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Discretion and complexity in customer focused environments

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KEYWORDS
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Task discretion;
Co-creative operations

Summary Operations have traditionally focused on reductive analysis; transactional processes open to mass-customisation and standardisation. This study proposes that service complexity created by extensive 'reasonable' customer demand limits the ability to standardise and manage systems through mass-customisation. Beyond mass-customisation we propose management is by discretion. Discretion is difficult, if not impossible to codify, so operations are 'managed' via framework principles that also are difficult to replicate and provide a source of sustainable competitive advantage. The study furthers the servitisation discussion through a public sector services case.

Introduction

With changing and challenging market conditions, goods and service providers have worked to become more customer centric (Gebauer, Gustafsson, & Witell, 2011). In this regard, firms may develop an array of services to create a valuable offering to attract business customers and generate a sustainable competitive advantage for the company (Vandenbosch & Dawar, 2002). A body of research has explored the use of service offerings to enhance firm competitiveness in the private sector. But in the public sector conditions may be quite different. This study investigates service operations in the context of public services. It asks the overarching research question: how can services provision be successfully employed in the public sector? This is explored with the specific case of Sutton Borough Council. The structure of the paper is as follows. First the service operations literature is discussed in relation to the particularities of public sector provision. Three relevant characteristics are identified: the importance of emphasising end user experience, the necessity of proposition alignment among stakeholders, and control of complexity to enable manageable task discretion. These findings are then further explored in the Sutton Borough Council case on crime prevention.

Service response

This section explores a range of service operation concepts to frame the study in the relevant literature. Given the particularities of the Sutton Borough case context, this section explores the notion of service operations in general, and then further develops the theoretical discussion on service provision with a focus on customer experience.

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The boundaries between products and services are increasingly blurred, with many manufacturers offering services in support of their products (Heineke & Davis, 2007). Similarly, many service companies employ processes and methods developed in manufacturing operations, creating hybrid product-service transformations. Such offerings include services, defined as activities or performance provided to satisfy customer needs, whereas goods are tangible products or stable intangible assets. The mix may range from pure tangible goods, through hybrid goods and services, to pure services. The development can be described as a progression from product and accompanied product-related services to treating services more as a business, and finally process-oriented or relationship-oriented services. The service concept has been subject of much debate, with many definitions of service suggested. Shifting from differences between services and goods, recent definitions tend to be more externally oriented and more explicitly focused on the customers (Vargo & Lusch, 2008a, 2008b). Vargo and Lusch (2008a, 2008b) further distinguish between service as a process and services as intangible units of output, which has been adopted in the study too.

Technological progress has both enabled and hastened the pace of change in the way products and services are made and offered. For instance, the use of information systems makes business process outsourcing viable to many companies. Operations strategies are thus employed by firms to better configure their operations in the delivery of integrated product service systems (Datta & Roy, 2011). Several concepts have emerged that encompass the reality of manufacturing and service firms, ranging from product-service systems, servitisation and high value manufacturing. Services in operations may be described as a complex interaction of three transformations; 'material-processing operations', 'information processing operations', and 'people-processing operations' (Ng, Parry, McFarlane, & Tasker, 2011). Firms that seek to offer a fuller market package of customer focused combinations of goods and services and the transition of companies has been termed servitisation (Vandermerwe & Rada, 1988). Servitisation creates a conflation of what were traditionally viewed as product and services which has given rise to a variety of different business models. Depending on the emphasis of the resultant model they may be described as product-service systems, experiential services, services sciences and service-dominant logic. But as products, services and product-service bundles become commoditised to the customer, firms may shift focus on the value gained 'in use' (Ng et al., 2011; Vargo & Lusch, 2008a; Vargo & Lusch, 2008b). This means that the customers experience in being able to successfully realise value becomes an integral part of the offering, and that at least part of the production design should explicitly aim at emotional engagement of customers (Fitzsimmons & Fitzsimmons, 2005; Hartsuiker, 2008; Heineke & Davis, 2007). Following Prahalad and Ramaswamy (2004) and Ordanini and Pasini (2008), value is here determined not through the products and services themselves, but by the value they co-create with their customers. The ability to design services which support all parties in the processes of value co-creation, 'co-opting the customer' into creating the experience, could become a source of competitive advantage for the firm. As such, there has been an extension of the process-focused shift towards greater customer involvement (Roth & Menor, 2003; Sprague, 2007). Research on service operations has also incorporated behavioural considerations, as discussed by Boudreau, Hopp, McClain, and Thomas (2003), Bendoly and Hur (2007) and Heineke and Davis (2007). This aspect of service operations is explored next.

