

SERVITIZATION - TRANSITION FROM MANUFACTURER TO SERVICE PROVIDER

<Service Science>

Kryvinska, Natalia, University of Vienna, Vienna, Austria / Comenius University in Bratislava, Bratislava, Slovakia, natalia.kryvinska@univie.ac.at

Kaczor, Sebastian, University of Vienna, Vienna, Austria, sebastian.kaczor@gmx.at

Strauss, Christine, University of Vienna, Vienna, Austria, christine.strauss@univie.ac.at

Gregus, Michal, Comenius University in Bratislava, Bratislava, Slovakia,
Michal.Gregusml@fm.uniba.sk

ABSTRACT

Purpose – The concept of servitization is driven by general business environment aspects like decreasing profit margins and revenues in manufacturing and equally internal drivers concerning financial, strategic and marketing aspects emerged. Consequently, higher margins on services tempt financial consideration, whilst the competitive advantage due to differentiation drives strategic aspects. Also marketing issues are tackled since servitization pushes sales and tightens customer relationships. In fact, it is necessary to be aware that although servitization exclusively deals with services, its origin and motivation arises from the manufacturing industry, since services are augmented elements of the tangible products offer.

Design/Methodology/approach – The aim of a company applying servitization is constituted by gaining certain advantages concerning financial, strategic or marketing tasks, through operating somewhere on the transition line between the product service continuum. In order to maintain this, a three-level approach is proposed. The initial level introduces the first step to go on with the transition from a strategic point of view, via a four-step framework. Consequently, the second level operates on the strategic business unit (SBU) stage, examining companies existing capabilities to choose the proper implementation of servitization. Ultimately, the third level elaborates a six-step framework concerning success factors in service and completes the transition.

Findings – The paper provides guidelines for conducting the transition towards servitization. Accordingly, it elaborates a certain route map to ease the access for this approach. Consequently, it

examines strategic considerations concerning prospective businesses, with regard to existing capabilities in companies. It also depicts success factors considering a service business to complete the transition to servitization.

Research limitations/implications – This is a conceptual paper, based on a detailed literature review. Thus, it proposes a route map for the transition toward servitization, which in turn opens possibilities for further research in this area.

Practical implications – The aim of servitization is to co-create value with the customer in order to gain benefits by enriching its product offers with services. And, since the desired value co-creation is carried out by the underlying services, it is crucial to know about their characteristics and modes.

Originality/value – The servitization does not represent a certain mode of applying a service to a good, but a transition from a manufacturer to a service provider. Thus, the paper contributes to the understanding of organizational restructuring, developing new capabilities; and a change of the business model from transaction- to relationship-based.

Key words Service, Service Science, Servitization, Service Economy, Value Co-Creation

Paper type – Conceptual paper

1. Introduction

Entrepreneurial decisions very often include steps and its transition processes towards new uncertain developments. In order to provide a guideline for conducting the transition towards servitization, this paper elaborates a three-level framework. Accordingly, the first section elaborates a certain route map to ease the access for this approach. Consequently, the second section examines some strategic considerations concerning prospective businesses, with regard to companies existing capabilities. The third section depicts success factors considering a service business to complete the transition to servitization.

2. Transition Route Map

In fact, servitization does not refer to a certain mode of applying a service to a physical good, but rather to the transition from a manufacturer to a service provider. Consequently, this evolution is characterized by several benefits for both customer and supplier but also implicates considerable challenges (Baines et al., 2009; Neely, 2008; Oliva & Kallenberg, 2003). According to above, one has to consider organizational restructuring, developing new capabilities and even the change of the business model from transaction- to relationship-based, which states a substantial challenge for management since most tasks are new for them. Finally, the aim of a company applying servitization is constituted by gaining certain advantages concerning financial, strategic or marketing tasks depending on the state of transition in the product-service-continuum. Oliva & Kallenberg (2003) illustrated the product/service transition underpinned with entrepreneurial strategic issues (cf. Figure 1).

