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Service Manoeuvres to Overcome Challenges of Servitisation in a Value Network

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Service Manoeuvres to Overcome Challenges of Servitisation in a Value Network

When manufacturing firms increase the share of service revenues, managing service provision becomes challenging. This study extends previous research on servitisation in individual firms by analysing the challenges service provision creates in a value network. The challenges are identified both within the firms and in the business relationships in the value network. In addition, the paper identifies and describes service manoeuvres firms use to address challenges resulting from servitisation. This case study of a value network is based on interviews carried out at 13 firms in the automotive industry, including suppliers, original equipment manufacturers (OEMs), and consultancies. The research shows that service manoeuvres, such as new types of resource integration and value constellations, are used to overcome challenges in the value network.

Keywords: Servitisation; Value Network; Challenges; Manufacturing Firms; Service Manoeuvres; Case Study

1. Introduction

In the automotive market where the profit margins on products are shrinking, both OEMs and suppliers turn to services to increase their profitability (Legnani, Cavalieri, and Ierace 2009). In addition, the suppliers are highly dependent on a few powerful OEMs as customers; sometimes only a single OEM. At the same time, OEMs, suppliers, dealers, and consultancies become part of a value network in order to co-produce service offerings, exchange service offerings, and co-create value (Lusch, Vargo, and Tanniru 2010). The value network perspective implies a focus on mutual benefits for the involved actors (Spohrer et al. 2007), and in practice resources are integrated to create competitive value propositions (Lusch, Vargo, and Tanniru 2010). Instead of competition between individual firms, the members of the value network collaborate to provide service to customers.

New market characteristics and customer needs affect changes to value networks (Lusch, Vargo, and Tanniru 2010). Industries composed of product-oriented firms have increasingly turned to new forms of resource integration as a means of service provision (for example, Davies, Brady, and Hobday 2007). An increased focus on service, hereafter referred to as servitisation, is often necessary for a manufacturing firm to

successfully compete (Oliva and Kallenberg 2003). However, many product-oriented firms find it challenging to shift from selling goods to being part of a value network that provides services (Davidsson et al. 2009). Gebauer, Fleisch, and Friedli (2005) identify a “service paradox”, finding that firms that invest in their service business do not generate the expected higher returns. Moreover, previous research has shown that manufacturers encounter challenges with servitisation, such as: resistance from employees (Brax 2005; Mathieu 2001; Reinartz and Ulaga 2008; Ulaga and Loveland 2013), design of the service offering (Brax 2005), challenges with customer relationships (Brax 2005; Martin and Horne 1992; Matthyssens and Vandenbempt 2008), and development of new services (Martin and Horne 1992).

The key to success with servitisation lies in knowing what services to provide, what role service provision should have in the firm (Galbraith 2002), and how to manage the cooperation with other actors in the value network. This study extends the scope of research on servitisation from single actors to a value network that includes several actors, such as suppliers, OEMs and consultancies. In practice, by participating in a value network, firms influence and are influenced by the service manoeuvres of other firms. Service manoeuvres are defined as ‘activities firms undertake to address servitisation challenges’ (Mathieu 2001). In this effort, some firms risk making substantial changes, while others may make no changes at all. This can in turn generate imbalances, or challenges, in the value network. A key question is, therefore, “What service manoeuvres (Mathieu 2001) should a firm perform in order to solve the challenges of servitisation in a value network?”

This paper investigates the challenges that different actors face as a result of servitisation throughout the value network. Specifically, the paper identifies the various challenges that exist for and between actors in a value network, and the service manoeuvres they use to handle those challenges. The research is built on a case study of a value network in the automotive industry consisting of 13 firms. The results suggest alternative service manoeuvres for addressing challenges.