Despite the recognised importance of the customer in the creation of value, research has largely presented business-to-customer delivery case examples with little focus on the contribution made by the customer in the realisation of an experience (Bendoly, Donohue, & Schultz, 2006). The early work of Vandermerwe and Rada (1988) which introduced the term servitisation used a language of 'value add' for example, ''corporations throughout the world are adding value to their core corporate offerings through Services'' and ''added value in customer offerings is going into services''. Such language does not implicitly involve the customer and their resource as part of the value creating process. It has been claimed that the outcome of services is improved by the participation and enhancement of dialogue with the customer (Lovelock & Young, 1979) and that both value and quality are perception based. Therefore, to achieve desirable outcomes, perceptions must be understood and managed as an integrated part of service operation (Bitner, Faranda, Hubbert, & Zeithaml, 1997; Ng, Maull, & Yip, 2009). Pine and Gilmore (1999) and Fynes and Lally (2006) extend this approach to include offerings which create emotional connections which may be revealed over time, and elements which require the active participation of the customer.

The customer's experience becomes an integral part of the offering, and production design should consider the emotional engagement of the customer (Heineke & Davis, 2007; Sampson & Froehle, 2006). Value is determined not through the product or services, but by the value it creates as perceived by their customers; a process requires that managers understand the value proposition of both, and capturing this interactive process is important for successful product definition, development and delivery. Using the passive/active and absorption/immersion axis classification of Pine and Gilmore (1999) to differentiate various customer experiences, experience-based operations fit in the immersive and active category. This means that the customers actively participate in and are an integral part of the offering, and in that manner co-create the offering (Hartsuiker, 2008; Prahalad & Ramaswamy, 2004). As shown by Martin and Pranter (1989), experiences are also influenced by other customers, who may, through crowding, unruly or unanticipated behaviour negatively impact on the services quality. Thus, employed processes must take into consideration a range of factors that may influence the customer experience.

Services may entail offerings that are relatively more tailored and complex than standard offerings (Vandermerwe & Rada, 1988), since the customer interaction and customisation imply a relatively high degree of flexibility (Arias Aranda, 2003; Javalgi, Whipple, Ghosh, & Young, 2005). This places emphasis on service flexibility and services variety (Pine & Gilmore, 1999). Modularisation is one approach to manage such demand variety efficiently. We propose that enabling such experienced-based offerings and associated

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operations require managerial focus on two concepts — *proposition alignment* and *complexity control*. The first covers coherent alignment between all stakeholders, while the latter explores the necessity to reduce complexity through standardisation and variation control to ensure quality in the offered experience. The meaning and role of these two concepts are discussed next.

Proposition alignment

A challenge in designing and delivering services is that conflicts may arise among stakeholders due to the need to share work and revenue, which adversely affect the value offered to the end user (Kim, Kosuke, & Beiter, 2010). In a service context, the extended value chain furthers the number of stakeholders and their roles, while service provision in the public sector may suffer from poor interest alignment among the different stakeholders. Proposition alignment means that the offering experience should be coherent from customer contact and supply chain partner perspectives. Complex service delivery inevitably involves complex organisational solutions which places pressure on firm relationships along the value chain (Purchase, Mills, & Parry, 2011). Firms with different but complementary competences are necessarily driven by different value propositions and as such have different value perspectives, aspirations and fears (Mills, Parry, & Purchase, 2011). Thus the challenge lies in relationship and the alignment of the value propositions such that the offering is experienced as coherent. In experiential terms, this has resonance with the person-centred psychotherapeutic concept of 'congruence' where the internal feeling and external expression are consistent; a state perceived by other parties as sincerity.

