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How Do Companies Servitize?

Case company: Mölnlycke Health Care AB

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Abstract

The rapid technological development has commoditized product differentiation and squeezed products margins. Consequently, manufacturers have sought alternative routes to increase the opportunity for competitive differentiation and found that they could do so by increasing the service component in their offerings. Due to the very unique and different natures of service, many companies experience problems identifying the service propeller. It has been our attempt to analyze and describe how businesses approach service development by conducting interviews and by reading relevant literature.

Our findings and subsequent analysis excavated a number of product culture residuals that had hampered the servitization process. One of our main findings showed that in order to overcome the barriers of change, there was an attested need to restructure a company's organization and reorient the company culture.

Nonetheless, we found, on the basis of our interviews and relevant literature, that the final and most important common factor was the unawareness as to the service development phase whereabouts. It was revealed to us that the unawareness by and large was due to the inability of product-dominant companies to handle the abstractions of the service concepts. The development process appears to be an ad hoc phenomenon, which also helps explain the frustration of the internal obstacles everyone had encountered. We came to the final conclusion that it was in fact the new service development process per se that had posed the strategic challenge.

Key words: • product-dominance • service orientation • service development • strategic challenge • dual role • process unawareness

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1. Background & Problem Definition

In this chapter we present the background information of the thesis. Second, we introduce the purpose and the fundamental research problem. Finally, we identify and present the case company and the limitations of our research.

1.1 Introduction

No company can stand still in today's increasing hypermarket place. Each must continually develop and adapt to the changing environment if it wants to maintain its competitiveness. One of the best methods for companies to meet this challenge is through strategic business development. This process necessitates companies to continually maintain efficiency and effectiveness by refocusing on their core business and divesting extraneous project, products and/or services. Similarly, it also requires companies to either develop and/or expand their core business through organic growth or acquisitions.

In the past, manufacturing companies could effectively compete based on internally focused product differentiation. However, the maturity of the manufacturing industry has put greater pressure on product margins and the onset of technology has instigated an increased product standardization and commoditization. This process makes product differentiation difficult to achieve, especially as R&D costs continue to escalate, which yield fewer and smaller enhancements. In order to defeat product standardization and diminishing returns businesses have communicated a desire to move toward service-orientation as an opportunity to increase differentiation. Service development, however, is an emerging subject in its infant stage, at least from a theoretical standpoint (Martin & Horne, 26).

1.2 Research purpose & our contribution

Accordingly, there is a need for further research in order to help companies on the brink of servitizing. Although services seem to offer numerous benefits, not only for the provider, but logically so also for the customer, the service concept has been and still is difficult for most established manufacturers to grasp a handle on. It is therefore our ambition to make an attempt to increase the understanding of the *nature* of service development. The main purpose of this research is to analyze and describe how businesses approach service development by conducting interviews and by reading relevant literature so that we can sculpt and contribute a model on service development, which in turn will be applied toward our case company: Mölnlycke Health Care AB.

1.3 Problem analysis

In order to serve the research purpose we have set out to first define the research problem, the research limitations and the information needed.

1.3.1 Problem definition

“How does a product/manufacturing-based multinational corporation strategically develop and/or extend its business to higher margin complementary services?”

After a cursory reading of the cost and benefits of offering services we found that most companies, including manufacturing-based ones, agree that offering services is an attractive strategic option. However, the complicated issue is how to proceed with the transition. To help understand this process we address the following questions as support to our main problem:

- How does a company shift from a manufacturing platform offering products to one that places more emphasis on the service component?

- What are the underlying challenges that a manufacturing-based company faces while making a shift from being a product-dependent company to increase the emphasis on and implementation of services?

We will keep these two questions in mind throughout the entire thesis and they will also assist us in approaching the theoretical framework (*Chapter 2*).

1.3.2 Limitations

The move towards increasing the service component in a product-dominant industry was in the 1980s termed *servitization* by professor Sandra Vandermerwe (Van Looy, Van Dierdonck and Gemmel, 33). It is a broad topic and as such we have set certain limitations, both in general and in particular regarding the research problem. The general limitations on our research were based on geography and resources (time and money available).

Although the service transition is taking place on a global level, we have limited ourselves geographically. Our main research was conducted on only medium to large Swedish-based multinationals. This was due to the proximity to executive management. Since we wanted to explore the executive management issues surrounding services, it made sense both in terms of time and expense to take advantage of our close location to numerous executive leaders in Sweden. Although some would say that this might lead to a culturally biased view of the service transition, we believe that multinational executives from every [Western] country face virtually the same level of decision-making, at least from a service conceptual standpoint.

Second, the notion of services has far-reaching external and internal effects on a company. We have narrowed our research to cover the process of servitization from an internal perspective, i.e. we do not intend to bring up service development that stem from e.g. mergers, alliances or

other business-to-business acquisitions. We intend to focus our research on the issues that are highlighted during the implementation of servitization, such as strategy, organization and processes. Our goal is to produce a model or an outline that can help understand the service transition.

Third, relative to manufacturing, services are exposed to a higher degree of people interaction and intervention. We elected to exclude the majority of [human] behavioral effects services can bring about, as it does not serve the research problem. The main reason for such exclusion is due to the danger of diluting our focus on the key issues involved in the service transition. In its (human behavior) place we opted to highlight certain critical issues regarding the employee skills and knowledge as a result of a heavier service-orientation.

1.3.3 Our main source of information

The research case is built on twenty-one interviews from eight different companies. Fourteen of the interviews came from executives from the case company; we will in the future refer to these fourteen interviews as the internal interviews. The remaining seven interviews came from: two pure service companies with no physical manufacturing and one manufacturing company, where the interviewed person has experience from both the company's service division and manufacturing division. Another interviewee came from a service division that had been set up separately from the original manufacturing company. Accordingly, there are two pure service companies and two service divisions companies from manufacturing companies. The two pure service companies have gone through the process of servitizing as entire entities, whereas the two service division companies (from the manufacturing companies) have experience in servitization. Though the service divisions' servitization experience is not as advanced as the pure service companies, they are still ahead of the manufacturing divisions in the respective companies.

The three other external interviewees are executives of manufacturing companies, where two out of the three have successfully experienced servitization. The third is in the process of servitizing, just as our case company is. It should be noted, however, that in comparison, this third company in process, is a manufacturer of industrial capital goods, whereas our case company produces consumable goods.

The service/product mix of the external companies rendered us with the opportunity to investigate using a three-layered approach. In no particular order, the first layer covered the perspectives from the core service providers, while the second layer included the service divisions within the manufacturing companies and lastly, the third layer dealt with the manufacturing companies. We considered it important to have a mix of the three, as we endeavored to understand the service transition from as many angles as possible. While the core service companies never had experienced a product-to-service transition we still deemed it good judgment to include them because of their service history and culture. We anticipated this information to give us a better understanding of the transitional issues, from which we could then develop a theoretical framework and later apply onto our case company.

From an internal (MHC) perspective, we thought it particularly important to understand its current strategic situation, its view and experience in services and service offerings. Because the definition of service and service offers vary between the subsidiaries, we wanted to make sure we collected our information from as many of the local subsidiaries as possible. The reasoning behind this is that these local subsidiaries are responsible for the regional customer interaction, satisfaction and the majority of external sales.

1.4 Case relevance

Mölnlycke Health Care AB (MHC) presents a classic case of strategic business development because they are experiencing reduced returns on their products, mainly due to the loss of differentiation, a result of

improved market technology and competition. MHC's management has grown increasingly interested in services as a method to differentiate its products, grow revenues and increase margins, which in turn gave us a gateway to study a company in the product-to-service transition.

To demonstrate the relevance of the case, this report will first lay out the theoretical framework for a company that desires to increase its service offers. Second, it will provide information from other companies that have undergone servitization or are in the process of doing so. Third, it will provide an in depth firm-specific study of MHC's transition into a more service-based company. Lastly, the conclusion will present the general aspects and theoretical implications a company can take into consideration when undergoing servitization.