2. Theoretical Framework

2.1 Value Networks

Service logic revitalises relationships, value co-creation, and service as a perspective on value creation (Vargo and Lusch 2004; Grönroos 2008; Edvardsson, Gustafsson, and Roos 2005). Within service logic, value-in-use means that a firm offers resources to facilitate the customer's value creation process, while becoming a value co-creator. Thus, in order to co-create value for customers throughout the value-creating process, manufacturing firms can be seen to adjust their strategies and to interact with customers (Grönroos 2008). Managing customer relationships is a central part of service logic, and knowledge and skills provide important resources (Vargo and Lusch 2004).

Thus, from a business perspective, "A value network is a spontaneously sensing and responding spatial and temporal structure of largely loosely coupled value proposing social and economic actors interacting through institutions and technology, to: (1) co-produce service offerings, (2) exchange service offerings, and (3) co-create value" (Lusch, Vargo, and Tanniru 2010, 20). An analysis of manufacturing firms by way of their value networks reveals that businesses deem offerings to include both service and physical products as part of the provision supporting the customer's value creation. Furthermore, integrating value network actors and solving customer problems in a customised manner provides a necessary ingredient of servitisation.

However, servitisation is an ongoing process, and firms in a value network might have different intentions regarding their role in service provision. They decide which services they want to provide, and what resources to put into service provision (Galbraith 2002) in order to cooperate with other actors in the value network. When actors in the value network fail to balance their emphasis on services in a business relationship, imbalances, occur in the value network.

2.2 Challenges of Servitisation

In the literature on servitisation, the term 'challenge' is often used without a clear definition. An exception is Brax (2005) who views challenges as optimisation problems of the service offering. In our view, service provision is not related to resource optimisation, but is more often related to finding a resource constellation that works well enough to provide a service for a specific customer. Challenges are also referred to as 'managerial implications' (see, for example, Gebauer, Fleisch, and Friedli 2005;

Martinez et al. 2010) or 'strategic hurdles' (Martin and Horne 1992), that is, issues that managers must consider in order for manufacturing firms to provide services. Martin and Horne (1992) refer to strategic hurdles as difficulties in achieving the objective of becoming service-oriented. This is in line with the way challenges are viewed in this study, that is, as a difficulty that hampers servitisation in manufacturing firms.

Service readiness has been revealed as the most significant challenge prompted by servitisation (Brown, Gustafsson, and Witell 2009). Lacking service readiness manifests itself through managers not knowing which activities to perform, or by not having the right organisational arrangements in place. Service is often considered from a strategic perspective, while operational processes and activities are neglected (Legnani, Cavalieri, and Ierace 2009).

Managers and the sales force need to be convinced of the potential of services, both for themselves as individuals, and for the firm as a whole (Brax 2005). Management may also push the sales force to sell services without knowing how they might benefit customers, which could, in turn, limit the active promotion of those services (Brax 2005). Furthermore, designing a strategic service that also works at an operational level can be a challenge (Brax 2005; Davidsson et al. 2009). Macdonald et al. (2011) give examples of how firms failed to sell services that were developed on a managerial level, and then taken over by operational employees.

Another challenge for a manufacturing firm is the tradition of providing services for free (Davidsson et al. 2009; Matthyssens and Vandenbempt 2008; Oliva and Kallenberg 2003). Consequently, finding a profitable service business model can be a challenge for a product-oriented manufacturing firm (Witell and Löfgren 2013). At a basic level, firms with an installed base could start charging for services through service agreements (Davidsson et al. 2009). As services become more advanced, however, a higher degree of standardisation is usually necessary in order to make service provision a profitable business (Sawhney 2006).

New challenges are revealed when broadening the perspective from single firms to multiple firms, or to a value network. If a firm wants to offer services, but its customers focus on product and price because they assume the services are provided for free, the entire value network will probably remain product-oriented (Matthyssens and Vandenbempt 2008).

Finally, as a firm's services become more advanced, servitisation and the value network increase in importance. The actors in a value network need to share information with each other, and to learn to build long-term relationships based on trust (Brady, Davies, and Gann 2005; Windahl and Lakemond 2006). However, given that many value networks have traditions of mistrust, this could be a challenge (see, for example, Matthyssens and Vandenbempt 2008; Lehoux, D'Amours, and Langevin 2013). Another challenge is to establish a suitable means of communication in order to facilitate information sharing and processing (Brax 2005).