Aggregating the perspective and following the classification of the touch point wheel (Davis & Dunn, 2002), there are distinct customer-experience segments — pre-purchase, purchase and post-purchase experiences — or Promise-Experience-Memory (PEM). Experience is determined by the end user, or customer, reaction to all three experience segments. The enterprise must be aligned such that the promise, experience and memory of the service are all coherent (Zomerdijk & Voss, 2010). Similar to value stream alignment in traditional product offerings which features prominently in value-focused processes such as lean, the alignment ensures that all supply chain parties focus resources on the given value offering. PEM-type constructs become challenging when we recognise that the end user must utilise their resource to co-produce the offering (Pine & Gilmore, 1999). So the alignment is not only more complex due to a larger number of participants, but also due to the two-way interaction between involved parties. The ability of firms in an enterprise to achieve such alignment is subject to emergent service experiences, as value in use is context specific. Further adding to the complexity, parties bring different contexts at different times, changing the experience and memory that will emerge for all parties who are interacting and seeking value. So with any given service promise the enterprise must be able to absorb variety (to some extent) to deliver valuable experience. Such emergent phenomenon of systems and outcome experience relate to the complex nature of service and thus designing for service experience requires an understanding of complexity.

Complexity control

The second concept that management should explore is complexity control (Amaral & Uzzi, 2007). Designing services that can cope with demand variety to deliver a standard experience will undoubtedly remain a key operational issue. An early adopter of production concepts in services, application of scientific management to its operations was the key factor underlying McDonald's early success (Chase & Apte, 2007). It arguably exhibits process applications to a greater degree than do many manufacturers in its main operating principles, such as standardisation and reduction of product variety, simplification and automation of processes and performance monitoring and control. The multitude of contexts that customers and suppliers bring suggests that variety of offering must be high, and firms and supply chains must have the flexibility to absorb the many different realistic demands placed on them to produce desired experience outcomes.

Hence, while product variety-based competition may be declining as a competitive strategy, mass-customisation remains an essential production strategy for satisfying varied customer demand while retaining relatively low costs (Liu & Cui, 2010; Zhang & Krishna, 2007). As with other production processes, such an approach works best in reductionist environments where transformational tasks can be controlled (Purchase et al., 2011). Given the great variety in possible customer expectations and preferences, task discretion becomes more difficult to codify or indeed manage in a service environment. Discretion here is the freedom or authority to make judgements and to act as one sees fit, which is understood as the role holder's ability to make procedural decisions (the independence from others when making those decisions). In customer contact service models (Metters, King-Metters, & Pullman, 2006) task discretion is controlled by limiting customer interaction to predefined encounters. But this is often unfeasible in experience-focused settings. Instead, institutions need the capability to manage customer interactions in relatively unscripted manners. This may require differentiation of work roles according to task discretion (Chase & Apte, 2007).

Unlike traditional product and services, offerings with a significant experience-based element typically if not necessarily involve several interaction points with customers. This provides many opportunities for value added activities, but also many opportunities for mistakes or failure to realise customer expectations. To ensure offerings meet customer expectation, end user or customer involvement in the offering must be combined with techniques for task discretion to prevent human error (Conti & Warner, 1997; Lagergren & Kaulio, 2011). Organisations need to, and often do, pay attention to their front line staff and the services they provide. The distinction between high- and low-contact customer systems provides a basis for classifying service production systems. Following Chase's (1978) customer contact model of services, the less direct contact the customer has with the service system, the greater is the potential of

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the system to operate at peak efficiency since the transformation of products is easier to manage when customer interaction is limited. This results in the practice of decoupling services into front-office and back-office operations, with the former responsible for the high-contact elements of work and the latter taking care of the low-contact elements (Metters et al., 2006). Back-office work can be detached from the physical locations that deal with the customers and relocated. However, in settings where such a split is not viable, greater emphasis is placed on operations having the customer experience in mind in both design and employment stages. In experience-based operations, the closer interaction between customers and staff also means that links between internal and external services quality are more immediate. The two may even be difficult to distinguish, making it unfeasible to have too great a disparity between back- and front-office and customer conditions.

