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AN EXAMINATION OF SERVITIZATION AS A BREAKTHROUGH SUCCESS FACTOR ALONG THE SUPPLY CHAIN

Case Study

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Abstract

The turbulent changing economic environment following the 2008 global financial and economic crisis has posed a major challenge to the majority of producing and manufacturing companies. The recessionary economy of the European Union, the "marginal countries" existence on the edge of bankruptcy, the shortage of loans and the subdued consumption of the population all affect the way in which products are marketed and the integration of accompanying services. This change has a significant impact on logistics processes and logistics service providers, as they face changing tasks and challenges in supply chain management. The authors intend to address this impact in their article, which also takes into account the results of international scientific papers.

INTRODUCTION

We can easily think that merging a product and service is a new concept, but not one that has a 150-year history. In the second half of the 19th century, the interconnection of manufacturing and service gained great momentum in America, which enabled manufacturing companies to sustain the supply chain process and, secondly, to build sustainable barriers for new entrants (of course, in addition they were able to use these new methods to lock new clients into the chains). Companies with new and novel products, but with a relatively limited manufacturing background led the way (Schmenner, 2009). The strengthening dominance of services was palpable and created a need to reconsider the principles of marketing (Veres, 2012), with service instead of goods becoming the basis of economic exchange (Vargo & Lusch, 2004a; Vargo & Lusch, 2004b).

The combination of products and services can be called **servitization**, referring to the shifting of production companies towards a service function, or as the outsourcing of production (Demeter & Szász, 2012a). We will stick with this definition throughout this article.

The essence of service is that production companies nowadays have more and more service elements alongside the product - indeed often instead of the product – in the service package which they offer the customer.

Firms are increasingly exploring the value of integrating goods and services (Baines & Lightfoot 2013), motivated by anticipated improvements in profit margins and the prospect of locking competitors out of their customer base (Bustinza et al., 2013).

Increasing the weight of services, however, raises new challenges for producing companies: for example, new, more complex packages must be offered to customers; care must be taken to enable the product and the related service elements to be demanded together; sales staff should develop a new approach so as not to consider services as a "honeypot" to increase sales but as an essential part of the package provided; financial constructions need to be found that have not been previously tried (Demeter, 2012). One of the main reasons for the appearance of servitization is that production companies have been able to realize less and less profits with their productive activities.

The authors aim is to present - on the basis of a study of the international literature - the development of service provider behaviour and the strengthening shift towards the sale of integrated products and services (i.e. "servitization") as a breakthrough success factor for multinational companies, and its impact on logistics service providers.

THE CONCEPT OF SERVITIZATION

Service is an innovation process of the organization's capabilities and processes, in which sales of products are shifted towards the sale of integrated products and services that offer higher user value (Baines et al., 2009). An OECD study concluded that the strengthening of this phenomenon could be experienced in the United States at the end of the 1980s: the service sector is different from the manufacturing sector, but these differences may become blurred (OECD, 2000).

Because of the role of services in the national economy, as a consequence of the financial and economic crisis, the emphasis on the supply side is likely to shift towards services. This mode of entering the market for production companies has been reinforced by customers' increasingly comprehensive demands and the need to protect themselves against their competitors (Baines et al., 2009). To increase market share, companies pay close attention to retaining existing buyers and luring new customers (Stalk, 1988).

Closer relations with customers are nurtured in order to successfully target their needs and create value (Davies et al., 2007). Furthermore, the product life cycle becomes increasingly important as the cost and efficiency of operating the product becomes the focus of the transaction. As such, various pressures emerge in the external environment of manufacturing companies (Kreye & Jensen, 2014).