1.5 Company background & history¹

Mölnlycke Health Care AB was created in February 1998 when Nordic Capital, a Swedish venture capital firm, acquired SCA's Mölnlycke Clinical Division and merged it with the Oy's Kolmi-Set division of the Finnish Tamro group. The merger resulted in a company with two operational divisions, Surgical and Wound Management, with a combined annual turnover of SEK 2 billion. Currently, Mölnlycke Health Care (MHC) employs 1,900 people, of which 1,200 are located in their production facilities in Finland, Belgium and Thailand. More than 400 people are engaged in sales and marketing (Europe and North America) and about 150 work at the corporate headquarters in Göteborg, Sweden.

Initially, the company suffered from a combination of unsatisfying factors, such as reduced profitability, inadequate resource utilization and an inefficient capital management system. Shortly thereafter, a new executive management team was installed. The new CEO and CFO stressed that their goal was to focus on increasing growth and improving efficiency in order to make possible an initial public offering in 2001.

¹MHC Annual Report, 1999.

The surgical division, symbolized by Klinidrape[®], is the market leader in the European single-use surgical product sector. Its products range from surgical dressings, clothing (protective gowns, caps and gloves), patient and equipment drapes, to pre-packed surgical procedure trays.

The wound management division is a relatively small player in the acute care, the home care and long-term care segments. It offers traditional and advanced high-end products under the Tendra[®] brand. It is especially well positioned in the advanced wound care management with Safetac[®], a silicon-based coating adhesive.

Though a relatively new company, the Mölnlycke corporate brand name is one of the best known in the European health care industry. It is often viewed as a supplier of high quality products with a heavy focus on the customer.

The spin-off led the way for a recent, major transformation program. The company leadership realized that solely relying on products would make growth more difficult to achieve, especially as products increasingly become more commoditized. Further, MHC realized it must distinguish itself from its competitors with “points of differentiation”, where the focus has shifted away *from* products *to* value-based solutions.

MHC has identified its brand values as the core value and the supporting values of its products. By virtue of this definition, MHC’s brand name does not trade on commodities. Quite naturally then, MHC faces challenges developing and expanding its core product-based business with accompanying and supplementary services, which probably requires a different approach in regard to organizational structure and business philosophy.

1.6 The health care industry

1.6.1 Bastions of conservatism

European hospitals are traditionally conservative in their business practices because the majority of them are state-owned (public). This linkage with the government means that the hospitals have to appear unbiased in their purchase decision-making. Thus, they often have protocols in place to prevent unfair competition among suppliers, which prevented many from establishing partnerships with their suppliers, which many private enterprises have in the past decade (Ziegler, et. al., 1).

Furtheron, this political hospital management lead the way for other conservative methods. In the past, the election of senior management positions in hospitals was more based on politics than managerial ability or industry knowledge. This system, in place since the late 1950's, is just now starting to crumble as governments realize that they must control medical costs, while also increasing the quality of care. Unfortunately, many of the political-based managers remain in key leadership positions. These managers are often older than their contemporaries in the civilian business world and are less likely to adopt new methods of management, such as supplier partnerships and new methods to measure health care quality.

1.6.2 Trends & transitions

As hospitals search for new ways to cut costs and improve patient care, two clear trends are starting to emerge. Both are based on the fact that many of the newly appointed managers, especially from younger generations, have their job stability based on their success at increasing efficiency and effectiveness.

The first trend is that many smaller hospitals are being merged or closed in an effort to centralize the main facilities at the regional hospitals. The

attempt to create economies of scale and scope will hopefully lead to the creation of larger hospitals, which are Mölnlycke's primary customers.

The second trend is the outsourcing of non-core activities, such as logistics and supply/inventory management. Hospitals and administrators are starting to focus on their core competence, patient care. Activities that are not related to patient care are increasingly outsourced to private companies who can often perform the service better at a lower cost (Ziegler, et. al., 1).

The latter of these two trends implies a heavier service-orientation, which suggests that Mölnlycke and its competitors need to realign their traditional focus on products, to one more sfocused on services.

1.7 Thesis outline

At this juncture we have described the background, the research problem and provided a brief introduction to the case company. In order to shed some light on our thesis procession, we have below provided a brief outline.

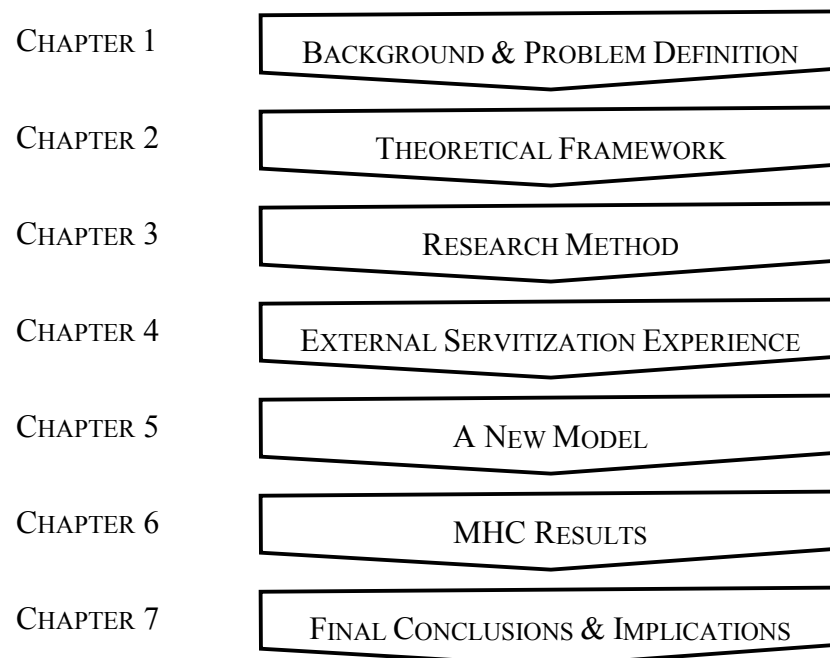


Figure 1.1 Outline of Master Thesis

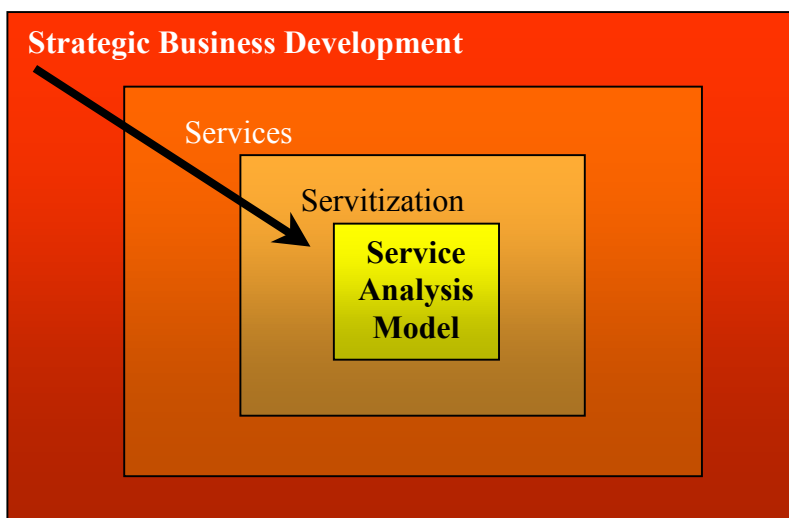
2. Theoretical Framework

After defining the research problem, the research questions and the basic propositions, we developed a theoretical framework from which we aimed to proceed. We began structuring the framework starting with business development and worked towards a narrower analytical model developed by David Bowen, Caren Siehl and Benjamin Schneider.

2.1 Introduction

Business and service development have always been important topics for both researchers and executives. As we developed our framework, we realized the complexities and movements in both areas. As such, the theoretical framework has been dynamic and has evolved throughout the research. While we increased our knowledge through reading secondary sources and through conducting the interviews, we constantly had to examine, reevaluate and refine the framework.

