Chapter 14
Strategies for Developing the Service Business in Manufacturing Companies

Jakob Ebeling, Thomas Friedli, Elgar Fleisch and Heiko Gebauer

Abstract Higher market complexity and increasing competition are forcing traditional manufacturers to rethink their traditional business strategy. New growth potential and lucrative margins in the service business tempt companies to extend their traditional products business by services and so, change their position in the product-service continuum. But, which position should be selected? What does influence this decision? And, which implications does the new position have for the organization? This contribution tries to answer these questions by describing existing strategies for the development of the service business in manufacturing companies. First, environmental factors are specified that influence the decision on a service strategy. Second, four different service strategies along the product-service-continuum and their organizational implications are described in detail. The chapter ends with some conclusions on the implications for managers.

J. Ebeling · T. Friedli · E. Fleisch
University of St.Gallen (HSG), St. Gallen, Switzerland
e-mail: jakob.ebeling@unisg.ch

T. Friedli
e-mail: thomas.friedli@unisg.ch

E. Fleisch
e-mail: elgar.fleisch@unisg.ch

H. Gebauer (✉)
Business Innovation, Environmental Social Sciences,
Swiss Federal Institute of Aquatic Research (eawag),
Karlstad University, Karlstad, Sweden
e-mail: heiko.gebauer@eawag.ch

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14.1 Introduction

Higher and more complex customer needs coupled with increasing competitive intensity and the need to exploit new profitable growth potentials are forcing manufacturing firms to extend their service business (Anderson et al. 1997). Companies like GE, IBM, Xerox, and Rolls-Royce Aerospace are prominent examples of this trend (Kastalli and Van Looy 2013). These companies have constantly added new services along the product-life cycle and increased their service revenue share to up to 56 % (Fischer 2012). These success stories are well known to managers and business consultants. But are these success stories transferable to other manufacturing companies?

Many companies failed in transforming their business by expanding their service offer. Instead of higher profits due to increasing service revenues they were con-fronted with higher costs and shrinking profitability. This phenomenon, also known as the service paradox (Gebauer et al. 2005), leads to the question on how to decide on the right service strategy (for manufacturing companies)?

Service strategies are based on extending services within the total offering (e.g. Vandermerwe and Rada 1988; Martin and Horne 1992; Mathieu 2001; Oliva and Kallenberg 2003; Davies 2004; Sawhney et al. 2004; Gebauer 2008). According to Martin and Horne (1992) and Kotler (1994) the product-sevice continuum in the development of total offerings follows a specific pattern: it begins with pure goods, continues to total offerings dominated first by goods and then gradually by services, and ends with pure services (Fig. 14.1).

The literature generally agrees that extending the breadth of services can be considered as moving along the transition line from products to services in the product service continuum, with the two ends being services as the add-on and tangible goods as the add-on (Oliva and Kallenberg 2003; Neu and Brown 2005). Service strategies represent different positions on this continuum. The following descriptions of service strategies are most often used (Fischer 2012):

- Service strategies for moving downstream in the value chain (Wise and Baumgartner 1999)
- Service strategies within manufacturing (Mathieu 2001)
- Transformation strategies for moving from manufacturing to service business (Oliva and Kallenberg 2003)
- Moving towards high-value integrated solutions (Davies 2004)
- Service strategies in product manufacturing companies (Gebauer 2008)
- Five types of new service-based business concepts (Lay et al. 2009)
- Service strategies and service transition trajectories (Matthyssens and Vandenbempt 2010)

In this chapter we focus on the four service strategies identified by Gebauer (2008), who used an explorative factor and cluster analysis of a sample of 195 Western European manufacturing firms, and Fischer et al. (2010), who detailed the findings based on 31 case studies (Fig. 14.2).

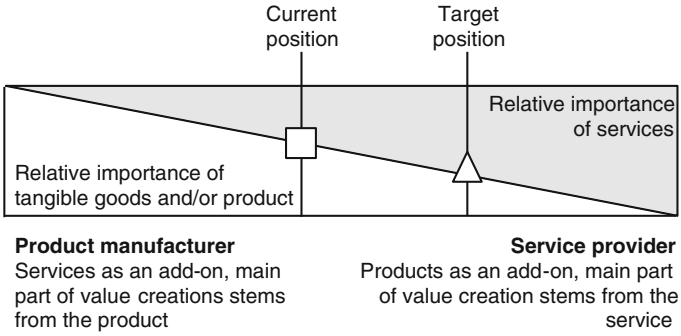

Fig. 14.1 Product-service continuum (adapted from Oliva and Kallenberg 2003, p. 162)