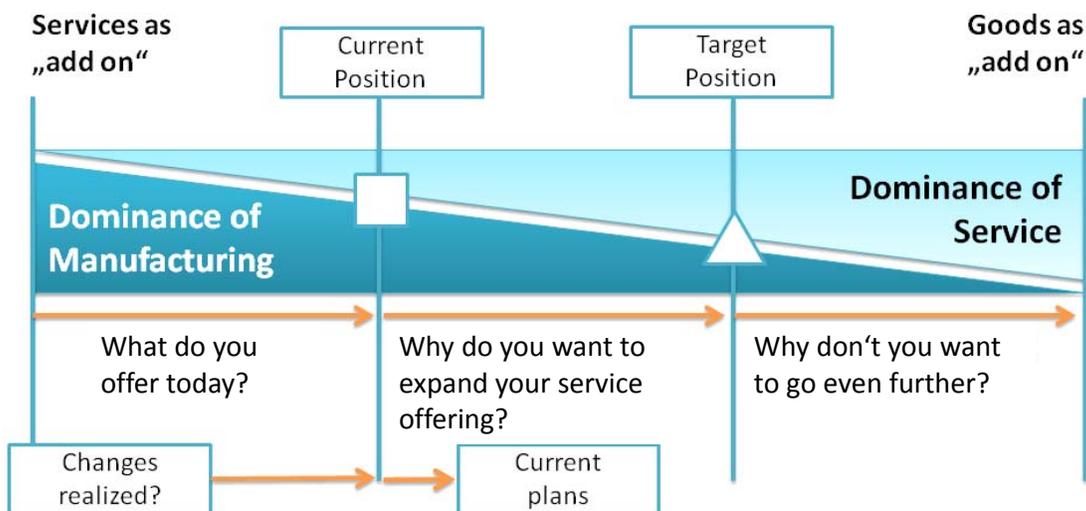


Figure 1. Product/Service Transition (Source: own illustration according to Oliva & Kallenberg, 2003).

As illustrated in Figure 1, the product/service transition comprises two extremes, manifested by the pure manufacturer on the one side treating services merely as “add-ons”, and the pure service provider on the other side considering goods as “add-ons”. Moving along this transition line represents several diverging options of servitization, which alter with regard to the extent of service dominance (Gebauer et al., 2005). Consequently, the procedure of servitization starts with the evaluation of one’s current position, which is followed by pondering the trade-off between desired benefits and prospective challenges on the way to the required target position (Oliva & Kallenberg, 2003). Nevertheless, from an entrepreneurial point of view it is difficult to trigger and bring forward such a complex approach. can be separated into four stages comprising a servitization route map (Mills et al., 2008; Oliva & Kallenberg, 2003). Accordingly, Figure 2 presents the servitization route map and summarizes the various transition processes aiming at the incorporation of services into a company’s product portfolio.

The first step (cf. “Transition 1” in Figure 2) of this route map regarding the consolidation of product-related services stems from the assumption that most manufacturing firms provide services anyway in order to sell and support their products. Since they emerged from diverging parts within the organization they barely contribute solid revenues and are therefore considered as unprofitable necessity to sell the product (Mills et al., 2008).