Although we started with the broad issues of strategic business development, we chose the servitization theory as our fundamental concept. We also identified a service orientated analytical model developed by Bowen, Siehl and Schneider for manufacturing-based companies. Their model helped us to understand the decisions and actions

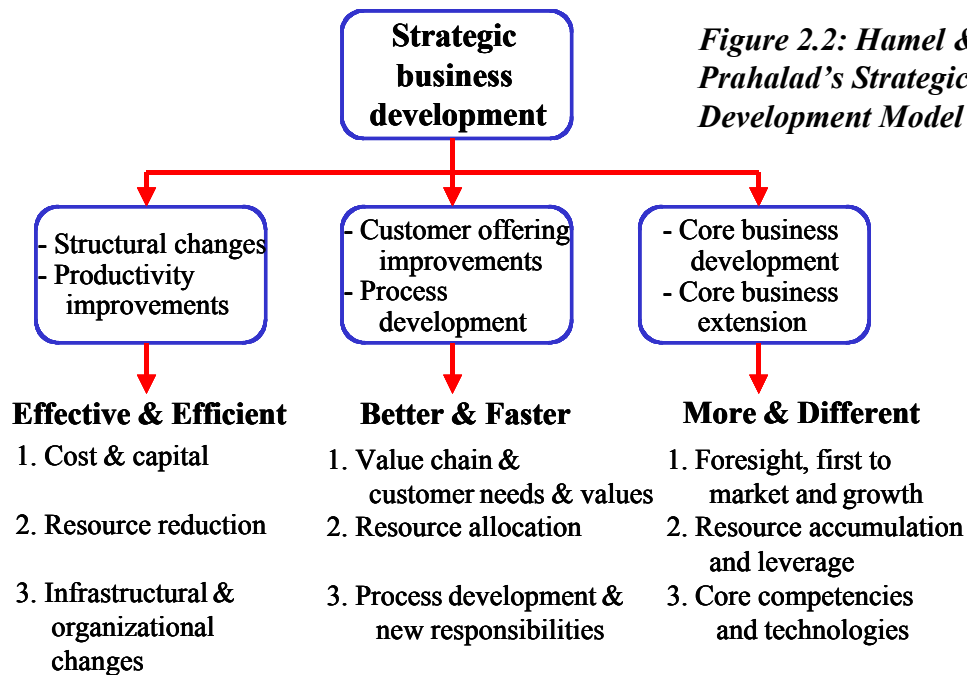


a company faces and used their model guidelines when we analyzed our interviews. *Figure 2.1* provides a snapshot of the general framework we have used in this thesis.

Figure 2.1 General Analytical Framework

2.2 Strategic business development

Strategic business development is a never-ending process. Although specific stages can be defined and often precede one another, the overall process is more circular. Nonetheless, Hamel and Prahalad have identified three key phases of business development, as seen in *Figure 2.2*.



Many companies underwent *Phase 1: Effective & Efficient*, in the late 1980's and early 1990's in response to slowing a growth and an increased shareholder demand for corporate restructuring. This forced many companies to divest non-core assets, reduce organizational redundancy, lower fixed and variable costs and reallocate capital more efficiently. This drive resulted in leaner companies with lower cost structures, which allowed them to compete more effectively in the global markets, especially with the Japanese. However, most managers learned that cost cutting does not produce a long-term growth in earnings (Hamel and Prahalad, 5).

In response, many companies entered *Phase 2: Better and Faster*. A company analyzing its assets and its value chain to improve its current activities characterizes this phase. This resulted in companies developing

better work processes that decreased cycle times and improved product quality. “Total Quality Management” and “Just in Time Delivery” are examples of this trend. As the processes improved, business and corporate managers also became more adept at allocating resources throughout the company. This often times forced mid and lower-level managers to continue the same level of production or service, but with fewer resources (Hamel and Prahalad, 5).

The advent of IT may also have amplified customer demands. Increasingly, companies began to realize that keeping a current customer was much less expensive than acquiring a new customer, which led to the birth of the Customer Relationship Management (CRM) revolution. This increased the companies’ knowledge as to the wants and needs of its customers and the benefits of redefining its business model in processes. Still, as both these trends mature and offer diminishing returns on investment, companies must enter the third stage.

Innovation best defines the third section of business development, *Phase 3: More and Different*. In most cases, a company has totally redefined itself several times in Phases 1 and 2 before entering this phase. However, the thinking that led to the past success will not necessarily provide a springboard for future success. A company must begin to understand the value of innovation in order to develop and extend its core business.

According to Hamel and Prahalad, an important tool for innovation is bundling, especially in industrial and commodity-based companies. However, to use this tool, a product-based company need to shift from “products” to “product bundles”, which implies the multiple and combined use of services. Thus, services will prove to be the link between Phase 2 and Phase 3. The companies that succeed in combining services with their products will not only develop and expand their core business, but also increase their possibilities of achieving competitive advantage.

2.3 Services

Since services will help a company traverse the link between Phase 2 and Phase 3, it is important to define what services are and gain a deeper understanding of their nature. With these issues in mind, we can then understand how a company can successfully add services.

2.3.1 Defining services

Defining concepts without finite limits gives rise to many interpretations. Academic scholars are particularly known for coming up with a range of definitions, preferably a definition that fits their own research purpose. Accordingly, there is no common opinion on how to define services. Many authors offer similar, yet different views on services; for example, Grönroos² captures the essence of service by stating that:

A service is an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to the customer problems (Van Looy, et. al., 4).

By virtue of its infinity, it is, of course, also possible to define what services are not. Quinn and Gagnon suggest that:

Services are actually all those economic activities in which the primary output is neither a product nor a construction (Van Looy, et. al., 4).

Taken to its extreme, services can broadly be condensed and reduced into “something we do”. Marketing guru P. Kotler offers a definition that describes service as:

Any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything (Van Looy, et. al., 4).

Thus, it should also be feasible to label service as a ‘product in the making’ (Van Looy, et. al. 25). It appears that service is the result of a

² A service management visionary and professor at Svenska Handelshögskolan in Helsingfors.

process or action where there is no distinct point of an ownership transfer. Further, it is not crystal clear where the process ends, i.e. when the service process is finished. What we can point to, though, is that services possess a series of processes or activities, which address a range of customer needs. Tangible products possess more obvious end boundaries, which address customer need. For example, the tangible elements of a camera can be specified into technical features and product specifications. Once the camera has left the production belt, these features and specifications are fixed and final and the attention is focused toward them. With services, it is difficult to make any such concrete observations. Therefore, it makes more sense to discuss the notion of service, or the concept of service. In the following section we focus on the nature of services.

2.3.2 Nature of services

There are many different kinds and variations of services surrounding us, just as there are many different products; they are produced for different reasons and consumed for different benefits. Thus, it is not inconceivable to imagine the various characteristics of services. Many started out as an additional feature to an already existing product or design. Once packaged together, the product and additional feature benefits become intertwined and interdependent. Over time, the service feature has come to dominate the market place, at least in terms of differentiation, competitive advantage and profitability. It is not our objective to list the different kinds of services, just as there is little use in listing all different kinds of products. Instead, we will focus on the very nature that distinguishes services from products and how services internally are categorized, the clear and the vague differences and similarities. It should become evident that the border between the two is fluent, to say the least.

Van Looy, Van Dierdonck and Gemmel³ have chosen to classify the nature of services using nine different methods (Van Looy, 12):

2.3.2.1 Degree of intangibility

A general differentiation between products and services is that goods are tangibly produced while services are intangibly performed. As a consequence, no direct transfer of ownership occurs when a service is performed. For example, taking a commercial flight is generally considered a service, though the aircraft itself is highly tangible, but there has been no exchange of ownership. In addition, the production and consumption of flying is simultaneous, a feature of services we shall later discuss.