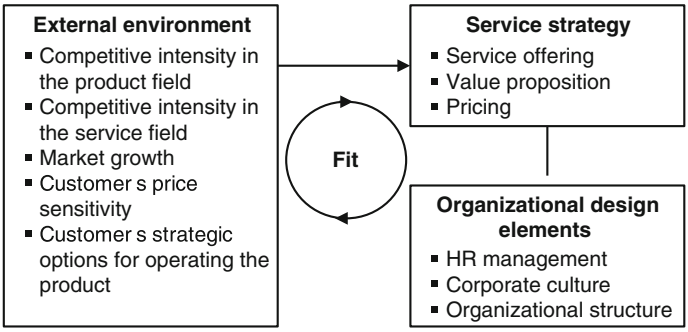

Fig. 14.2 Achieving a strategic fit

14.2 Influencing Environmental Factors

Organizational theory has established several dimensions of environmental characteristics: uncertainty, directness, change, dynamism, homogeneity, complexity, and munificence (Aldrich 1979; Andrews 1996; Duncan 1972). Research on the external environment started with Dess and Beard's discussion (1984) of the various dimensions of organizational task environments. They distinguish between the following three factors characterizing the external environment: munificence, complexity, and dynamism. Munificence relates to the scarceness of environ-mental resources that support firms' growth within a given industry. Environ-mental complexity reflects the heterogeneity and concentration of environmental elements. Environmental dynamism refers to the rate of change and degree of in-stability of the environment. Rapid change, short product life cycles, and processes of creative destruction are typical characteristics of dynamic environments. Dynamic environments make current products and services obsolete, and require new competences to be developed (Dess and Beard 1984). Miller (1987) uses the term environmental competitiveness to reflect the number of competitors, and of areas in which there is

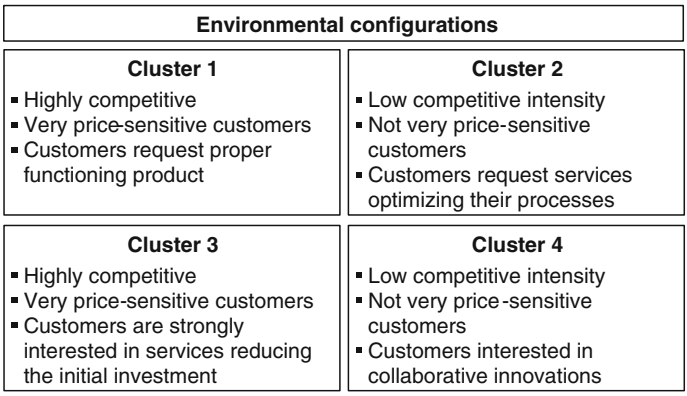

Fig. 14.3 External environmental configurations

competition. Jaworski and Kohli (1993) use the term competitive intensity, which reflects the behaviour, resources, and ability of competitors to differentiate their products or services. The market orientation view argues that organizational activities are not only influenced by competitors, but also by market turbulence in terms of changing customer product preferences. Kohli and Jaworski (1990), for example, propose a philosophy that directs firms' activities toward understanding changing customer preferences and design a strategy to satisfy those needs (Fig. 14.3).

Not all of these dimensions are equally important for the service business. On that account, Gebauer (2008) developed a model for the external environment which comprises competitive intensity in the product fields, competitive intensity in the service field, market growth, price sensitivity of customers, and strategic choices of customers. The first two derive directly from the literature on market orientation. Market growth and price sensitivity of customers reflect the two aspects of market turbulence, a traditional dimension of the business environment (Jaworski and Kohli 1993). Market growth refers to the growth rate of total sales in a business unit's principal market segment. A high market growth in the product field denotes a more favourable environment for manufacturing companies (Slater and Narver 1994). Price sensitivity captures customer behaviour in consequence of changing prizes (Janiszewski and Lichtenstein 1999). Market turbulence, as operationalized by Jaworski and Kohli (1993), also covers the changing customer product preferences. In this context, customer product preferences are interpreted as changes in strategic choices on how to operate the products. Outsourcing the product maintenance represents such a strategic option. Other strategic options refer to ensuring only proper product functioning or optimizing the efficiency and effectiveness of the product within the customer process. Customers following different strategic options probably have different customer needs.