Service-focused and experience-based business models are reliant on the labour element in creating competitive advantage and giving strategic opportunity to those capable of its development and sustainment (Heskett, Sasser, & Schlesinger, 1997). It can be challenging to reduce complexity of staff-customer interactions through standardised and scripted responses while retaining the competitive advantage gained through personalised offerings. Its delivery requires devolution of power to frontline staff to act appropriately and in the best interest of the business. This greater degree of discretion places emphasis on selection of both staff and customers, and on planning and control of uncodified interactions between sales staff and customers to ensure the latter have a positive experience. It may be achieved by instilling a strong business culture, though this should be instilled from a firm's inception (Hsieh, 2010). PEM alignment may be achieved and performance better assessed through an on-going audit of likely context and desired experience, as opposed to current pre-set performance metrics (Davis & Dunn, 2002). Making requirements for customer co-production explicit may further engage users emotionally. By being involved in the production of a product, consumers are likely to be more engaged with the brand, resulting in higher value compared to a traditional transaction process whereby buyers and sellers would interact only briefly to exchange cash for finished goods. It may also give rise to fresh ideas and new ways of conducting business (Christodoulides & Jevons, 2011).

Case implication

The conceptual argument provided in this study is next referred to in the case example linking Sutton Borough Council in London with the Metropolitan police and local groups with a stated aim ''to make Sutton the safest borough in London'' (Andreu, Ng, Maull, & Shadbolt, 2011). Since safety to a large extent is perceptional rather than the actual risk of being a crime victim, service design must aim at the emotional element of the customer engagement (Fitzsimmons & Fitzsimmons, 2005; Hartsuiker, 2008; Heineke & Davis, 2007). Similarly, in the Sutton Borough, community interaction with Council and Police sets the experience value, in particular since perception rather than actual safety plays big role in community behaviour and crime fear. As such, the citizens co-create their experience with the various council staff (Ordanini & Pasini, 2008; Prahalad & Ramaswamy, 2004). The case study covers services characterised by significant customer interaction and complexity. The former characteristic follows partly from the involved role the citizens have in crime prevention, and partly from the role fear and perception plays. The latter characteristic arises because crime prevention involves a large number of diverse stakeholders who may have different agendas and ways of operating. This in turn impacts on the degree of effective planning and control that can be put in place, as well as aligned management instruments such as performance measures and communication.

Services all have pre-set target outcomes, but given that individual actors both draw on and provide these services, they are heavily context specific. The service delivery must cover systems and processes required to design and manage effectively in such a co-creating and non-standardised environment. This prohibits the simple transfer of processes and techniques taken from more standardised production and service settings, while the lack of structured process is likely to be both costly and difficult to organise and manage. In addition, planning and control of such uncodified interactions between sales staff and customers require on-going performance assessment as opposed to pre-set metrics (Hsieh, 2010).

In dealing with crime prevention and the fear of it, the Council provides services characterised by significant customer interaction and complexity, dealing with direct and indirect aspects of crime prevention and maintaining order as well as covering a range of stakeholders. There is a wide range of stakeholders and the population is heterogeneous, which increases coherence complexity, and indirectly also gives rise to potential difficulties in ensuring value alignment. To ensure person-centred congruence (Rogers, 2004), coherent services must be employed across the Safer Sutton Partnership Service participants to ensure that all receive similar treatment. Such standardised service helps set expectations, which in turn affects perception (Bradley, 1998; Scribbins, Flatley, Parfrement-Hopkins, & Hall, 2010). The alignment necessitates that stakeholders are informed on decisions made and act in agreement, both with an emphasis on the end user rather than immediate customer or interest. For any public organisation that needs to please its customer (the state) and its end users (its citizens), such alignment may be less straightforward than in other sectors.

To successfully provide experiences that customer desire, relevant components that impact the experiences must be incorporated deliberately and from the outset (Pine & Gilmore, 1999). Operations with a greater degree of customer interface necessitate particular consideration to the physical environment. Such 'servicescapes' are designed to influence customer and employee behaviour and their perceptions (Bitner, 1992). In crime prevention and crime perceptions, the local authority cannot control the environment to the high degree possible on the factory floor or an office environment. But physical manifestations that to citizens suggest a higher likelihood of crime being committed can be tackled. These include poor lighting, broken house

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or store windows, and wall graffiti. Ensuring that such problem areas are improved needs to be a priority in addition to appropriate physical environment, implemented processes and sufficient staff, and managers must also incorporate behavioural components. Fynes and Lally (2006) and Voss and Zomerdijk (2007) emphasise the participation element, which suggests that the citizens must themselves be active in crime preventive measures to ensure a fully involved and valued experience. Relying on the Police or local authority may not be sufficient.