2.3 Service Manoeuvres

Service manoeuvres are activities that manufacturing firms undertake in order to address challenges of servitisation (Mathieu 2001). Mathieu (2001) distinguishes between changes in the offering and changes in the organisation. Different kinds of service manoeuvres can be identified by reviewing the research on service transition (for example, Oliva and Kallenberg 2003; Gustafsson, Brax, and Witell 2010), and on service strategies (for example, Gebauer 2008).

Firstly, in their research on service transition, Wise and Baumgartner (1999) identify successful service manoeuvres as a movement towards the customer, and engagement in activities throughout a product's entire life-cycle. Additionally, Oliva and Kallenberg (2003) identify separating a specific business unit based on services as an important service manoeuvre, while Neu and Brown (2005) identify integrating different organisational units as a key service manoeuvre in a firm's service transition process.

Secondly, research on service strategies (for example, Davies 2004; Gebauer 2008) enumerates specific service manoeuvres (Gebauer et al. 2010). The most important service manoeuvres relate to adopting a new service strategy, or changing between two service strategies. As an example, changing strategy from an after-sales service provider to an outsourcing partner requires a service manoeuvre involving internal activities in order to separate the product and service business from external activities. This results in the creation of stronger customer relationships (Gebauer et al. 2010). When firms change service strategies, they often become embroiled in a mismatch between strategy and organisational design, and the change of the

organisational design factors becomes a key service manoeuvre for the success of the new service strategy (Gebauer et al. 2010).

Both research traditions provide examples of service manoeuvres related to the value network. The greater the focus on service manoeuvres, the greater the strategic, financial, and marketing benefits. However, the strategic and political costs increase, which means that firms should consider entering into partnerships (Mathieu 2001). As an example, nurturing business relationships and establishing partnerships are important service manoeuvres. The service manoeuvres that value network firms perform are determined by the challenges they face. Some service manoeuvres may facilitate value network servitisation, while others might solve the challenge for the individual firm, but increase the tension between firms.

3. Method

3.1 A Case Study Approach

This empirical study used the automotive industry to investigate the challenges different actors face throughout the supply chain as a result of servitisation. In addition to offering vehicles, automotive industry OEMs bundle various offerings (a mix of hardware and service) into transport solutions (Löfberg, Witell, and Gustafsson 2010). As such, it qualifies as a servitisation-intensive supply chain where all actors face an increased dependence on service. In the present study, we view the supply chain in the automotive industry as a complex value network that includes actors, such as suppliers, OEMs and consultancies.

We adopted a case study approach for our research design (Eisenhardt 1989; Meredith 1998). The value network acted as a case, and the different firms as actors. The case study approach was used because of its emphasis on gaining a detailed understanding of the complex issues within individual actors, as well as the interactions between actors (Eisenhardt 1989; Merriam 1998), thus enabling a conceptual contribution (Siggelkow 2007).

3.2 Empirical Context and Study Object

The research studied a value network consisting of 13 firms: eight suppliers, three OEMs, and two consultancies. The interviews were semi-structured, and involved 15 CEOs, service managers, and marketing managers. The suppliers included four first-tier

suppliers and four second-tier suppliers. The services provided by these suppliers ranged from basic services, such as billing, logistics and documentation, to services related to the development of new products. The OEMs in the study focussed on after-sales services, such as spare parts and repair, but they offered the whole range of services from basic services to transport solutions.

The interviews were recorded, transcribed, and imported into NVivo, where the data was coded and categorised (Merriam 1998). The analysis of the different actors was performed in two stages: within-actor analysis and cross-actor comparison. Eisenhardt (1989) argues that the cross-actor comparison is facilitated when the researcher identifies the emerging pattern for each actor before comparing it with others.