According to the contingency theory companies have to align their strategy on the external environment. High performance can be reached if a strategic fit is

realized (Mintzberg 1979). Gebauer (2008) analysed in his study of 195 companies these environmental factors and their influence on the performance. Four different clusters of external environment configurations could be identified.

The first cluster comprises an environment that is highly competitive for products and services. The customers are very price-sensitive and request services that ensure the proper functioning of the product. Very little attention is paid to services optimizing effectiveness and efficiency of the product in their processes, focusing on collaborative innovation for their processes, and reduction of the initial investments by paying for performance.

The second cluster can be described by low competitive intensity. Customers are not very price sensitive. They demand services which focus on optimizing their process. They don't expect services which are only focusing on ensuring the proper functioning of the product. Similar to cluster 1, customers don't request services focusing on collaborative innovation for their operating processes and the reduction in the initial investments.

High competitive intensity and strong interest in reducing the initial investment are the main environmental factors of the third cluster. Ensuring the proper functioning of the product as well as collaborative innovation is less prominently requested by customers, whereas services optimizing the effectiveness and efficiency of the customer's processes are demanded on a medium level.

The fourth and last cluster of environmental influences can be described as low competitive intensity and high interest on collaborative innovations. Companies in this environment are faced with customers requesting services ensuring a proper functioning of the product and optimizing their processes on a medium level. The price sensitivity of their customers is low.

14.3 Service Strategies for Manufacturing Companies

To meet these external requirements four different patterns of successful service strategies could be identified which vary in terms of service offering, value proposition and pricing (Gebauer 2008; Fischer et al. 2010). These four strategies are labelled as After-Sales Service Provider (ASP), Customer Support Provider (CSP), Outsourcing Partner (OP), and Development Partner (DP) (Gebauer 2008). To implement one of those strategies managers need to adapt several factors within their organization, such as human resource management, corporate culture, and organizational structure (Gebauer 2008). In the following section the four different service strategies are described and their organizational implications are explained.

14.3.1 After-Sales Service Provider

Companies following the *After-Sales Service Provider* strategy are faced with high competitive intensity and price sensitive customers, who (only) expect a properly functioning product for a low price. Predictably, the low prices cause deficits in product reliability, leading to sporadic breakdowns and customers increasing request for support to ensure proper product functioning. The main field for competition are attractive prices for both, products and services (Cluster 1).

ASPs focus on ensuring the functional capability for the period in which the customer uses the product. If the product breakdowns appear, standardized after-sales services are offered to the customer, which include predefined services such as spare parts, repair, inspection, hotline, and basic training. Sophisticated service needs such as the optimization of effectiveness and efficiency of the product in the customer process, collaborative innovation in customer's operating processes, and reduction in the initial investment by paying for product performance are only minor issues. The prices for these services are not integrated into the product price. Charges and prices are based on a mark-up for labour and parts. Price discounting is used frequently.

ASPs create a unique value proposition by providing products at attractive prices and guaranteeing a proper functioning of the product through after-sales services. Because of the unbundling pricing approach, the customer can choose those after-sales services that are really needed. The customer can compare the prices for services and obtain price discounts.

To deliver superior after-sales service, ASPs establish frontline employees as reliable troubleshooters, who guarantee a quick response in case of a product breakdown and concentrate on a small range of issues that arise when delivering standardized after-sales services. In addition, service technicians possess strong technical expertise and are motivated to get continuous training. The latter includes on-the-job and formal classroom trainings and ensures that individuals have basic knowledge of the technical expertise needed for the range of issues that typically arise when after-sales services are requested.

In terms of the corporate culture, ASPs change their corporate values by providing after-sales services and making the role of service employee to one of the most important positions within their company. The service employees interpret after-sales services as the main differentiating factors in the product-marketing strategy. However, service employees understand that services are not just an add-on to the product. Services are charged separately and represent an essential part of total value creation. Other typical service-related values, such as innovation, customization, and the belief that flexibility and variety create profits, are not necessarily developed.

APS bundle the various after-sales service activities such as repair, inspection, and spare-parts management in a cost-centre within the product unit. The formulation and implementation of after-sales services is a collaborative effort among various units within the business, between the after-sales services and product

functions. Having fixed costs for the required service personnel, the main driver for profitability becomes capacity utilization. Since the demand for after-sales services is unpredictable, high capacity utilization is very difficult to achieve. So, sharing resources between after-sales service and production-function can facilitate the covering of peaks and proper capacity utilization.