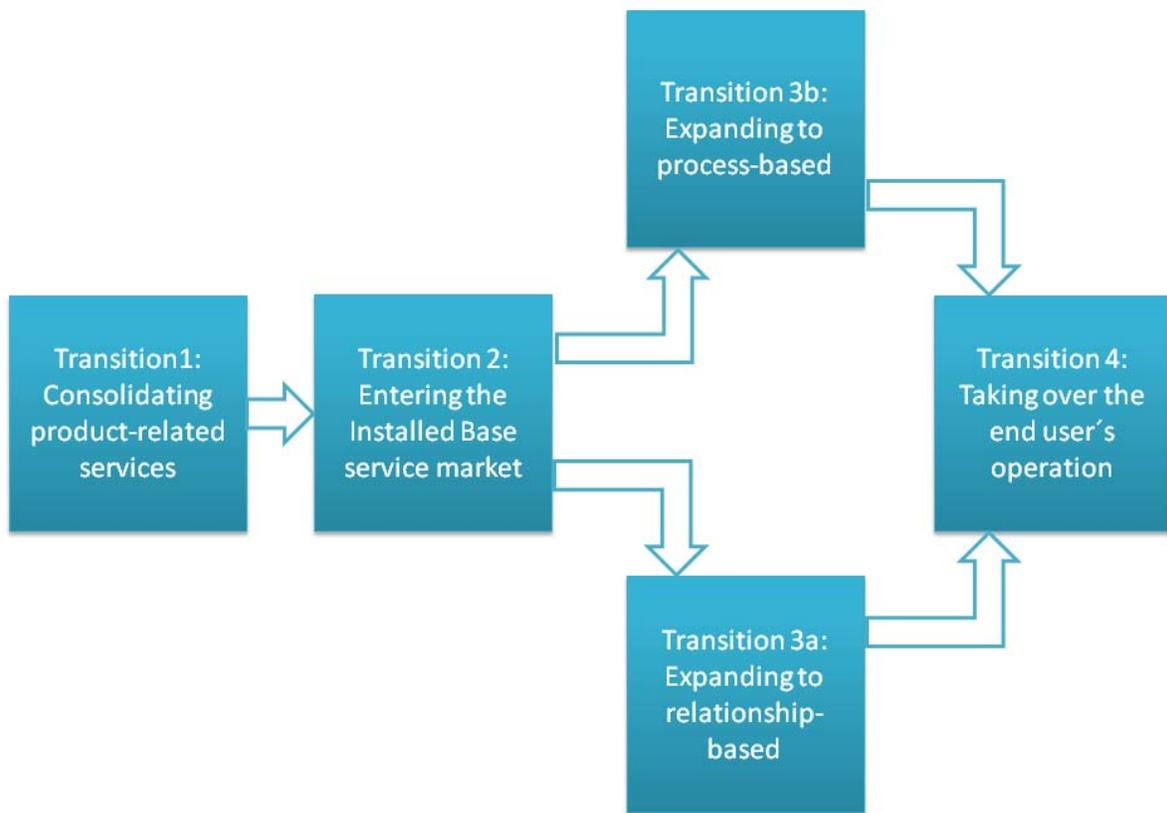


Figure 2. Servitization Route Map (Source: own illustration according to Mills et al., 2008; Oliva & Kallenberg, 2003).

In order to improve service efficiency, recommended result of the first stage constitutes of a consolidation under a single organizational unit, which comes with a comprehensive monitoring system to assess its performance (Oliva & Kallenberg, 2003). Going on with the transition the second step (cf. “Transition 2” in Figure 2) is characterized by the recognition of profit opportunities within the precedent defined service field and the corresponding structural adaptations. Although this procedure is supported by the previously implemented monitoring system, one is still faced with challenges regarding cultural change and creating capable service infrastructures (Mills et al., 2008). Finally, the second stage is completed by establishing a well-functioning service organization, which can be evaluated regarding customer and employee satisfaction and general business success (Oliva & Kallenberg, 2003). The subsequent third stage is manifested by a selection towards a distinctive direction. Consequently, the focus of customer interactions can be changed either from transaction- to relationship-based (cf. “Transition 3a” in Figure 2) or from product efficacy to product efficiency (cf. “Transition 3b” in Figure 2). The former one changes the way the service is finally priced whereas the latter one transfers the product to a part of the offering (Mills et al., 2008). The final development of necessary and considerable capabilities assigns the goal of the third stage (Oliva & Kallenberg, 2003). Actually the last stage (cf. “Transition 4” in Figure 2) yields a pure service provider, who adopts customer’s operation risks and responsibilities taking over customer’s maintenance or operating organization (Mills et al., 2008; Oliva & Kallenberg, 2003).

3. Examine the Business

Considering the transition of servitization illustrated in Figure 1, the procedure always starts with the evaluation of one’s current position regarding modes of implementation (Mills et al., 2008; Oliva & Kallenberg, 2003). Consequently, this consideration aims at a company’s internal capabilities focusing on organizational structure and know-how. Kinnunen (2011) and Kinnunen & Turunen, (2012) derived therefore an adequate matrix, comprising the two dimensions “organizational culture” and “organizational configuration”, which examines the portfolio formed by dedicated strategic business units (SBU). The matrix enables a screening regarding product- or service-oriented organizational culture which is opposed to manufacturing- or customer-centric organizational configuration, in order to evaluate how capable a certain organizational unit is in applying servitization (Kinnunen, 2011; Kinnunen & Turunen, 2012). The resulting four quadrants of the matrix are displayed in Figure 3.



