifecycle except for the last phase, *Service Retirement*. None of the relevant perspectives delivers additional value in this phase, as the service will be eliminated from the service portfolio offered by a provider. If parts of the service will be reused e.g. due to a necessary improvement, the product using these parts will be declared as new service. In this case, co-creation takes place as discussed with the focus on innovation starting a new Business Service Lifecycle.

Having set the framework in which phase of the lifecycle which perspective is most helpful, the question is now how customers can be integrated. Within the proposed framework, the dimensions determining co-creation in the different phases should be analysed..

Dimensions of co-creation

As it has been stated in the basic idea of the framework, co-creation is very useful during the whole Business Service Lifecycle except for service retirement. The different phases in the lifecycle are characterised by different perspectives of co-creation, requiring different types of customer integration in each phase. Customer integration is characterized by a variety of dimensions and influence factors, where the major ones from a business services provider's point of view are described in the following.

- Skill set: The skill set of customers determines to which extent a customer is able to participate in cocreation. Basic types of skill sets are (1) professionals, (2) developers, (3) advanced users and (4) ordinary users (Kristensson et al. 2004). The skill set necessary is mainly dependent on the complexity of a business service. As an example, Netflix invited customers to take part in a programming contest to create a new algorithm suggesting other DVDs of interest on their online rental platform. In this case, customers with no experience in programming could not participate.
- Socialising: Customers can be integrated individually or as a group. Sometimes it makes sense to integrate customers independently, e.g. in the operational phase where a service is consumed by individuals. In other cases, the integration of customers being connected is more useful (Nambisan 2002, Piller and Ihl 2009). This could be e.g. a technical support forum on the internet, where customers answer requests by other customers with representatives of the provider being involved in the discussion.
- Interaction intensity: Here the question is to which extent customers are allowed to bring in new ideas. This can be strict, having a lot of predefined settings, on the one hand or a complete open interaction allowing for a large extent of co-creation on the other hand. The extent of co-creation feasible is decreasing during the lifecycle of a service (Piller and Ihl 2009). In the early phases of the Business Service Lifecycle, the search space has to be wide open to enable innovation. Once the service is getting increasingly mature, more and more characteristics are defined narrowing the possibilities of interaction. Nevertheless, mass customisation, allowing customers to select options from a closed predefined set, is not in our focus. The inherent dilemma, leveraging high volumes to achieve economy of scale and at the same time having to tailor products to specific needs has been solved by technology (Davis 1989).
- *Time investment*: The time aspect is also very relevant for determining customer integration. One aspect is the time required to be contributed by the customer in a certain phase of the lifecycle for a business service. Some co-creation, like the development of the Netflix algorithm mentioned above, demands a lot of time and a rather long-term commitment. In other cases, the time needed is very short like e.g. a contribution in a forum. Another aspect is the relationship of customers and provider over time. For some purposes it is really helpful to establish a continuous long-term relationship with certain customers (Nambisan 2002).
- Customer selection: An important aspect within co-creation is the selection of customers, i.e. the number and characteristics of customers that are allowed to engage in co-creation. This could be open for anyone who wants to participate or restricted to specific customers selected by a provider. Not every customer might be suitable for a certain purpose depending on the required input for the service in the different phases of the lifecycle (Pisano and Verganti 2008).

Based on the previous analysis (including the perspectives of co-creation) a general mapping of the characteristics of the dimensions to the phases of the Business Service Lifecycle can be derived. The result is shown in Figure 3.

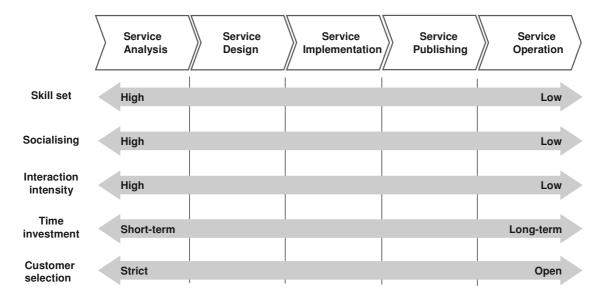


Figure 3: Characterisation of Dimensions of Co-Creation over the Business Service Management Lifecycle

According to the perspective of innovation, which is most relevant for service analysis and service design, the cocreation is highly creative. Therefore the *skill set* demanded should be high. A high skill set is still needed within sourcing and service implementation respectively, but the necessity is decreasing because the solution space has become closer. Within marketing, a much lower skill set for co-creation is required, especially when it takes place within service operation. In this phase the focus lies more on consumption than on co-creation.