ASPs put great emphasize on collaboration with third-party logistic providers as a key factor for implementing the after-sales service strategy and differentiating it-self from competitors. Having a high number of installed products all over the world, good collaboration enables them, for example, to provide on-site support including the right spare parts in less than 48 h.

14.3.2 Customer Support Provider

Customer Support Providers' markets consist of customers who are looking for outstanding product quality. Product performance and reliability are the main purchasing attributes. Furthermore, customers are demanding more services, since they're increasingly focussing on their core competences. They invest in reliable products and demand services that increase the efficiency and effectiveness of the product in the operating phase. Compared to ASPs, CSPs are not faced with such a high competitive intensity in terms of price competition and intensity of price discounting. CSPs are still able to achieve elements of the differentiation through technical superiority (Cluster 2).

Both the customer expectations of improved product efficiency and effectiveness in the customer process as well as the explained competitive situation appeared to support the need for alignment with the customer support service strategy. This strategy concentrates on optimizing customer operating processes. The latter means achieving maximum uptime (operationality) and yield through services such as comprehensive preventive maintenances, advanced training, and process optimization. In contrast to ASPs, the goal is not to react immediately to product failures, but rather to prevent breakdowns.

The price of the services is not integrated in the product price. Services are bundled into customized packages and the customer pays a fixed price. That means that compared to ASPs, the customer-support service strategy is based on service elements that can be customized and bundled according to customer needs. Thereby they are able to offer sufficient flexibility to respond to individual customer needs. Optional service elements are designed to accommodate expected differences between customers. In addition, services are tailored by modifying individual service elements to fit the needs and wants of an individual customer.

CSPs form a value proposition by providing highly reliable products and increasing customer efficiency and effectiveness through a comprehensive range of maintenance services, tailoring service offerings to satisfy the unique needs of an individual customer, and guaranteeing customers a fixed price for an individual service package.

In terms of corporate culture, CSPs make substantial effort in convincing service employees that customized service packages are an essential part of the value creation. The flexibility to modify and adjust the amount of purchased service elements is interpreted as enabling to accommodate unexpected differences that arise between various customers. Consequently, both managers and employees believe that customization and flexibility contribute to better differentiation, thus leading to higher profits. Customer support providers also adapt the key roles performed by frontline employees who deliver highly customized services and serve as performance enablers. Performance enablers develop an in-depth understanding of the individual performance requirements of customers and provide unbiased recommendations to customers on how to achieve the desired performance outcomes. Delivering highly customized services means that frontline employees must also be able and willing to assume responsibility and provide flexibility for the broad range of issues that arise when customizing services for individual needs.

CSPs recruit individuals who have a strong foundation in technical expertise and have behavioural competencies, as well as an appropriate customer-focused attitude. The technical expertise is similar to ASPs. The behavioural competencies include (listening and) communication skills. These skills are necessary, because listening to and communicating with customers is essential for the understanding of individual customer needs. These skills help to convince customers that the defined service package fits their needs. The behavioural competencies and the customer-focused attitudes are trained by formal or informal mentoring programs, during which new service employees are coached by experienced, long-term employees, and service managers. Customer support providers try to retain these unique competencies by reducing employee fluctuation and establishing long-term employee/customer relationships. Long-term employees accumulate a broad base of technical expertise, behavioural competencies, and a customer-focused attitude which is also needed to supervise new service technicians.

In comparison to ASPs, CSPs do not integrate the responsibility for implementing the service strategy into the existing product division. Instead, they create a new service division with specific and clear responsibilities for services, such as preventive maintenance, advanced training, process optimization, repair, inspection, and spare parts. As a typical business unit, the service division also takes over the profit-and-loss responsibility. Setting-up a new service division is an intra-firm collaborative effort between product and service divisions. The human-resource needs of the new service division are met initially through internal resource flows from the product unit. Compared to ASPs, no resources are shared on an on-going basis between product and service division. Due to a higher focus on preventive maintenance the service demand is more predictable which enables higher capacity utilization.

For CSPs, a somewhat trickier issue is the challenge of creating a global service infrastructure that is capable of delivering the different services locally to the customer's installed base. This presents multiple challenges. One of which is the investment decision to build an infrastructure that will not generate revenues

immediately. The initial investment can dilute some of the operating profit, thus reducing the overall profitability of the service division. At the operational level, the ability to diffuse knowledge across the local service organizations has to be developed. The different local service organizations also have to make an explicit decision about the degree of standardization of the service offer, to balance the transferability of services across the local organizations with the customization for individual local organizations. To make this decision, CSPs install a product management function for customizing the services offered.