Crime management services are difficult to standardise effectively, which means that there is a significant reliance on a high degree of task discretion among frontline staff. Moreover, it is in the interest of both Sutton Borough staff and the community to allow for such devolution of power to frontline staff, and allow them to act appropriately and in the interest of community. This allows for potentially more customised services by the Borough, as well as enriching staff working conditions. For more dependable quality provision, in customer contact service models the task discretion is controlled by limiting customer interaction to predefined encounters that can be designed so that task discretion and staff skill is kept to a minimum (Metters et al., 2006). However, this is often unfeasible in experience-focused settings, where there is a need to manage customer interactions in a relatively unscripted manner, and a multitude of actors are involved at the various PEM stages (Davis & Dunn, 2002). In this case, purchasing stages are approximations for the worry of crime. And in the case of crime prevention and perception of crime, this applies to a great degree, since there are a large number of conditions at play; previous personal experience, background, specifics of individual events and so on.

The customer involvement also necessitates the use of foolproof design to ensure that their own actions do not inadvertently affect experiences negatively (Bendoly et al., 2006). If employed correctly, such poka-yoke techniques provide the benefit of reduced customer discretion while simultaneously retaining their feeling of control. The former is necessary to meet quality standards and, in turn, customer expectation. Such expectation management is vital in the design and management of service operations.

So there is a need to modify the existing back/front office split, moving away from the typically proposed open access and interaction approach to a more closed one where the Borough citizens only have (limited) visibility to assigned front persons. The latter should be part of the Safer Sutton Partnership Service, but have dedicated and exclusive citizen-interfacing roles. This also means that job roles must be set according to required task discretion degree (Chase & Apte, 2007; Conti & Warner, 1997; Ritchie & Angelis, 2010). In a normal product or services context, categorisation of job families is useful because it clarifies where operations can be standardised and where highly skilled staff is needed. However, in an experience-based environment it is the frontline staff, and possibly the lowest trained staff, that has the greatest degree of customer involvement. And in this interaction the degree of task discretion may be difficult to fully take out, which may necessitate investments in higher skilled workers or more training. Automation can be employed to reduce discretion, for instance, through the use of scripted responses to customer requests. But such deskilled tasks do not fully utilise staff, nor do they help in attracting skilled employees, or in creating a satisfying experience for distressed citizens. Instead, functional flexibility may allow for staff rotation (Van Hootegem, Rik Huys, & Delarue, 2004), enabling for greater staff assignment selection, simplifying recruitment for given tasks, and quite possibly improving crime fighting as well since it allows for dedicated teams.

It may be advisable to increase control of the citizens' fear of crime and related experiences by shifting its focus to more manageable elements. After all, the perception of quality in the crime fighting is influenced by outcome as well as its process (Martin & Pranter, 1989). Such an approach may entail a resource re-allocation of Police and Council staff in the way they interact with the community to ensure locals are not worried about potential or real crime in the area. While similar in nature to Police patrolling, emphasis is on perception management rather than crime fighting. These encounters can be with or without physical presence depending on allocated resources. Such an approach also allows for improved risk management, which is a key element in the Sutton Council strategy plan.

Conclusions

This study extends the services provision to emphasise the end user experience in the value provision, and explores how the necessary discretion in the services offering can be managed effectively. This is illustrated with the Sutton Borough Council case. We argue that successful experience-based operations require managing the often conflicting elements of opening up the value chain to the end-user or customer in pursuit of co-creating value, and the need to control the experience through reduced complexity and discretion. The challenge the Sutton Borough Council faces is to reduce complexity of staff-customer interactions through standardised responses while retaining personalised experience to deliver quality services — a feeling of safety in this case. This may sit poorly with services provision and the underlying operations, both conceptual and empirical, and in particular with those that have a substantial experience element in them because of the greater variety involved. Contrary to servitisation theories, it may be necessary to reduce the co-creation part when the experience and perception element is substantial because of difficulties in controlling experiences in an effective manner. Further research is needed on the management of co-creation, in particular in settings with multiple stakeholders and a combination of customers and end users to consider. As such, the limits of co-creation in services provision, and its operational impact, can be explored in a model on servitisation employing complexity and discretion control for improved performance.

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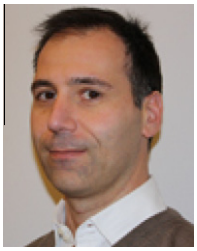

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