2.3.2.2 Degree of customer contact

The higher the customer contact, the higher the instantaneous demand for a service, which in turn increases the immediate effects on the customers, i.e. there is no time overlap between the service provider and customer interaction. Because of human nature, the higher the degrees of customer contact the higher the performance variability; high performance variability impedes the continuity of quality.

2.3.2.3 Degree of simultaneity

The production and consumption cannot be separated from each other although there need not to be a personal interaction between the producer and the consumer; few Boeing passengers actually interact with the pilot. Nonetheless, it should be apparent that the consumer is no longer just a consumer but, also, a component in the production process. The consumer is instead considered a client with a dual role: a consumer and a producer. Therefore, production cannot be stored and consumption is concurrent with production.

³ P. Gemmel is a director of a research centre for hospital management at the University of Gent and Vlerick School of Management. R. Van Dierdonck earned a PhD at Harvard University and is dean at the Rotterdam School of Management. B. Van Looy has been responsible for the Service Management Centre at Vlerick School of Management and is currently studying innovation processes at the KU Leuven.

2.3.2.4 Degree of heterogeneity

The degree of heterogeneity is closely related to the degree of customer contact. The sources of service benefits stem from the interaction between the service provider and customer. Standardizing the customer operating system is one solution to reducing the heterogeneity; McDonald's has tried to standardize its service concept around the world but there are factors outside the operating system that can still lead to performance variability, e.g. the mood of the service provider and the location of the restaurant.

2.3.2.5 Degree of perishability

This particular aspect of services is as closely related to the degree of simultaneity and intangibility: the lower the goods element and the closer production and consumption overlap, the higher the degree of perishability. Thus, it is only possible to affect the service outcome through operation capacity management, which involves both the provider and the consumer.

2.3.2.6 Degree of demand fluctuation over time

Naturally, product demand fluctuates over time as well, but by virtue of its relation to perishability, the service offerings cannot be stored. The variability of demand necessitates an even higher degree of capacity management for the very same reasons. Restaurants cannot store customer visits but they can, naturally, prepare for rush hour visits.

2.3.2.7 Degree of service customization

The very elements of services, e.g. the intangibility, simultaneity and heterogeneity, in and of themselves give rise to the monopolistic feature of services. A service does not have as complete a boundary when it comes to the finished offering as a product does, because of the interaction between providers and customers. Of course there are differences within the service arena; the degree of customization in professional services (accountants, lawyers, etc.) is much higher than McDonald's worldwide concept of service standardization.

2.3.2.8 Degree of labor intensity

Just as products can have a lesser or larger service wrapping, services can have lower or higher degree of capital intensity. Hospitals represent a capital intense service industry because of the equipment in operation. This is of course not to say hospitals have low labor intensity, but in relation, the system operation management involves making more capital decisions than pure professional firms do.

2.3.2.9 Service direction

Towards people or equipment? It is important to discern the service or maintenance of products, e.g. freight or dry cleaning, from the service where the direct beneficiaries are people. The consequence of this is that direct people-oriented services entail a completely different mindset than in those where the service rendered does not involve direct customer contact, (e.g. a dry cleaning drop off vs. a hairdresser's visit). A visit to the hairdresser has a high degree of customer contact and a high degree of customization. In contrast, dry cleaning has a low degree of customer contact and a low degree of customization. These examples demonstrate two outcomes in a one-by-one matrix. We would like to expand the possible outcomes and increase the matrix into a two-by-two template with four different outcomes.

The subsequent matrix, *Figure 2.3*, presented by professor Sten Söderman⁴, describes the combinations of degrees of contact with the degrees of customization. It should be kept in mind that the framework does not claim one box to be superior or inferior compared to another box in the matrix. It does, however, chart what could be of weight when administrating services, which ultimately is determined by what kind of service the provider prime.

⁴ Lecture, Handelshögskolan, Göteborg, 22 May, 2000.

	Standardized Process Execution	Customized Process Diagnosis
<i>High degree of client contact Value is on interaction</i>	Nurse Key skill: ensure client's comfort through pre-set process	General Practitioner Key skill: real time diagnosis of problems
<i>Low degree of client contact Client value is on results</i>	Pharmacist Key Skill: supervision of low-cost provision team	Brain Surgeon Key skill: creative solutions to unique problems

Figure 2.3 The Contact & Responsiveness Matrix

As demonstrated, the notion of service pays particular attention to the more or less direct contact a service delivery system has with the customer. Employees of the service provider become part of that system to an extent not seen in traditional product manufacturing, where the producers, engineers and so on, are seldom in contact with end customers. As a result of the customer contact, service employees have a greater impact on the final quality of the service. Naturally, this puts different criteria on the employees, primarily their interactive skills, knowledge base, competence and attitude. The above matrix depicts how different the levels of contact and responsiveness can be in one the same sector. It does not, however, provide for the different types of interactions.

2.3.3 The nature of interactions

While services lend themselves to multiple categorizations, so does also interaction. As we have distinguished interaction to be one of the principal dimensions of services, we deem it obligatory also to explore the different types of interactions involved, both in their disposition and intensity.

Mills and Margulies have catalogued three key interaction types: maintenance-interactive, task-interactive and personal-interactive services (Van Looy, et. al., 14).

2.3.3.2 Maintenance-interactive services

An ATM or window money withdrawal does not involve an interaction that is either long lasting or intense. The intensity is instead characterized by convenience and comfort. The information flow between the service provider and customer is typically low and finite. The focus falls on the customer information input; the customer must know what is sought in order to have the service expedited. The degree of employee decision-making and employee/customer interface is low; the social skills involved are minor and one the same employee does not have to repetitively serve the very same customer. In other words, the service is fungible, which makes it possible to provide the service on a perpetual basis and in bulk amounts that are easily accessible. Consequently, maintenance-interactive services are subject to a high level of standardization.

2.3.3.3 Task-interactive services

In contrast, a task-interactive service exemplifies a high level crossing point between the provider and customer. The interaction is centered on the performance of the task itself and the flow of information between the provider and customer is crucial and comprehensive, which generally results in a longer-lasting relationship. The technical skills involved are characteristically high and the provider almost solely tenders the input. Mills and Margulies use the interaction with an architect as a classic example of a task-interactive service. The clients (customers) have little technical information and their knowledge of how to do it is thus vague, although they by and large know what they want. In such a scenario, the employee is not fungible and the client expects to deal with one the same architect throughout the entire process; the problem posed can be unique (but does not have to be) and subsequent employee decisions are complex. In addition, because the employee decision is solution oriented, there is an expected date of when to terminate the relationship.