CSPs emphasize the considerable extent to which collaboration with customers can become a key factor for the success of a customer-support service strategy. This strategy requires the development of a shared understanding of market conditions and of individual customer needs for optimizing the customer's operating processes.

14.3.3 Development Partners

Development Partners' customers expect specific solutions for the operating processes. A greater specialization of customer processes and a clearer definition of operating processes as core competencies seem to be the drivers for a higher demand on innovative solutions for customer processes. DPs also report that competitive equality has been reached in the field of products and after-sales services, leading to essentially greater competitive intensity. Sustainable competitive advantages derive mainly from designing individual solutions for customer processes (Cluster 4).

DPs' value proposition is based on providing design and construction services to support customers in the process development, to achieve outstanding process performance. That means that DPs create a situation in which the firm's customers benefit directly from their development competencies. These competencies are co-produced between the service provider and customer, serve as a resource-position barrier, and can be translated into an entry barrier for competitors. Both the DPs and their customers possess a unique and hard-to-imitate competency position, leading to sustainable competitive advantages. Since DPs often bundle products and services into solutions, products and services are sold together.

DPs convince their initial R&D staff to be a "service provider for customers" that co-produces, with the customers, innovative solutions for customer processes. Instead of believing that innovation with respect to self-developed products is the main value driver, over a period R&D staff increasingly recognize that co-produced or even co-innovated solutions are the major new source of value creation. The R&D staff serves as a trusted adviser and develop a learning relationship. As trusted advisers, R&D staff develops an in-depth understanding of various customer processes. Employees collaborate with and provide unbiased recommendations to customers on how to innovate and develop solutions for customer processes. Employees participate in the implementation of innovation to improve customer

processes. Additionally, the R&D staff is compelled to establish a learning relationship with individual customers. A learning relationship is typically defined as an on-going connection that becomes more effective as a seller's personnel and (one) of its customers interact with each other. The R&D staff become "smarter" as they gain an intimate knowledge of customers' complex problems in developing the operating process. At the same time, customers become smarter as they learn about the real development capabilities of the supplier. Additionally, customers also learn about the firm's specific development capabilities, whether they can support future process development, and whether the firm's R&D staff can be trusted to provide superior design and construction services to answer the customer's current and future process challenges.

DPs essentially invest in developing and recruiting technical competencies. Engineers are recruited at both levels—graduate engineers from technical universities and managing engineers from professional engineering consultancies or other manufacturing companies. Typically, an intensive trainee program ensures the initial skill adaptation of graduate engineers in terms of company-specific technical competencies. A major part of the trainee program consists of lessons on behavioural competencies and customer-focused attitudes. The graduate engineers learn appropriate communication skills to perform the role of a trusted adviser and developer of a learning relationship. New managing engineers are usually assessed according to their technical and behavioural competence, as well as customer-focused attitudes. Only engineers with an outstanding performance record are recruited.

A separate R&D team is responsible for design and construction services to achieve outstanding process performance. Setting-up this separate R&D team is an internal R&D effort. The initial human resource needs of this new separate R&D team are initially met through internal resources. Resources are shared on a regular basis between the separate R&D teams for extra customers and the remaining R&D staff for internal research and development projects. Compared to ASPs, the reason for sharing resources does not stem from the unpredictability of the service demand, but is driven by the potential to use customer knowledge to innovate products. As in typical R&D functions, DPs concentrate on retaining the competencies needed to provide superior design and construction services. Only high employee retention ensures carrying out different front-line roles and developing the necessary competencies effectively.

The DP service strategy requires a common understanding of customer challenges in the process development. The collaboration with customers is also interpreted as a key factor in contributing to a successful implementation of the service strategy. Compared to ASPs and CSPs, there is no need to set up a global service infrastructure of service agents or service organizations. The separated R&D team is usually located at the headquarters.

14.3.4 Outsourcing Partner

Outsourcing Partners combine cost leadership with medium degree of product and service differentiation. Customers in this field have the need to improve cash flows and reduce the capital employed leading to an increased concentration on core capabilities. Instead of concentrating on the product, they expect to buy mainly the performance of the product that they need in the post-purchasing phase. Buying product performance increases price competition and the intensity of price discounting. This leads to an erosion of product margin because, hence-forth, customers only compare prices but do not separately value technical features or better services any more (Cluster 3).