Since the turn of the millennium, steps towards market expansion have been dominated by compliance with consumer demands and expectations, so high quality customer service has been given priority (Kalló, 2010). Consequently, in order to increase sales figures and performance indicators, competition between companies gradually became more intense in the years following the crisis. The experts at Cambridge came to the conclusion that service is not a universal panacea for manufacturers. At the same time, it has a significant potential value, which gives businesses the ability to move up the value chain and exploit the benefits of higher value business activities (Baines et al., 2009). Despite the spread of product-service systems, this surprisingly does not assume a shift towards services. Although the revenue of the emerging companies is higher according to empirical analysis (Neely, 2008), their net revenue-related profits are below those of purely productive companies. This phenomenon is called (Gebauer et al., 2005; Neely 2007). Neely explains this for three main reasons: the cost of labour is much higher in services, especially those with high added value and skilled workers. To succeed with servitization, a manufacturer will require new guiding principles, structures and processes for their production and support

operations (Oliva & Kallenberg, 2003). These are likely to be different to those associated with traditional manufacturing.

THE EFFECT OF SERVITIZATION ON PRODUCTION AND MANUFACTURING COMPANIES

With services added, more products can be sold as they add value to the original product and are much more suitable for building consumer loyalty. The servitization of production and manufacturing companies is driven by a major engine, i.e. to deliver higher, more stable revenue and more profits than average (Demeter & Szász, 2012b). Of course, businesses have recognized that services are more complex than producing products, and this also requires a different product approach: service planning, organizational strategy and organizational transformation (Baines et al., 2009). Conversely, the manufacturing companies that have chosen this mode of entry have already recognized that in the growing global competition, the traditional competitive advantage based on products is virtually impossible to maintain, while services may be a distinguishing factor in production companies (Demeter & Szász, 2012). However, servitization is not an easy strategic choice, given that a manufacturer needs to carefully design its services. In order to succeed with servitization, a manufacturer is likely to need some new and alternative organizational principles, structures, and processes (Ahamed, 2013a). The economic implications across businesses and economies has only been addressed by a few researchers, most notably Sawhney et al. (2003). Collectively, the majority of these exiting studies have sought to conceptualise and contextualise the adoption of servitization, and tend to rely on data from two-three organisations that are recognised practice leaders (Baines &- Shi, 2015). The study by Lee et al. (2016) reveals that the servitization strategy is a better choice for a manufacturer selling physical goods only when the goods require a higher level of service (i.e., have a high service dependency), and when the competition between the two channels is more severe (i.e., high channel substitutability). In addition, obtaining cost efficiency is found to be an important factor in achieving higher competitive advantage over the other channel. Wise & Baumgartner (1999), Oliva & Kallenberg (2003), and Weeks (2009) claimed that to implement a servitization strategy successfully, organizations are required to change their strategies, operations and value chains, technologies, and system integration capabilities. They also need to effect changes in the people they employ so as to support cultural shifts in the organizational blueprint. As the economic environment has changed, the servitization strategy has recently been implemented in a context in which big data plays a significant role (Opresnik & Taisch, 2015). Servitization frequently occurs as a response to financial difficulties, new customer demands and strategic product differentiation (Mathe, 1993, Gebauer et al., 2013). A key feature of servitization strategies is a strong customer centricity. Customers are not just provided with products but broader more tailored ‘solutions’. These deliver desired outcomes for specific customers, or types of customer, even if this requires the incorporation of products from other vendors (Davies, 2003).