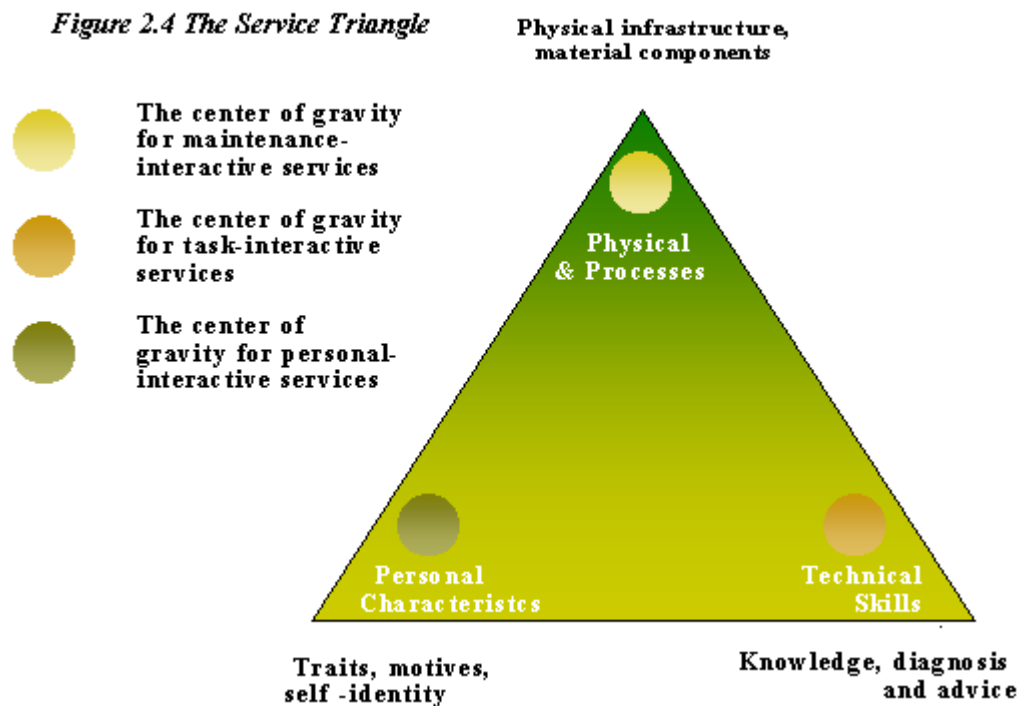
2.3.3.4 Personal-interactive services

Personal-interaction services embrace both uncertainty and ambiguity; customers are uncertain because they do not know the answers and they can also express a doubt over exactly what needs to be solved (ambiguity). The authors refer the work of a psychotherapist as a personal-interactive service. In personal-interactive services, the personal and social skills are at par with the high level of technical skills required. Though the solution to a task-interaction problem may be complex, the parameters are usually fixed. However, the personal-interactive process evolves around human nature, where nothing is fixed and as such it is very difficult to erect any standards.

By now it should be obvious that different types of services require a different component design. The first outline, Söderman's matrix, mapped out the service direction in terms of the different degrees of contact and responsiveness, whereas Mills and Margulies described out three main interaction skills. However, they speak little of the different organizational components. Canadian scholar John Haywood-Farmer furnished a service triangle that frames what the different components of a service organization may be (Van Looy, et. al., 16).

2.3.4 Service triangle

The service triangle (*Figure 2.4*) has been modified from Haywood-Farmer's original version and presents, in its altered form, a service organization to be comprised of the following three main components:



The darker green top segment of the triangle represents the structural capital, the components that belong to the organization and can be identified with it. McDonald's, for example, is located toward the top of the triangle as its fast food service is contingent on its hamburger assembly system, structure and policy.

The lighter green bottom segment of the triangle indicates the human capital, or the components that are brought into the organization. The technical skills in the right hand corner are the skills related with the profession, e.g. the skills of doctors, lawyers or plumbers possess. For example, a brain surgeon is located at the far right bottom corner of the service triangle. The personal characteristics to the left of the triangle are not tied to any specific profession but instead tied to a specific person; the credentials are based on quality. A student café can be an illustration of an organization placed in the bottom left corner. Students typically care more about the cool attitude of the owner than the quality of service (Van Looy, et. al., 17).

Preferably, it is desirable to have a healthy service triangle balance, though some of course will an angle toward one corner. Inevitably, an accounting service will be tilted toward the bottom right corner, but it will, nonetheless, better be able to leverage its institutional skills if formal processes that will remain within the company absorbed them (top segment of triangle).

Once an organization has defined its service concept, one can say it becomes the blueprint that conveys to the employees what service offerings they should provide and communicates to the consumers what service offerings they can expect to receive; one of the first steps toward “servitization”.

2.4 Servitization

In the past, the traditional manufacturing company only produced goods and focused very little on providing services. However, over the past 50 years, many manufacturing companies began to realize the importance of services and offered their goods “bundled” with services. The move towards an integration of products and services was termed “servitization” by professor Sandra Vandermerwe of the International Institute for Management Development (Van Looy, 33). Her research provides an outlook as to the causes, the development and the implications of this process. This theory serves as an excellent stepping-stone as we attempt to understand “how” a company can successfully undergo the transition from products to services.

2.4.1 Causes

There are two major driving forces behind servitization; demand and desire to develop and/or sustain a competitive advantage (Van Looy, et. al., 35). Further, managers are taking a more holistic approach to their business model and customers’ problems (Vandermerwe, 314). Most realize they inject more value to the core through a service wrap, which in turn also leads to changes in the company’s core business, its revenue and profit generation.

As a company realizes that competition and substitution from competitors increase, it attempts to boost its efforts through development and/ or sustaining its competitive advantage. Adding services may be one route to develop such advantage.

2.4.2 Development

Vandermerwe (315) states that servitization has evolved in three overlapping phases. The first stage consisted of a company producing either “*Goods*” *or* “*Services*”. During this phase, before the 1950s, companies defined themselves either as manufacturers (e.g. Ford Motors) or as service providers (e.g. Merrill Lynch). Very few companies, especially manufacturers, viewed themselves as service providers. However, as technology advanced, the business environment began to change and industries started to converge. The result led many companies to enter the second phase, “*Goods and Services*”.

Manufacturing companies began to realize that others easily replicated their goods and began to offer accompanying services both as means to differentiate their products and to enhance customer satisfaction. A good example of this is the American automaker makers’ entrance into the customer automobile finance market. Similarly, typical service based companies such as banks, brokers and educational institutions started to design and use products in order to expedite the delivery of their services. This was evident in the creation of consumer-oriented mutual funds, which banks used to lure customers into using other bank services.

The current stage, “*Goods + Services + Support + Knowledge + Self Service*”, allows customers to customize the “bundles” of products and service to achieve the necessary solution, or add value (Vandermerwe 315). Thus, it is no longer of interest to divide things in categories of goods or services. The interesting point is *how* customer value can be created (Gummesson, 78)!⁵

⁵ E. Gummesson is a professor at Stockholm University and a highly regarded author of service management literature.

Due to all the various stages of the servitization process, it should be apparent that the service concept adds a breadth and width to the organizational infrastructure.

2.4.3 Implications

Servitization, a popular strategic option in the early 1990's, is even more prominent today. Most companies, even commodity manufacturers, offer a variety of services to the customer without ever truly identifying what they are. Often times, the products and services are bundled so tightly together that it is difficult to determine where one begins and the other ends. Therefore, it also becomes difficult for companies to detach them and pin down the precise key success factors. However, successful combinations requires multiplication of the product and service in such a way they cannot be disconnected, because if they can, then "control" rests with the consumer and the company has lost its competitive feature.

From a producer standpoint, services lead the way for another incentive to undergo servitization. Due to its fixed features, the product life cycle becomes virtually finite. In contrast, service features, such as intangibility and perishability, are flexible and can continually offer new combinations, which alter and prolong the lifecycle. For example, an automobile manufacturer can extend its relationship with customers by offering financing and insurance, tying the bonds with the customer even after the purchase of the vehicle. This way the relationship and bonding value between supplier and customer is extended. Lastly, it is also a method of offering customers a more unique solution/successful combination based on his/her preferences.

In the past, the monopoly dimension was characterized by "productization" through geographic frontiers, where different regions established different product and sales structures. Today, the business logic is quite the opposite: the monopoly dimension is instead portrayed in terms of time and the strategy is no longer structured around products, but how dynamically it acts, what concept (bundle of offerings) it can

construct that will create customer value – “the right offer at the right time” has replaced the older concept of “the right product in the right place” (Ishii). Unquestionably, the professional boundaries of a company change because the solution/time dimension is not as finite as the product market dimension. A solution approach may involve mixing industries by entering into alliances and networks, sometimes even with competitors in order to present the right offer to the customer.

In order to control manufacturing, companies do not need to control the actual production steps in-house. Nonetheless, in one way or another, it need to sketch and control the strategic steps in the process, from technological knowledge to logistic systems to commercial networking. One implication is how it changes the network unit; the plan is no longer to “steal” a larger slice of the pie but to make the pie larger all together. For example, the Japanese automotive makers early recognized the value of sharing information with their competitors by creating relationships with them, not against them (strategic alliances). They further created interdependent links by deep vertical integration with both their suppliers and customers, where resources, not just physical, were shared, backwards and forwards (Dicken, 224). They understood that the auto industry is not centered on the production facilities, but around what type of links and relationships they have, directly and indirectly.