OPs offer attractive prices for operational services. Their goal is to assume the operating risk and full responsibility for the customer's operating processes. The value proposition of OPs is simply based on reducing the customer's capital employed and managing the corresponding risks. In contrast to CSPs, OPs do not create customized service packages. Operational services are standardized and focus on efficiency, economies of scale, and the belief that service customization is costly. However, offering attractive prices for the performance of the outsourced process without a sufficient product and service quality is insufficient. If the product breaks down frequently, troubleshooting, repairs, and spare parts will increase service costs, leading to a possible erosion of overall profitability.

In terms of corporate culture, OPs place considerable effort on convincing front-line staff to be a "pure service provider" that delivers the output of the operating process to the customer. Instead of believing that customized service packages or technical features are an essential part of the value creation, the frontline staff has to recognize that taking over customers' operating processes means providing standardized services. The OPs' frontline staff has to adapt to their roles as reliable operators and boundary spanners between standardized services and complex service delivery. A reliable operator guarantees a defined quality of output from operating processes. He has an in-depth understanding of customer requirements of the process output that makes it possible to satisfy customer needs.

OPs search for individuals for the role of frontline employees is based primarily on their good expertise in operating processes. They try to recruit the customer's employees when taking over the operation of customer processes. Thus, they can gain immediate access to the intimate knowledge of the operating processes. This enables them to operate the customer process at the same performance level as the customer. OPs do not incur great costs of intensive training of the frontline staff in advanced operational skills but usually only to update the former customers' operators in terms of technical experience with machines of the OPs and ensure that they have the right skills to provide service. The training and development of technical expertise and advanced service skills are provided by on-the-job training. Furthermore, training in behavioural competencies and appropriate customer-focused attitudes does not seem to be important. Previous customer employees

already have adequate communication skills for dealing with their former employers.

OPs typically set up a separate service company as a new service organization which is often a legally independent company to provide operational services. The organizational separation from the main company reduces internal barriers with regard to taking over the operation of processes that are not related to own products but to products from third party companies. Therefore, integrating outsourcing services into the existing product and/or service division seems less appropriate for OPs. Keeping close ties to the main company is important, for example, in terms of spare parts replacements within an outsourcing partnership. However, more important to the intra-firm collaborative effort is the inter-firm collaboration of the new service company with existing customers, banks and insurance companies. An extensive collaboration with customers aids in recruiting the necessary employees and clarifies the degree to which the newly formulated strategy aligns with the customers' underlying needs. A close collaboration with banks and insurance companies is important to deal with the financial risks of operating customers processes. Since, OPs operate as pure service companies, they put great emphasis on customer proximity of the service organization. During the formulation and implementation of the service strategy, companies decentralize decision-making-authority.

Table 14.1 summarizes the explained alignment between external environment, service strategy and organizational design elements.

14.4 Managerial Implications

Instead of discussing the question what position manufacturing firms should occupy on the transition line between manufacturing and providing services, four specific service strategies were presented. The service strategies provide an attractive opportunity for product-oriented firms to reconsider and adapt their position in the product-service-continuum.

However, to exploit the opportunities of services successfully, manufacturing firms have to establish the appropriate alignment between the external environment, service strategy, and factors of organizational design. This means that there is no one way of positioning on the transition line. Mangers have to be aware that for (re-) defining their service strategy a sound knowledge of the external environment is needed, which is especially true for knowing the requirements of their customers. Since, shifting their service strategy and offering new services might not address the need of all customers. However, satisfying the needs of all customers to the full extend could result in an unmanageable complexity, which would not deliver the expected results. To avoid this, a clear picture of which markets and customers should be addressed in the future has to be developed. Consequently, one key factor for success appears to be a managerial orientation toward markets.