THE EFFECT OF SERVITIZATION ON LOGISTICS

Continuing the logic of above sections, we can state that servitization is an **opportunity** which allows production and manufacturing companies to keep control of their supply chain processes (Schmenner, 2009). It is a **task**, since besides increasing profits and efficiency, businesses need to maintain their customer satisfaction level and build their supply chain according to customer expectations (Baines et al., 2009). It is a strategic decision on the basis of which the company chooses what kind of business model it is going to adopt, as it will have an impact on its supply chain position (Demeter & Szász, 2012b). As organizing and implementing the provision of goods between members of the supply chain is the task of logistics service providers (Horváth, 2012), the examination of Hungarian servitization trends and new business models can affect the activities of Hungarian, vertically integrated logistics service providers, and the development of their service portfolios. Although a workshop study (Demeter & Szász, 2012a) has concluded that, as is typical of developing countries, Hungarian manufacturing companies do not regard service production as a decisive phenomenon, in the global economy, on the contrary, we primarily consider the tendencies in developed countries, which are different from those developing countries (and consequently, from our own country). The spread of servitization plays a greater role in the activity and business model of the manufacturing and production companies registered in the developed countries, which are the engine of the new economy, as well as in the international role undertaken by logistics service providers. Changes in logistics expectations and, consequently, the activity of logistics service providers (cross-border, serving international supply chains) may bring major challenges to the penetration and growth of servitization.

THE EFFECT OF SERVITIZATION IN THE LARGE INDUSTRIAL COMPANY ENVIRONMENT

Companies with global presence have a significant economic influence on both Hungary and the rest of the world. Maintaining their competitiveness is of the utmost importance, thus responding to the expectations of a rapidly changing economic environment, they constantly transform their strategy, as a result of their structure and business units.

The 2008 global financial and economic crisis forced big companies to rethink the importance of the significance of services in relation to their products, and whether and how they can be delivered. This "rethinking" of course also had a significant impact on their supply chain processes and logistics costs. In some sense, this was also the goal, because the supply chain costs contributed significantly to the total cost of the products. Another trend which dates from the crisis is that manufacturing companies are increasingly concentrating on their core business, focusing on production, "internal" efficiency, the pursuit of innovation and the introduction of new products into markets. The latter is perhaps one of the most important factors in competitiveness, as the introduction of new products, especially if they have been developed following a given customer demand, can provide predictable and plannable revenue growth for companies, even in the medium term. Maintaining greater focus on core activities does not mean that the related services are fully outsourced to companies, rather that the company concentrates primarily on manufacturing processes, on optimizing them and making them more efficient

That is, servitization is the transition process of an organization that continuously innovates new services and added values with its core product, which in the end marks a firm as a value provider and leads to better success (Ahamed, 2013a). Today, many leading companies are offering an integration of services with their core products which comprises a significant shift in their underlying business models. So, while studies demonstrate that servitization creates value on the level of the product directly acquired by the customer, value acquisition by the product-service provider is subject to debate (Kastalli & Van Looy, 2013). The results of (Bustinza et al., 2015) also show that increasing differentiation and high customer satisfaction are fundamental to achieving competitive advantage and superior performance with services. The analysis also indicates the importance of a company's position in the value chain and the organizational structure it selects to support services in successful servitization.

During sales, there may be more than one product offering, including a supportive, horizontal, all-pervasive area of logistics. Most of the functional areas within the company, such as research and development, manufacturing, manufacturing planning, and quality are also involved in meeting customer needs quickly and flexibly. However, because of the above role, logistics has become increasingly important (Figure 1). For industrial manufacturers in large companies, the number of buyers and the business opportunities of individual geographic regions define servitization, and thus the logistic models used in customer service.

In countries which are members of the European Union and sales are high (e.g. large industrial customers in Western European countries) direct service and support can be justified on the manufacturers' side. This is especially true for industries where products are supplied in large quantities (usually over several years and continuously), and so bring lower profits. In the supply chain, distribution cannot be used in all cases, for example, in so-called low mix-high volume (small diversity, large number - mass production). Considering material requirements, these are typically components in the automotive industry or in the entertainment electronics industry. Small and medium-sized customers can be served through distribution, whereby optimum inventory can provide a short delivery deadline, which is often not the case for manufacturing companies with a broad portfolio of products. The "distribution strategy" also works in European countries where multinationals are gaining dynamic growth in the short or medium term (e.g. Russia and other Eastern European countries). In such cases, a franchise-licensed local distribution may be one of the (first) solutions which, due to its local knowledge, may be better able to adapt to the needs of the local market.