The empirical study revealed challenges of servitisation in the value network within the different types of firm (suppliers, OEMs, and consultancies) and in the relationships (a, b, c and d) between the different types of firm (see Figure 1). We identified various service manoeuvres that individual firms use to solve or to cope with the challenges.

- Insert Figure 1 about here -

4. Results and Discussion

The analysis revealed six challenges within individual actors (Table 1) and nine challenges in the business relationships between the various actors (Table 2). In addition, eight service manoeuvres that firms use to deal with the challenges were identified (Table 3).

4.1 Challenges Within Different Actors

All challenges within the manufacturing firms (suppliers and OEMs) were related to an overall challenge; that manufacturing firms are product-oriented but want to increase their share of service offerings. Thus, the manufacturing firms mainly act as individual firms, and do so by acting according to goods logic rather than service logic. This was evident in one challenge faced by the suppliers that suggests that many employees have unclear roles. As an example, this challenge was particularly apparent in one small firm, where the production manager was also responsible for marketing services. Such a

service strategy creates an organisational structure that does not support services (Galbraith 2002; Gebauer and Friedli 2005).

Within OEMs, product-oriented salespeople do not appreciate the added value of selling services to the customers, and thus do not actively promote the services (for example, Brax 2005). Sales people who successfully sell goods by providing services for free have an especially hard time adjusting to situations where services take priority over products. Furthermore, OEMs have goals for their servitisation, but no corresponding strategies. In line with the research of Legnani, Cavalieri, and Ierace (2009), we found that there is an absence of operational structure of service processes and activities. Finding ways to develop and sell services proved challenging to all OEMs in the study.

The challenge is reversed for consultancies. As suppliers in the value network start to offer services and become solution providers, they find themselves in competition with the consultancies. This condition influenced one of the two consulting firms in the study that offered solutions to its customers with no in-house manufacturing capacity. Since suppliers often start by offering their consulting service for free to OEMs, the competition with consultancies became fierce.

- Insert Table 1 about here -

4.2 Challenges in Business Relationships Between Actors

The power of OEMs is clearly evident in the challenges identified in their relationships with suppliers – relationship (a) in Figure 1. OEMs make decisions on matters such as the suppliers' choice of components, and from which firm to buy these components. Despite this apparent lack of control, several of the studied suppliers are striving to become solution providers. High demands from OEMs only disadvantage suppliers to some degree, since these demands also improved individual supplier's organisational routines and competitiveness, and could also generate more cost-effective solutions.

One key challenge identified in the relationships between suppliers and OEMs (a), and OEMs and dealers (b), was that providing service implies more work, but less income. For example, as a consequence of developing services demanded for free by the OEM, the supplier also loses income as the service implies the creation of a cheaper

product (for example, less material in the component to charge for). Also the OEM must sometimes deliver services for free because only the dealer profits from the service part of the business deal. Consequently, both suppliers and OEMs struggle to find profitable business models for services (Davidsson et al. 2009).

The challenges related to the relationships between the OEMs and the dealers (b) concern the networking role of the firms. The fact that the OEMs are not close enough to the end customer to offer services is apparent in various ways. For instance, the development of new services becomes harder as the OEMs lack daily contact with the end customers. Additionally, the OEMs do not have control over end customer communication, and consequently cannot address them in a service-oriented way.

Although the OEMs want to offer services to end customers, they must compete with the dealers. They have to balance the level of services offered directly to end customers with services offered through the dealers. Offering services through the dealers implies another challenge: the OEM wants to increase services, but the dealers and the customers are product-oriented.

The roles of value network consultancies and suppliers change as the importance of services increase. In one way, their relationship (c) becomes competitive as their offerings become more alike. However, some cases suggest a closer cooperation as they integrate their resources and co-develop new value propositions (Lusch, Vargo, and Tanniru 2010). Yet a major difference is that payment for services is easier for consultancies, which is probably due to their service orientation and the fact that they are used to getting paid for knowledge. There is close cooperation in the relationship between consultancies and OEMs (d); however, consultants are rarely retained in times of recession.