Again, using the Japanese automakers as an example, the idea of becoming a strategic components in an overall and very complex system. Their core value is derived from being able to navigate in this highly hybrid and dynamic system of processes, where it becomes crucial to focus on the strategic steps in the manufacturing process, logistics system, network intelligence and to form profitable alliances (Quinn, Doorley and Paquette, 65). Seen from this perspective, in which companies are systems where production and service become links, the beginning is just as important as the ending. It implies that the end service link is as important as the beginning production link.

2.4.4 Service advantages

However, as with most systems, there are stronger links and there are weaker links. We have opted to describe the advantages of services when they have been servitized, i.e. only manufacturers that have gone through servitization can fully enjoy the advantages. Using the literature as support, it is our own interpretation that services can primarily be used as a competitive tool to:

- Raise the uniqueness of the product: American automakers realized they had a tough time competing with European and Japanese car-makers in terms of quality or cost efficiency. Instead, they added a financing dimension when selling their cars.
- Set up competitive barriers: For example, a company can have a service system in place that is so integrated and co-mingled with the resources of the company it becomes difficult for companies to replicate (causal ambiguity).
- Block the entrance of third parties, e.g. distributors. Technology has brought on a trade mix, which can block out or skip certain levels in the production chain.
- Increase transactions fees: In broad terms, selling a product is a one-time-transaction whereas selling service-usage is a subscription-like transaction with multiple streams of revenue. Particularly if you can strengthen the client's dependency.
- Intensify dependency: Due to the higher degree of customer contact, services by and large imply stronger relationships; relationships are difficult to copy, products are not. American Hospital Supply set up an electronic order-entry system that tied the purchasing and inventory of hospitals to the company.
- Create a time monopoly: Because of its conceptual nature, services are more time-dependent than products.

2.4.5 Service disadvantages

However, shifting the focus away from products toward services certainly has its impediments. Although services have been used in the past, including them into the corporate strategic design is a fairly new concept. In this respect, we are of the opinion that a service transition can prove disadvantageous because:

- A new focus can interfere with the traditional operations.
- Reputation (brand name and core value) can be threatened if the transition is not smooth.
- New concepts mean new and different actors using new and different methods. The scope of competition becomes wider and deeper. This new dimension of doing business can create a high level of uncertainty, which some companies may find it difficult to handle.
- Measuring service costs and profits. Companies often have a product-based accounting systems that do not (or cannot) track the value of services. A considerable deal of the difficulty addressing services is how to account for these abstractions on the income statement.
- Managing and mobilizing intangible resources divert the decision-making power downstream (forward integration) toward front office, which increases performance variability. In turn, variability burdens quality continuity.

2.4.6 Servitization's bottom line

Service is increasingly embodied in and delivered together with the products. This means it is becoming easier to standardize the core elements of basic services. Similarly, manufacturers are starting to realize that the knowledge they are selling or transferring to their customer is becoming increasingly important. As manufacturers move into more consultant and knowledge-based roles, they are increasingly offering a greater range of services that actually are focused on providing solutions

to customers' problem. Industries boundaries blur at the same time as more focus is put toward total solutions and time.

As a result, the future competitive landscape is changing. We have attempted to explore the very basic concepts of servitization and possible impacts on the future market. As manufacturers are offering more services, there is a corresponding need to bring the organizations more in line with a service philosophy. We have made an effort to do so by looking at the "hows" of servitization.

2.5 The initial service analysis model

At this point, our research has captured the fact that: 1) companies seek to continue their growth, especially through services; 2) services are progressively more different in their nature than products; and 3) the phenomenon of manufacturing companies turning to services is termed "servitization". The next step in our research is to describe how the servitization process has been carried out. In order to do so, we found a pre-existing academic model developed by Bowen, Siehl and Schneider (80).⁶ Their model laid the grounds for our Initial Model and we will use their model to outline and to analyze the relationships among strategic choices, service related goals and a service organization in manufacturing.

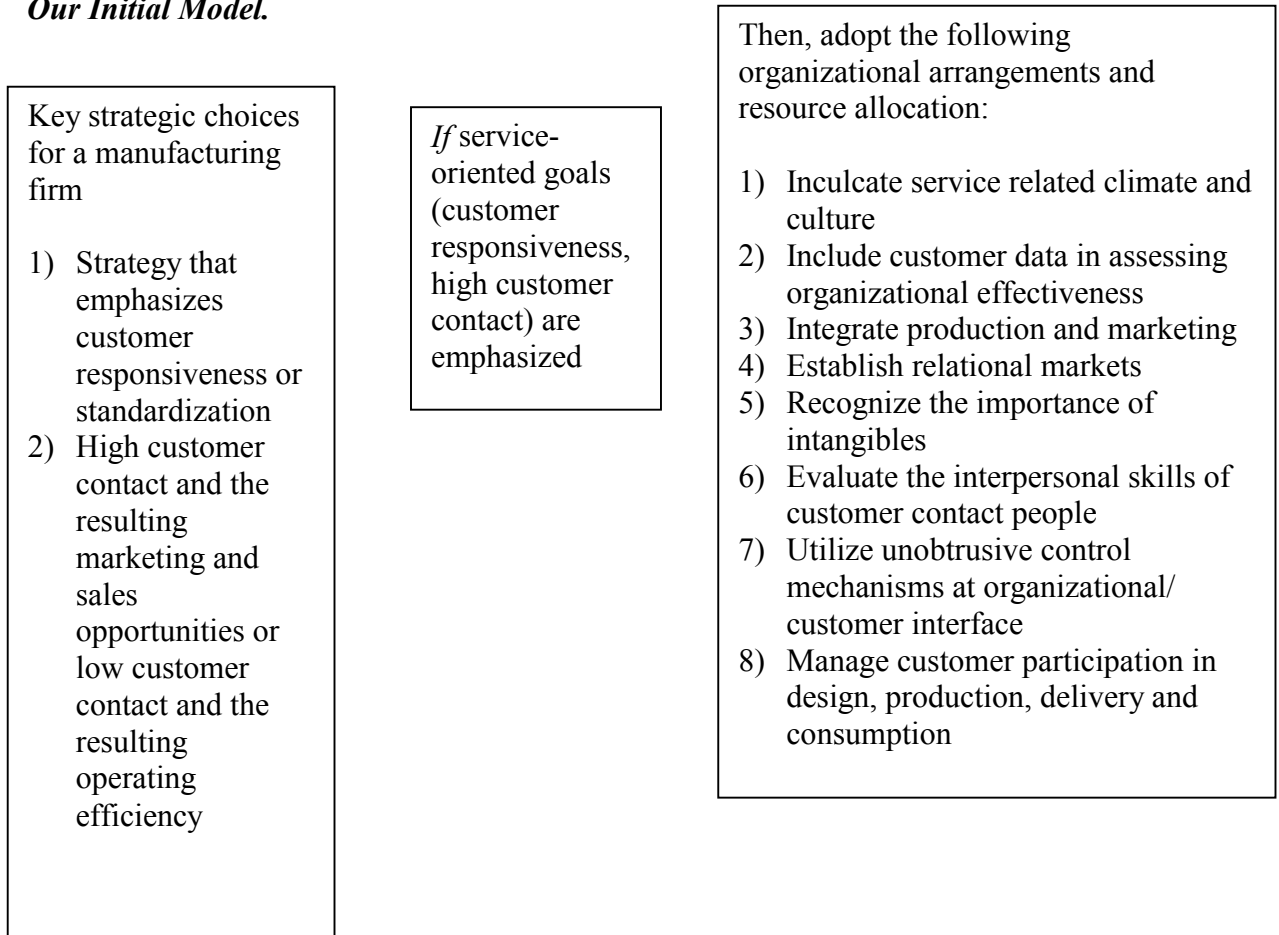
2.5.1 The initial model's background

The model was originally developed in the late 1980's as many researchers noted that manufacturers were increasingly including more services in their offerings to their customers. Although Vandermerwe classified this trend as servitization, no one had clarified the process or the key issues involved in servitization. This resulted in Bowen, Siehl and Schneider crafting the model in *Figure 2.5*. Their goal was twofold: 1) to isolate the key strategic choices in developing a customer service-orientation and 2) provide a description of the necessary organization

⁶ D. Bowen and C. Siehl are professors at the University of Southern California. B. Schneider is a professor at the University of Maryland.

arrangements required to support a customer service-oriented strategy (Bowen, et. al., 78).