Table 14.1 Service strategies based on external environments and their organizational implications

	After-sales service provider	Customer support provider	Development partner	Outsourcing partner
External environment	Cluster 1	Cluster 2	Cluster 4	Cluster 3
Customer requirements	Proper functioning of the product	Main purchasing attributes are product performance and reliability; efficiency and effectiveness of the product in the customer processes	Innovative solutions for their operating processes	Reducing the initial investment; high level of operational services
Competitive intensity	Competitive equality with products, erosion of product margins	Technical superiority creates part of the differentiation	Competitive equality with products; and after-sales service; erosion of product and service margins; sustainable competitive advantages come from designing individual solutions for customer process	High price competition
Service strategy				
Service offering	Spare parts, repair, inspection, hotline, basic training	Comprehensive preventive maintenance, advanced training, process optimization, repair, inspection, hotline and spare parts	Design and construction services	Mainly operational services; other kinds of services are not important; customized service are not important
Value proposition	Provide products at attractive prices; guarantee proper product functioning through after-sales services	Provide highly reliable products and increase customer efficiency and effectiveness through services; tailored services to satisfy the individual customers; guarantee a fixed price for individual service package	Customers benefit directly from supplier development competencies; Co-production of competencies between customer and supplier	Combining cost leadership, medium degree of product and service differentiation; value proposition is based on reducing the customer's capital employed and managing the corresponding risks

(continued)

Table 14.1 (continued)

	After-sales service provider	Customer support provider	Development partner	Outsourcing partner
Pricing	Unbundling pricing approach enables customer to choose service; use of discounting	Low intensity of price discounting	Price bundling of product and service	High price competition, price discounting is regularly used
Organizational design elements				
Human resource management				
Personnel recruitment	Strong foundation of technical expertise; ability and motivation to learn continuously	Strong foundation of technical expertise; behavioural competencies and customer-focused attitude; risk-assessment skills	Strong foundation of research and development expertise; graduate engineers from technical universities; managing engineers from professional engineering consultancies or other manufacturing companies	Frontline employees with good expertise in operating processes recruit customers' employees when taking over the operation of customer processes
Personnel training	Formal classroom training; on-the-job training	Initial training program, on-the-job training; mentoring program	Trainee program for graduate engineers; on-the-job training	Do not incur great costs of intensive training of the frontline staff in advanced operational skills; on-the-job training
Corporate culture				
Values with respect to providing services	Services as an essential part of total value creation	Customization and flexibility are the enabler of value creation	Being service provider for customers; Co-innovating solutions is main source of value creation	Convincing frontline staff to be a "pure service provider" that delivers the output of the operating process to the customer; focus on standardized services

(continued)

Table 14.1 (continued)

	After-sales service provider	Customer support provider	Development partner	Outsourcing partner
Role of employees	Serve a reliable trouble-shooter; deliver standardized service	Deliver highly customized services; serve as performance enabler	Serve as a trusted advisor, develop a learning relationship; lead collaborative innovation performance	Reliable operators and boundary spanners between standardized services and complex service delivery
Organizational structure				
Integration of business unit responsibility	After-sales services as a cost centre within the product unit	Creation of a separate service division	Separate R&D team	Separate service organization which is often legally independent
Inter-firm collaboration	Initial internal resource flow from production function, shared resources between service and production function	Initial internal resource from the product unit, no shared resources on an on-going basis	Initial resources from the R&D function, internal expert knowledge network	Close collaboration with banks and insurance companies
Global service infrastructure	Service agents	Infrastructure of local service organizations; essential investment that will not generate revenues immediately; diffuse knowledge across the local service organizations; explicit decision on standardization of services	Centralized service infrastructure because R&D team for external customers is located at headquarters	Great emphasize on customer-proximity; decentralized decision making

The successful implementation of the four service strategies requires different types of adaptation of organizational design elements. Identifying the alignment of service strategy and organizational factors with market characteristics seem to present both major challenges and the primary implications for managers. Table 14.1 could serve as a managerial navigator, indicating the consistent configuration of factors of organizational design. Depending on an organization's individual service strategy, managers can use the table as a checklist for the alignment of the service strategy with the actual environmental and organizational factors.

For example, a *Customer Support Provider* strategy benefits from a service-oriented culture which is characterized by values that emphasize customization and flexibility and employees that live and deliver these values to support customers with tailored services to optimize effectiveness and efficiency in using their products. Delivering such services leads to a high degree of interaction with the customer during tailoring. This, in turn, requires the necessary skills including technical expertise, behavioural competencies and customer-focused attitude as well as risk-assessment skills, and so on. In Contrast, a *Development Partner* service strategy should be backed up by strong R&D competencies, an organisational structure close to the central R&D division that supports the development and delivery of R&D-oriented services and an incentive system that encourages the service employees to provide R&D-oriented services not to internal—as usual R&D units do—but directly to external customers.

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