Figure 3. Matrix to examine Companies Servitization Capabilities (Source: own illustration according to Kinnunen, 2011; Kinnunen & Turunen, 2012).

The first quadrant labelled “Satisfying Product Provider” operates product-oriented with a customer-centric model, which therefore appears externally oriented, executing tasks like customer relationship management. Since emphasis is laid on manufacturing, and services are for that reason treated as “add-ons” (Kinnunen, 2011; Kinnunen & Turunen, 2012), companies should approach this section with a product-oriented or service-oriented product-service-system (PSS) (Baines et al., 2009; Neely, 2007). Regarding the second quadrant “Value-adding Service Champs”, which is characterized by an actually stronger external focus (Kinnunen, 2011; Kinnunen & Turunen, 2012) one should even consider moving into use-oriented or result-oriented PSS applying therefore relationship-based business models (Neely, 2007). This refers to the fact that value creation is already conducted via flexibility, customization and variety, which consequently provides the best basis for servitization. The third quadrant, which is labelled as “Introvert Bulk Producer” in contrast, appears as highly internally focused with barely any intentions to conduct services (Kinnunen, 2011; Kinnunen & Turunen, 2012). Since the main lever for cost reduction is based on standardization and innovation, one still may try to approach an integration-oriented PSS by

moving into distribution and merchandising (Baines et al., 2009; Tether & Bascavusoglu-Moreau, 2011). The last quadrant is characterized by an indecisive behavior, since it tries to create value for the customer, but still organizes like a manufacturing company. Consequently, this inefficient allocation consumes most of service profit margins without contributing considerable revenues (Kinnunen, 2011; Kinnunen & Turunen, 2012), which therefore leads over to the service paradox (Gebauer et al., 2005). In fact, this quadrant strives for a certain commitment to its strategic perception.

As current position regarding servitization capabilities is fixed now, one has to consider as a subsequent step its desired target position (refer to the Figure 1) along the transition line of servitization (Oliva & Kallenberg, 2003). Considerable reference points are provided by the evaluation of one's surrounding market forces (Fan & Zhang, 2010).