To derive new innovative ideas for services, *socialising* should be intense to enable a close collaboration of customers involved. The necessity of socialising is decreasing over the lifecycle as consumption of a business service within service operation mostly takes place individually. Therefore, the co-creation in operations will be more focussed on individual customers, too.

Innovation also demands an intensive *interaction* in co-creation because of the early stage of the service where the scope of possible service designs is very broad. Sourcing possibilities in the implementation phase are often driven by the chosen design but still allow for variety. Within marketing, the interaction intensity is lower as a certain customer need has been identified and a specific product is now published and delivered. During operation the possibilities for co-creation are low as the most characteristics have already been defined.

The customers' *time investment* for analysing ideas for new services and their design should be limited to a short-term interaction. If a certain customer need has been identified, the development of the respective business service should be done fast as time to market is a major success factor. After the service has been designed, the duration of the customer-supplier relationship has to be increased as marketing relationships are most successful on a long-term base. Due to profitability aspects of the service, the time investment of customers for co-creation in operations should be as long-termed as possible.

Customer selection should be very strict in the phases of analysis and design. As innovation is a challenging but important task, customers should be chosen carefully. Otherwise the expectations of e.g. delivering a highly innovative service with a fast time to market are hard to reach. This also holds true for sourcing, where the chosen design will be implemented. Still, a less rigorous selection is possible due to the more mature stage of the service. On the other hand, marketing is aiming at publishing the service, thus requiring as many customers as possible for participation to maximize coverage. During the operation phase, the business service's co-creation experience should be open to nearly everyone in order to raise the profitability of the service.

Nevertheless, the characteristics of the dimensions are highly context dependent. The grading should be seen as basic guideline on how to determine the dimensions of co-creation throughout the Business Service Lifecycle rather than a strict definition. A provider integrating co-creation in a business service should be aware of the dimensions and use the framework as guideline for the prioritisation of instruments for co-creation.

Limitations of co-creation

Although customer integration offers great opportunities for providers to improve their service lifecycle management, there are also some limitations. For example, compared to mass customisation, the unlimited openness of the search space might be hard to manage. Customers might be overwhelmed if the number of choices available becomes large, which might even lead to a less satisfactory experience (Wathieu et al. 2002). Furthermore, co-creation is based on voluntary participation. Hence, a customer would soon lose interest if the process is not transparent or overall not beneficial. Ideally, of course, the co-creation process creates equal benefits for both providers and customers.

Piller and Ihl (2009) elaborate on the paradox of customer integration into innovation: while on the one hand integration is often seen as positive per se, some authors see it as harmful to innovation. In case providers only listen to the customers' current needs, future investments will be neglected. A quote by Apple CEO Steve Jobs illustrates this argumentation: "You can't just ask customers what they want and then try to give that to them. By the time you get it built, they'll want something new" (Gendron 1989). Furthermore, the provider tends to be biased not only towards listening to its current customers but among these, to its most important customers (Sawhney et al. 2005). However, in an analysis of different empirical studies, Piller and Ihl (2009) find a general consensus on the benefit of customer integration for innovation. Benefits, for example, include the consumercentric problem perspective and the addition of details, even though the contributed ideas are often already known (Füller et al. 2006). Additional concerns raised by Enkel et al. (2005) are the loss of know-how, the dependence on customers and misunderstandings. Overall, the risk of customer involvement lies in the possible raise of the general level of uncertainty (Auh et al. 2007). While this cannot generally be refuted, we believe that the risks of co-creation have to be weighed against its benefits.

CONCLUSION

Co-creation is a promising idea for service providers to offer more successful business services. Through the increase in availability of symmetrical media technologies like the Internet, providers have more and more opportunities to get in contact with customers to conduct co-creation. But the management of co-creation within the lifecycle of business services is crucial for a successful interaction. Integrating the wrong customers with wrong expectations will not lead to a valuable contribution. The proposed framework aims at structuring aspects of co-creation during the various stages of a generic Business Service Lifecycle and makes a contribution by analysing where and how co-creation can be effectively utilised throughout this lifecycle. A service provider can use this framework to derive implications for proper types of co-creation and use the framework as guideline for the prioritisation of instruments for co-creation.

Despite the positive aspects highlighted for the proposed framework, there are some limitations. The framework delivers no concrete concept how co-creation should take place. It is rather a guideline how a provider can include co-creation in the management of business services over their lifecycles. It delivers the main dimensions a provider should be aware of and how the degree of integration should be prioritised. Still, up to now it is only a conceptual framework based on existing literature. The next step of research should be an empiric evaluation to gain more experience of its applicability and to concretise the characteristics as well as the most suitable instruments of the dimensions in the respective phases. Especially the limitations in each phase should be analysed and specified with respect to the dimensions.

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