- Insert Table 2 about here -

4.3 Service Manoeuvres to Solve the Intra-Actor Challenges

An individual actor's service manoeuvres sometimes solve a specific challenge and strengthen the value network. At other times, service manoeuvres respond to a threat to an individual firm's role in the value network. In this case, the manoeuvre helps the firm address the consequences of a challenge rather than solving it. In some cases, this

creates challenges for other actors in the value network. These manoeuvres are presented in Table 3.

The overall challenge of increasing the service offerings in a product-oriented firm was successfully solved by one of the suppliers, which increased the firm's service orientation. This firm managed to change the mindset of its employees by putting a price on their competence. When employees realised that customers were willing to pay for their knowledge, their self-confidence increased and they adapted to co-creating value with customers. Furthermore, to become more service-oriented, a clear definition of employee roles and a clarification of the responsibility for goods and services solved the challenge of unclear roles for employees.

Although the senior management of the OEMs emphasised services, the size of the organisations and their long tradition of competing through product performance meant that they were still product-oriented. A service manoeuvre used in this case involved treating the service as a product. For example, assigning services with item numbers in the accounting system made it possible for customers to order the service through the normal information system. In fact, instead of increasing their service orientation, many firms solved the challenges with a product-oriented mindset. For example, the challenges of product-oriented salespeople and customers are solved by creating a tangible service output, such as a website. Although OEMs have goals with their servitisation, they struggle to develop strategies for it. None of the firms in this study solved this challenge. The product-oriented firms seem unaware of what is needed to succeed with service.

An interesting finding involved the shift that one consulting firm made. In the automotive industry, value network suppliers want to become solution-providers, thus becoming competitors to the consultancies in the same industry, a condition that heavily influenced at least one of the consultancies in the value network studied. In reaction to this increased competition, the consulting firm began establishing partnerships with manufacturing firms in order to deliver solutions when its customers demanded them.

Apart from the consultancies, only one of the traditionally product-oriented organisations in this study solved internal challenges in a service-oriented manner. Evidently, manufacturers address intra-firm challenges with a product orientation.

4.4 Service Manoeuvres to Solve Challenges in the Value Network

Adopting a value network perspective implies that the focus on supply will be enlarged by a focus on value and value co-creation (Lusch, Vargo, and Tanniru 2010). This means that firms must handle challenges present not only within their own organisation, but also in their relationships with other organisations. Some of the challenges in the relationships between value network firms are addressed within the existing product orientations of organisations. Yet there is an additional focus on solutions and value co-creation in the value network. Many of the service manoeuvres identified in these relationships result in new constellations of resource integration to create value propositions (Lusch, Vargo, and Tanniru 2010).

The first challenge between suppliers and OEMs (a) that involved being a complete supplier with less freedom to design and choose subsystems was solved successfully by some suppliers through partnership creation. One of the suppliers established partnerships with a number of consultancies in order to maximise service flexibility.

Managing relationships with other actors in the network increases the ability to deliver solutions (Windahl and Lakemond 2006). Several manufacturing firms in the study claimed a change of focus from competition to cooperation between suppliers and OEMs (a). However, only one supplier successfully solved the challenge of more jobs, but less income by separating the service from the delivery of goods. Consequently, customers bought the service and were then free to buy the physical product from any one of the competitors. Cooperating with an external consultancy for service provision proved the key to getting customers to start paying for previously free services.

Services imply more jobs, but also less income for OEMs. One of the OEMs successfully solved this challenge in a way similar to the supplier mentioned above: instead of building up its service capacity with resources inside the firm, the OEM developed and offered the service by using an established service firm. Not only was it easier to charge for the services, but the OEM could utilise an existing service network, meaning lower fixed costs and a higher service level.