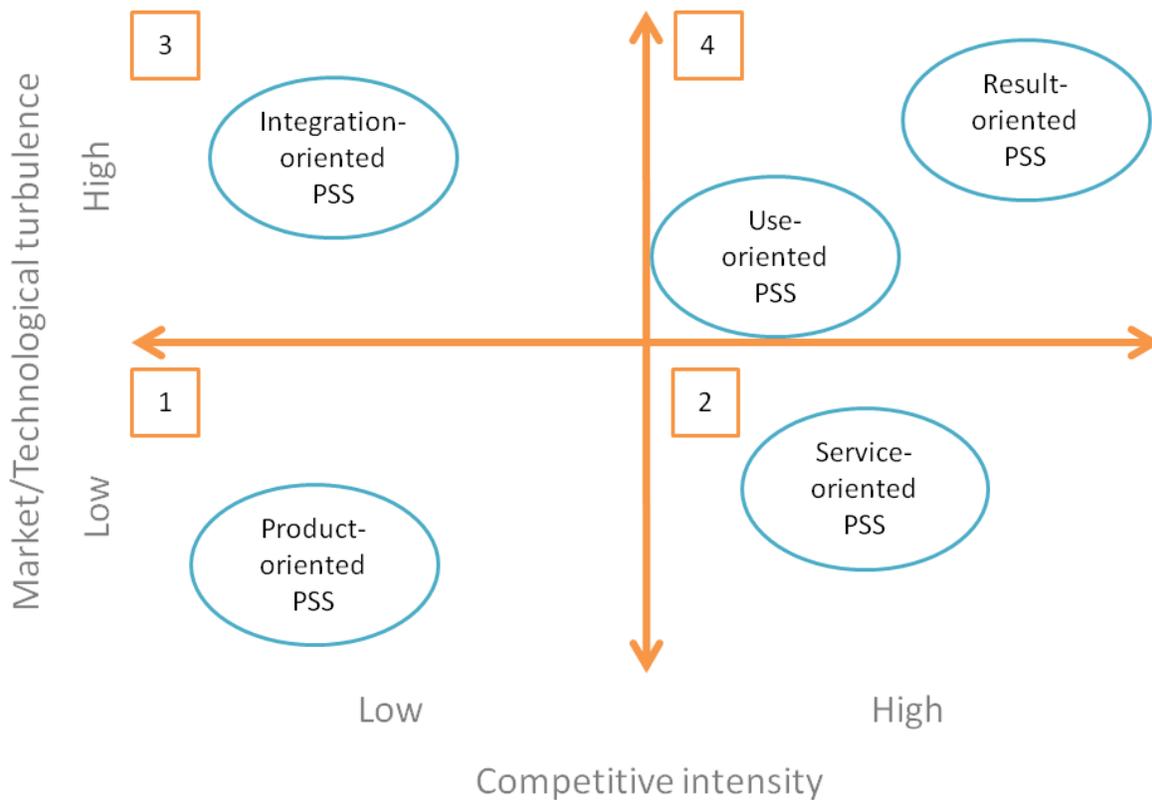


Figure 4. Aligning PSS with Market Forces (Source: own illustration according to Fan & Zhang, 2010).

The approach of Fan & Zhang (2010) is presented in Figure 4, which comprises of two dimensions constituted by the degree of market- or technological turbulence on the one side, and the extent of competitive intensity on the other side. Consequently, this constitutes a matrix of finally four

quadrants depicting diverging market contexts, whereas each one appears more suitable for a particular servitization approach (Fan & Zhang, 2010). Since add-on services like maintenance, repair, re-use or recycling, labelled as product-oriented product service system (PSS), aim to extend the product life cycle of tangible products (Baines et al., 2009; Mathieu, 2001; Neely, 2007; Tukker, 2004), this concept fits well into the first context of market forces. Consequently, both the market/technological turbulence as well as the competitive intensity are low, which implicates stable demand for the product that inherently is considered as long-term investment. The application of a product-oriented PSS would therefore support this occurrence (Fan & Zhang, 2010). This would be in contrast to a service-oriented PSS that in fact establishes entry barriers for competitors by locking customer in (Baines et al., 2009; Mathieu, 2001; Neely, 2007; Tukker, 2004), which therefore appears best for the second market context. Accordingly, this one is characterized by low market/technological turbulence as well but entails high competitive intensity, which therefore strives for the application of competitive strategies (Fan & Zhang, 2010). Considering integration-oriented PSS, which aims to move downstream along the supply chain by vertical integration, conducting distribution and merchandising services (Baines et al., 2009; Mathieu, 2001; Neely, 2007; Tukker, 2004), seems to be the best way to meet high market/technological turbulence in the third market context. As incurring the role of the distributor, manufacturing companies may avoid financial losses stemming from bullwhip effects due to fluctuation in customer demands and system-inherent forecast errors. Finally, one should consider the application of a use-oriented or result-oriented servitization approach in a highly competitive and turbulent market context, since customers are often faced with a vast number of alternatives which in turn customer loyalty (Fan & Zhang, 2010). Consequently, customers would gain benefits from the solely use and availability of a product resulting of the use-oriented and result-oriented servitization (Baines et al., 2009; Mathieu, 2001; Neely, 2007; Tukker, 2004). In fact, proceeding with the transition of servitization ultimately yields towards a comprehensive examination of the service offering, which will be discussed in the following.

4. A Six Step Framework for Successful Service Integration

The final step during transition of servitization is in fact to deal with the core characteristics and options of the service offering, whose extent alternates due to the degree of servitization applied (Oliva & Kallenberg, 2003). Manufacturers are striving to escape from declining product margins and therefore gaining higher operating margins from services (Gebauer et al., 2005). Consequently, there have to take place some inherent organizational reallocations of organization's capabilities and processes to enable the shift from selling products to selling PSS (Baines et al., 2009; Davies et al., 2006; Neely, 2007; Weeks & Plessis, 2011), which therefore demands increased focus on the

designing of compelling service offerings that attract customers (Frei, 2008). Accordingly, this task may appear challenging to the management of manufacturing firms, since the inherent fuzziness of services makes it much more difficult to define them properly in comparison to straight product designing (Araujo & Spring, 2006; Baines et al., 2009; Davies et al., 2006; Spring & Araujo, 2009). Current service literature fortunately provides certain step-wise frameworks to approach this issue and develop outstanding service strategies (Cohen et al., 2006; Frei, 2008) in order to become services the new cash cows of the company, that finally account for up to half of total sales (Reinartz & Ulaga, 2008). The following section discusses a six-step framework, which integrates a four-step framework (Frei, 2008; Reinartz & Ulaga, 2008) with the six steps derived by Cohen et al. (2006) to provide a solid approach to succeed in service business. Table 1 summarizes these consolidated findings.