Optimally selected customer support areas such as MRP (Material Requirements Planning) or the use of a suitable forecasting and communication channel such as EDI (Electronic Data Interchange) can all guarantee efficient, fast and error-free manufacturing and service for the sales channel. High-quality operation of these functional areas increases customer satisfaction, which is one of the most important measurements for successful and sustainable business models. In industrially less developed regions, e-commerce (electronic commerce) systems are used to communicate with potential buyers. If we look a little beyond the borders of Europe and examine the EMEA (Europe, Middle East and Africa) economic region, which is a classic geographic area in a global corporate environment, we can find the e-commerce solutions typical of the regions mentioned above in some Middle Eastern, and some African countries as well.

CONCLUSIONS

Servitization is one of the typical tendencies of the contemporary world, and something which we do not know too much about. Nevertheless, more and more companies are making efforts to move in this direction.

Manufacturing firms can develop advanced services to differentiate their offers and increase customer satisfaction. Servitization creates new opportunities in growing markets, operating as an instrument of differentiation. Servitization also builds barriers to competition as service providers build a deep understanding of customers' experiences and needs and may also accumulate an advantage of scale (Bustinza et al., 2015). Manufacturers who see the key to their future success in delivering services still face significant challenges (Baines et al., 2009). Based on the inter-connections described above, we can state that it is not only production and manufacturing companies, but also their supply chain, logistical service providers which will still face significant challenges in the future.

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ANNEXES

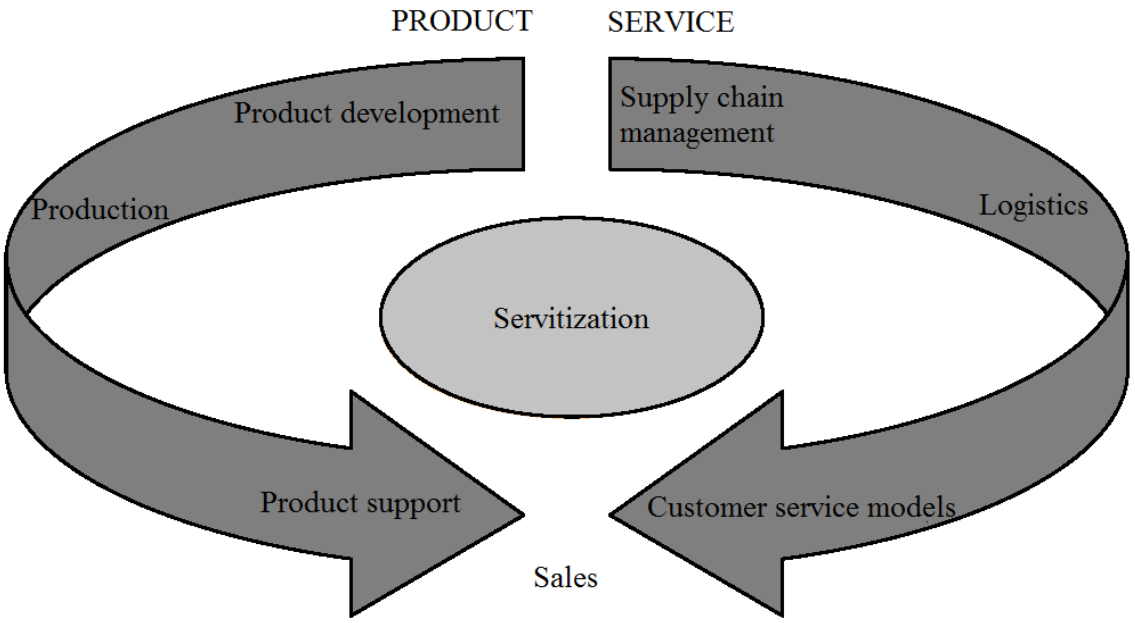

Figure 1. The effect of functional areas of the firm on servitization
Source: Authors' own design