One OEM in the study solved, to an extent, the challenges regarding the relationships between OEMs and dealers (b); namely, that they want to deliver services, but then become competitors to their customers, and want to offer end-customer services but are not close enough to the end customer. In order to get closer, this

particular OEM bought up some of its dealers, which gave it control over the end-customer relationship. This manoeuvre not only facilitated offering services, but also service development and securing payment for services.

The challenge of wanting to increase services to dealers and customers who are product-oriented was addressed by all the studied OEMs within their existing product orientation. Adding tangible attributes to a service allowed both salespeople within the organisations, and dealers and end customers, to accept the services and to justify the service cost.

Regarding the relationship between suppliers and consultants (c), the challenge ‘new value constellations; partners and competitors’ implies that suppliers and consultants have similar value network roles and, consequently, become competitors. However, the second part of this challenge provides the solution to this problem. Firms become partners, and together they offer new value propositions to the customers as solutions. This way of dealing with the challenge in the relationship between consultants and OEMs (d) offers solutions that could make the consulting firm’s role more difficult to replace.

- Insert Table 3 about here -

5. Conclusions

Previous research focussed on challenges that manufacturing firms face within their organisation, or in the relationship between an OEM and its customers (for example, Mathieu 2001; Brax 2005; Martin and Horne 1992). The present study extends this research to include various actors in a value network. The intra-firm challenges identified in this study supplement existing knowledge on service transition (Brown, Gustafsson, and Witell 2009; Oliva and Kallenberg 2003), while the inclusion of suppliers, OEMs, and consultancies extends previous knowledge by looking beyond the existing assumptions, and analysing new value constellations within the value network. In particular, the present research shows that not only the OEMs, but also suppliers and consultancies, are influenced by servitisation.

The OEMs initiate the servitisation of the value network, and influence the servitisation of the other actors. They place demands on suppliers to become solution providers, shifting the focus from competition to cooperation between suppliers and

OEMs, which, in turn, increases the service orientation of the suppliers. However, the OEMs themselves remain product-oriented, and demand the inclusion of services in the offering. In line with the research of Matthyssens and Vandembempt (2008), we found that customers who remain product-oriented will influence the entire value network, and that the servitisation will be impeded.

To solve the challenges of being part of the value network, the various actors use different product-oriented and service-oriented manoeuvres. Although a product orientation approach is needed to succeed in areas such as production and logistics, the results of this study show that servitisation challenges are better managed by service-oriented manoeuvres. The types of service manoeuvres used are dependent on the background of the manager in charge of services. When the production or R&D manager is responsible for service provision, the service manoeuvres are often consistent with a product orientation, while a marketing or sales manager may find it easier to use service manoeuvres consistent with a service orientation.

All but one supplier in the study addressed internal challenges through service manoeuvres in a product-oriented way, following goods logic. As an example, most service manoeuvres are based on adding tangible attributes to a service. This can be seen as a tactical service manoeuvre with limited influence on the manufacturing firm (Mathieu 2001). Many manufacturing firms have goals for servitisation, but lack strategies to achieve them. As a consequence, most firms have failed to solve the challenges, leading to the conclusion that resolving internal challenges successfully is difficult with a product orientation. However, managing business relationships could be a very helpful service manoeuvre for product-oriented firms facing value network servitisation. By partnering with a service firm, employees with a product-oriented mindset will be influenced by the business logic of a service provider.

However, most challenges pertaining to the relationships between the actors in the value network were solved with service manoeuvres that adhere to service logic. When actors combine internal and external resources to co-create value, services are created through different value constellations (Lusch, Vargo, and Tanniru 2010). As services increase, cooperation between firms takes on new forms, while resources, such as knowledge and skills, become increasingly integrated. In the present study, the service manoeuvre of establishing new value network constellations was a key to

solving the challenges present in business relationships (see, for example, Kowalkowski, Witell, and Gustafsson 2013).