Figure 2.5 Bowen, Siehl & Schneider's Model – Our Initial Model.



2.5.2 Key strategic choices

Bowen, et. al. identified two central strategic choices that any manufacturing firm must address before it can adopt a more service-oriented approach to its business. These two choices are on the left side of the model in *Figure 2.5*.

2.5.2.1 Customer responsiveness or standardization

The first strategic choice a manufacturing company needs to focus on is its level of responsiveness to its customers. This choice stems from both strategic management and operation/production literature. To better understand the strategic choice and its impact in the servitization process,

it is applicable to first understand its relevance and its theoretical evolution.

Strategic management literature proposes that a company either focuses its strategy on cost leadership or differentiation. A cost leadership strategy focuses on standardization, efficient internal operations and high product availability. The alternative solution, a differentiation strategy, emphasizes a company's flexibility to offer "unique" products that result from the company's external focus on the customer (Bowen, et. al., 80).

Operations and production literature, on the other hand, identifies four main manufacturing strategic dimensions: 1) cost; 2) quality of products; 3) supply dependability; and 4) flexibility, denoted as variations in products (Bowen, et. al., ss 80). Although each of these categories is important, no one company can focus on all aspects equally. Thus, choices have to be made on the priority of the different aspects.

This choice manifests itself in the company choosing its level of responsiveness in terms of external customer orientation, product uniqueness and flexibility. A company that decides to be responsive will place more emphasis on the customer's needs and wants, offering its customers uniqueness both in terms of products and accompanying services and stressing flexibility, not only in product variations but throughout the entire organization (Bowen, et. al., 81).

2.5.2.2 High or low customer contact

The second strategic decision, related to the first, is the company's desired level of contact with the customer. Contact has various meanings in this context. First, it describes the typical sales/marketing contact between buyer and seller. Second, it can also refer to personnel in other positions, besides sales/marketing, having contact with each. For example, the different levels of management of the manufacturer can be in contact with their counterparts at the customer's company. Third, contact can mean that the customer visits and helps the manufacturer

design and produce the product. Similarly, it can also refer to the manufacturer sending its research and/or production staff to the customer's site to gain a better understanding of the customer's needs and desires.

Although contact, as discussed above, is almost always beneficial for the manufacturer, the problem lies in the operational efficiency and cost of contact. High contact often leads to higher costs because it takes more personnel time and effort. Thus, a company that desires to be a low cost producer normally opts for lower contact to maximize its operational efficiency and reduce its costs. Nonetheless, a high level of contact also produces many benefits. It often produces increased marketing/sales opportunities and also provides the manufacturer with better information as to the customer's needs and desires. If used properly by the manufacturer, this can lead to both increased revenue generation from current and future products, as the manufacturer better understands the customer's internal subtleties.

2.5.2.3 The choice

The outcome is that a company has to make a decision regarding both of the strategic issues. For a company to truly undergo servitization, Bowen et. al. propose that a manufacturing company needs to adopt both a high level of customer responsiveness and a high level of customer contact. Moreover, they emphasize that the "effective implementation of a [customer-oriented] strategy requires total commitment and supporting organizational arrangements" (Bowen, et.al., 81). The next step then requires us to understand what supporting organization arrangements should look like.

2.5.3 Implementation of service-oriented strategy

After the manufacturing company makes the decision to take a more service-oriented approach to its business development, the company then makes the necessary internal organizational changes that will support its

strategy. Bowen et. al. identify eight specific areas that the company must adjust, presented in the following paragraphs.

2.5.3.1 Inculcate a service related climate

Successful service firms are dependent on their company culture and climate. This type of culture is often driven by top management and is reflected in the norms and values of the firm. The key values that service firms emphasize is innovation, flexibility, customization and variety. These values serve as the foundation for success in the service world.

These values often run counter to the manufacturer values of standardization, economies of scale and efficiency. Thus, a manufacturer's management plays two critical roles. First it must demonstrate its commitment to service by establishing clear goals and priorities and it must balance between typical manufacturing values and typical service values (Bowen et. al., 82).

2.5.3.2 Collect customer data on organizational effectiveness

A manufacturer that desires to undergo servitization must understand that the nature of services changes the way others judge the company and how the company should assess itself. In products, the easiest way a customer can judge a manufacturer is by the cost and the quality of the product. In return, price and quality will also directly affect the sales and success of a product.

Services offer a new challenge because their benefits are more difficult to measure than products. The company can actively use customer assessments to measure its effectiveness in delivering the service. The assessment is important because service often deals with intangibles and is usually more customer benefit-oriented. Thus, assessments are helpful instruments when trying to determine the success not only of the service, but also of the service customerservice delivery (Bowen, et. al., 82).

2.5.3.3 Integrate production and marketing

By adding service to products, a manufacturer needs to take into account that the production and consumption of service is simultaneous. This means that as a greater part of the “bundle” becomes services, the more important it is to consider the customers needs and wants during the production. To accomplish the production of customer-oriented service and products, Bowen, et. al., emphasize that marketing and production must be integrated to ensure future success (82).

2.5.3.4 Establish relational market

By shifting from product-dominance toward service-dominance, the level of ambiguity increases, as service is a relatively unknown concept to manufacturers. Therefore, manufacturers ought to counteract this ambiguity by creating deeper relations with its customers. This is often a challenge for manufacturers because they can secure their business offerings based on price and quality where the buyer can be (but does not have to be) anonymous. The best way to establish these relationships is by emphasizing joint gains. When this goal congruence exists, it is much easier for the manufacturer to include the customer’s input into the production process and allow the manufacturer access to both the customer’s information and resources to facilitate the process (Bowen, et. al., 83).

2.5.3.5 Recognize the importance of the intangibles

Manufacturers that desire to pursue a more service-oriented strategy and are involved in high levels of customer contact must ensure that their emphasis on the intangibles are as important in the product design as the tangible dimensions. The intangible aspect includes reliability, responsiveness, competence, access, courtesy, communication, credibility, security and customer understanding according to Bowen, et. al. (83).

2.5.3.6 Evaluate interpersonal competencies

The behavior of employees who have customer contact directly influences the customers' perception of quality. Most service companies understand this concept. However, as a manufacturer starts to offer more services that require higher customer contact, they need also to recognize the educational impact it brings about and train their customer contact personnel. The selection may focus on employees who are defined as having a service-oriented disposition, i.e. helpful, thoughtful, considerate and cooperative. Even though these people exhibit a strong service-orientation (a trait or affinity), the manufacturer must ensure that they provide them with the skills through training (Bowen, et. al., 85).

2.5.3.7 Utilize unobtrusive mechanisms

Since services are heterogeneous, it is very difficult to specify conventional methods, such as rules and procedures, in the performance of service. This is based on several facts: 1) customer involvement raises the level of input uncertainty and 2) employees often work under unpredictable circumstances when providing the service. These factors make it virtually cost prohibitive to use conventional control methods when managing the production of service. Thus, an organization normally uses less obtrusive mechanisms, which are also less costly, to manage the service delivery. An example of this is by developing shared values, which can guide the employee in providing the appropriate level of service expected by the company and the customer (Bowen, et. al., 85).