The first step includes the identification of suitable products one can valorize with adequate services. Therefore, the decision arises whether to support all products offered or to choose only complementary ones to gain possible synergies from economies of scale in service technologies. The second step depicts the allocation of service offerings into a whole portfolio in order to separate between different service levels. Hence, customers may choose between rapid execution of the service, which therefore is charged with a higher fee or lower prices due to basic services. One has to be aware that customer derive the overall quality levels with regard to the number of offered service products, which may be too few but also too many (Cohen et al., 2006). Proceeding along the framework the third factor to consider is constituted by the appropriate choice of business models and corresponding revenue modes. In fact, one has to apply in any case a financial mechanism, which consequently determines the value of the service offering (Frei, 2008; Reinartz & Ulaga, 2008). Additionally, there should be an explicit decision on pay-per-use and pay-per-output business model which serves either sporadic service requests or long-lasting performance-based contracts (Cohen et al., 2006).

Table 1. Six Step Framework for Successful Services Integration (Source: own illustration according to Cohen et al., 2006; Frei, 2008; Reinartz & Ulaga, 2008).

1	Identify which Products to cover	<ul style="list-style-type: none"> - Support all products - Support only complementary products - Support even competing products
2	Create a Portfolio of Service Products	<ul style="list-style-type: none"> - Too few or too many service products reduce quality levels and profits - Separate through different performance levels
3	Select Business Models to support Service Products	<ul style="list-style-type: none"> - Establish funding mechanism to make aware of service value - Apply different models for different products and life cycle stages

4	Modify after-sales organizational Structures	<ul style="list-style-type: none"> - Employee management through additional recruiting and trainings - Consider outsourcing of service units to third-parties
5	Design and manage after-sales Services Supply Chain	<ul style="list-style-type: none"> - Match supply of resources with demand - Deliver right materials, through right people, with appropriate infrastructure, at the right place, within an agreed-upon time at the lowest price
6	Monitor Performance continuously	<ul style="list-style-type: none"> - Deeply understand customer problems and perceptions - Evaluate performance against benchmarks

Accordingly the fourth step in applying excellence in service is manifested by adaptations and changes in organizational structures. These last from initial employee management regarding additional recruiting and trainings to structural optimizations like outsourcing (Frei, 2008; Reinartz & Ulaga, 2008). In fact, this new established organizational structure demands for the fifth step entailing a savvy service supply chain, which streamlines back-office processes (Frei, 2008; Reinartz & Ulaga, 2008). Accordingly this issue can be described as the delivery of right materials, through right people, with appropriate infrastructure, at the right place, within an agreed-upon time at the lowest price (Cohen et al., 2006). The final sixth step deals with the maintenance of providing excellence in service offerings, which should be conducted through a monitoring system that evaluates against benchmarks and customer feedback. Consequently, one can extract considerable information from the monitoring system in order to deeply understand customer problems and perceptions to enable the creation of compelling service designs (Cohen et al., 2006; Frei, 2008; Reinartz & Ulaga, 2008).

4. Conclusions

Moving along the transition line between the both extremes of a pure manufacturer and a pure service provider offers several opportunities to utilize benefits from higher profit margins on services. Though, a lot of companies fail in exploiting these benefits and are therefore struggling with the so-called “service paradox”, since the potential of the added service to contribute to total revenues is not fully exploited.

Thus, the aim of a company applying servitization is constituted by gaining advantages concerning financial, strategic or marketing issues through their positioning in the product service continuum. In order to maintain the related management decisions, a three-level approach was introduced, which has to be executed step by step. The initial level introduces the first step to go on with the transition from a strategic point of view, via a four-step framework. Consequently, the second level operates on the strategic business unit (SBU) stage, examining companies existing capabilities to

choose the proper implementation of servitization. Ultimately, the third level elaborates a six-step framework concerning success factors in service and completes the transition.

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