We have identified two different service manoeuvres related to new value network constellations. Manufacturing firms are moving downstream (Wise and Baumgartner 1999); which means that they often partner with service firms or consultancies. To face this competition within the value network, other consulting firms partner with new manufacturing firms to gain access to production capability. This creates two types of value constellation possessing similar competencies. Interestingly, a manufacturing firm has the power in one value constellation, and a consulting firm has the power in the other. Instead of providing cooperation, these two different value constellations compete for the same business. Although several firms in the study are integrating their resources in order to create common value propositions (Lusch, Vargo, and Tanniru 2010; Kowalkowski, Witell, and Gustafsson 2013), there is an imbalance of power in these business relationships.

The present empirical investigation of actors in the automotive industry makes an attempt to identify the challenges of servitisation throughout the value network. But, the study focusses on the supplier side, and does not cover all possible actors in the value network. Further research is needed to include more actors, such as specific service providers, dealers and customers. In addition, the specific value constellations for individual services need more research in order to understand how actors can work together to overcome the challenges of servitisation.

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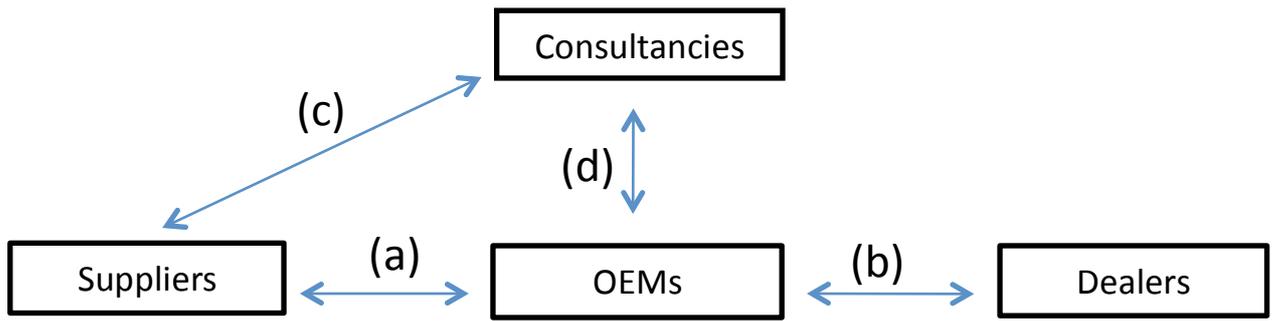


Figure 1. An overview of the value network, the different types of actors, and their business relationships.

Table 1. Challenges within actors creating imbalance in the value network.

| Type of firm | Challenge | Description | Quotes to exemplify challenge |
|---------------|---|--|--|
| Suppliers | Increase service, but product-oriented. | The firm wants to increase its service offerings, but is product-oriented. | The tricky part with services is that you need to come up with the service, and then come up with the business model for that particular service. [...] Why should we change when we are making money? |
| | Unclear roles for goods and services. | Unclear roles for employees to be able to handle both goods and services. | She got help from the production leader and the purchasing manager. These people were in a situation where they also performed marketing activities. |
| OEMs | Increase service, but product-oriented. | The firm wants to increase its service offerings, but is product-oriented. | We don't try to create a lot of new processes for this [services], but we try to run the product processes with small modifications. If you do it separately [...] you will not be allocated part of the budget. |
| | Product-oriented salespeople sell services. | Product-oriented salespeople sell services. | If we are going to succeed in services, it is not about the strategy for creating new services. We will solve that. But how could we guarantee that we have the competence to sell it? |
| | Goals, but lack strategies. | Firms have goals with their service infusion, but have no strategies. | There is a goal to increase the turnover from services [...] but there is no strategy for it at the moment. |
| Consultancies | Offer solutions, but lack manufacturing capability. | No manufacturing capacity, but complete solution providers. | We don't turn out the machine, but we do have partners, so we can get it done for the customer. |

Table 2: Challenges in business relationships between actors that create imbalance in the value network.

| Type of relationship | Challenge | Description | Quotes to exemplify challenge |
|---|--|--|--|
| Relationship (a): Suppliers and OEMs. | Offer solutions, but lack control. | Complete supplier with less freedom to design and choose subsystems. | For example, one supplier was responsible for buying components for the front axle, so they chose themselves, but now the OEM has taken over and tells them where to buy their components. |
| | Offer services, but reactively. | Great demands have advantages and disadvantages. | Not all firms are strong enough to stay on the market when it develops in this way. If you have a professional customer that you work with that makes professional demands on the supplier, then you become better yourself. |
| | More jobs, less income. | More jobs, but less income. | The difficult part is getting paid for the services that the firm offers. Many demand that you should offer a lot, but you are not willing to pay for it. |
| Relationship (b): OEMs and Dealers. | More jobs, less income. | More jobs, but less income. | Even if we figure out how the dealer is going to get paid for the service, how do we get our share? |
| | Offer service, but no access. | Wants to offer the end customer services, but is not close enough. | Today [...] we are many that work in the dealer organisation since we have bought 30 percent of the dealers in Europe. [...] You can control the process – how we take care of the customer, competence. |
| | Become competitor to customers. | Wants to deliver services, but then becomes a competitor to its customers. | But we should probably not get too deeply into that [offering services to end customers] and should absolutely not compete with our present customers. |
| | Services, but customers not ready. | Wants to increase the services, but dealers and end customers are product-oriented. | If you take a service agreement as an example, when you start selling it, it is very hard to explain what the customer gets, because there is nothing tangible in it. |
| Relationship (c): Consultancies and Suppliers. | New value constellations – partners and competitors. | New competitors as their offerings become more alike; new partners as value constellations are created for solutions delivery. | There are great advantages when you say that you are highly flexible [...]. A consulting firm that partners like this works with a number of different customers, and their competence will help us as well. |
| Relationship (d): Consultancies and OEMs. | Partnerships, but at a distance. | Close cooperation with customers, but the first ones to go in times of recession. | |

Table 3. Service manoeuvres and their relation to the different challenges.

| Service Manoeuvre | Description | Type of actor | Orientation | Targeted Challenge |
|---|--|----------------------------|-------------|---|
| Increase service orientation. | Change the mindset of the employees by putting a price on their competence. Identify clear employee roles. | Supplier | Service | Increase service, but product-oriented. Unclear roles for goods and services. |
| Treat service as a product. | Treat the service as a product, and make adaptations so that it fits into the normal routines. | Supplier, OEM | Goods | Increase service, but product-oriented. |
| Make the service tangible. | Create a tangible output for the service. This allows the salespeople to show something tangible to the customer, and to justify its cost. | Supplier, OEM | Goods | Product-oriented salespeople sell services. Services, but customers are not ready. |
| Develop resource integration capability. | Offer solutions to their customers although they have no manufacturing capacity in-house. | Consultancy | Service | Offer solutions, but lack manufacturing capability. |
| Create partnerships to deliver solutions. | The OEMs have power to influence the suppliers' activities, and expect them to deliver solutions. To be flexible, one supplier has established partnerships with consultancies. | Supplier | Service | Offer solutions, but lack control. Offer services, but reactively. |
| Separate service from the delivery of goods. | Customers buy the service, and are then free to buy the physical product from any competitor. | Supplier | Goods | More jobs, less income. |
| New value constellations to charge for service. | When external resources are introduced into the on-going business relationship, the customers realise that these resources could not be delivered free of charge; the service was valued, and had a price. | Supplier, OEM, Consultancy | Service | More jobs, less income. |
| Acquiring customer relationships. | To get closer to the end customer, the firm buys up some of its dealers. | OEM | Goods | Become a competitor to customers. Offer service, but no access. |

Biography



Nina Löfberg is a researcher at the Service Research Center (CTF) at Karlstad University, Sweden. She holds a PhD in Business Administration from Karlstad University. The title of her Ph.D. dissertation was “Service Orientation in Manufacturing Firms” and she has a special interest in service logic, value creation and service innovation. She has published research in scholarly journals such as *Journal of Service Management* and *Managing Service Quality*.



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