2.5.3.8 Manage customer participation

In traditional manufacturing, a company often designs its products according to certain specifications and then produces it for the market. However, services require the customer to participate in the production and delivery. This means that it is very important for a company that wants to servitize to properly manage the customers' participation in the service production and delivery. To do this, Bowen et. al. suggest that the company should 1) define how it and the customer should behave in the relationship, 2) agree on the nature of the relationship with the customer

and 3) understand that services require a more mutual approach both to production and to value sharing (Bowen, et. al., 85).

This means that a manufacturer needs to take certain actions with each service customer. It is advantages to first justify the need for a service relationship (i.e. the customer will get higher quality if he participates in the design or production). Second, it ought to clarify the role between the two (i.e. straightforward terms and conditions). Last, it should be prepared to train the customer in order for the company to include that person in the service delivery process (Bowen, et. al., 85).

2.6 The overall concept

Our framework began with strategic business development, a broad solution to the challenges plaguing most mature manufacturing companies. We identified that services were the key stepping stones for companies to go from Phase 2 to Phase 3 in the business development model. The framework also defined services and looked at the nature of service, which helped us to understand their importance. Lastly, the framework discussed servitization and pointed to the broad aspects of a service transition. Our next step is to gather data from both internal and external interviews to see if this framework provided a valid answer to our main problem – “how to servitize”.

3. Research Method

Our aim in this chapter is to give an overview of the research methods we used to gather the necessary data for this study. We will begin with an explanation of the methods available and then explain the method we used in our research in greater detail.

There are two main approaches for developing solutions to the challenge of servitization: multi-firm or firm specific. A multi-firm approach consists of analyzing a large number of companies that have dealt with or currently dealing with the transformation into a more service-based company and yields broad, general issues. The other approach is to deeply analyze one firm's transformation into a service-based company and generalize the findings.

We chose to use a combination approach whereby we conducted a multi-firm approach interviewing seven senior executives of service companies and other manufacturing and to gain a broad understanding of the issues and the challenges that they face(d). Finally, we interviewed multiple executives and key personnel in our case company, which recently committed itself to become more service-oriented. This case allowed us to delve deeper into the issues involved.

3.1 An exploratory & explanatory approach

We used Robert Yin, a well-respected academic in the field of case study research, as our main source in establishing our methodology. Yin identifies three different strategies for conducting research: exploratory, descriptive and explanatory. An exploratory study attempts to explore a subject or phenomenon for which no or limited prior information exists. A descriptive study attempts to describe or define a subject to increase the understanding of it. An explanatory study goes further than a descriptive study and attempts to explain the reasons for a certain phenomenon (Cooper, 12). Based on these definitions, we will use both an *exploratory* and an *explanatory* approach. The process purposefully started out as an

exploration on the subject of services and servitization in modern business. As we clarified the subject, via external interviews and background reading, we then took a more *explanatory* approach.

3.2 Design

After formulating our questions, we developed our research design, which is a plan to guide the process of data collection, analysis and interpretation. Yin identifies five critical parts to the design: 1) the research question; 2) the underlying propositions, if any; 3) the unit of analysis; 4) the logic/theory that links the data to the propositions; and 5) the criteria to interpret the findings.

We introduced the research problems in *Chapter 1*, with the supporting propositions. *Chapter 2* laid out our theoretical approach and our criteria to interpret the findings. However, we still need to define the unit of analysis. To do this we again applied Yin's model that states that there are three conditions that help guide the researcher to use a certain design. These conditions consist of 1) the type of research question proposed; 2) the magnitude of control an investigator has over the actual event being studied and 3) the degree timeliness of the event (current vs. past).

Since our research questions focused on the "how and why" of servitization and we had little control over the behavioral events that affect the process, we used the above conditions to determine that a case study design best met our needs (Yin, 3). A case study deals with a reality that has been and is constructed by human beings; i.e., it is not a single, fixed, objective incident waiting to be detected. Therefore, we chose the case study approach because it helps us to better understand the complex phenomena and it also allows us to retain a holistic and meaningful view of the characteristics of today's business events (Yin, 5). In other words, we had selected the phenomenon before we conducted the interviews whereas one could say the objective of a quantitative approach is to discover.

3.3 Collection of data

The thesis purposefully started out as an exploration on the subject of servitization. We wanted to ask business practitioners who are actively leading companies in this direction to describe and interpret the growing need to offer their customers services. These interviews with senior executives, combined with our background reading on the subject, helped us to develop a clear picture of the broad issues that companies currently face. We also used the interviews with the executives to isolate similar problems that companies have and apply it to MHC and, eventually, develop a better framework for manufacturing companies to follow when they seek to servitude their offerings.

3.4 Sampling selection

After deciding upon the case study, we were faced with the options of performing either a quantitative or a qualitative investigation. Although both aim to provide an enhanced understanding of the subject studied, the quantitative approach is more reliant upon transforming data into numerical values so that a statistical analysis can be accomplished. Instead, a qualitative approach relies more on the interpretation of the gathered information and not on statistical findings (Yin, 7). Thus, we chose a qualitative method.

The purpose of a qualitative approach is to gain a deeper understanding of an action or experience based on information that is difficult to quantify, such as attitudes and values (Yin, 7). This approach is also more holistic compared with the more fragmented quantitative approach. In contrast, the intention of a quantitative research method is to “discover” an unknown and objective phenomenon. Due to the extensive nature of services and servitization and the fact that they are reliant upon the environmental surroundings, we decided to use a *qualitative* approach.

3.4.1 Selection of the data

Before selecting the data we wanted to gather, we first had to define the term data. In our opinion, Cooper offers the best definition in that data are the facts presented to the researcher from the study's environment. Our environment for this thesis consisted of both the academic world and the business world. Thus, we needed both primary data and secondary data to demonstrate and to explain the servitization process.

Primary data is first hand information collected by the researchers to solve the specific research problem. This information can be gathered many ways, through interviews, surveys, or by observation. Our most important and unique source of primary data is the twenty-one interviews, both external and internal.

Secondary data is data that has been collected by other researchers and has had at least one level of interpretation inserted between the event and its recording. This type of data often originates from previous surveys, professional journals and the Internet. Secondary data was important in the setting up the theoretical framework and understanding the case companies business environment. By using information from other researchers and industry sources, we were able to develop a more integrative approach with which to analyze MHC and develop generalized conclusions and recommendations.

3.4.2 Purposeful sampling selection of companies

Because we are not striving for statistical generalization, we have already argued for our decision using a non-random sampling selection. The next step in the sampling selection procedure was to single out the external interviewing companies from which we felt we can learn the most. Since such a method has a specific purpose in sight, it is referred to as purposeful sampling. The purposeful selection criteria have been based on convenience sampling and network sampling.

3.4.3 Convenience and network sampling selection of interviewees

Convenience sampling refers to time, money and location availability. Because of our limited time and money, companies in a close or near-close proximity were selected. Thus, all of our external interviews were drawn from Swedish-based multi-national companies. After selecting several companies that had made a substantial strategic shift towards the provision of services, MHC's CEO helped us identify the senior executives in these organizations that had facilitated the [service] change. Because MHC's CEO has been a business leader for over 30 years, we wanted to make use of his network of connections to ensure we came in contact with executive leaders with a diverse range of experiences. Drawing on the executives from his connections is what Yin refers to as the network sampling method.

It should be noted, however, that the convenience sampling and network sampling methods were not mutually exclusive. In fact, it would be fair to say they had a tandem-like function between themselves.

3.4.4 Interviews

Our strongest contribution to the research study was the folder of interviews we carried out. All twenty-one interviews were used as the main and most unique source of primary data, due to the fact that much of the information we sought were attitudes, values and personal thoughts, all of which are highly subjective. Furthermore, the people identified for external interviews were all high-level executives with many time constraints. This meant that sending out a survey would have been probably met with little reply success. It also meant that the interviews ideally should contain some sort of structure and time limit to ensure that the external interviewees did not see us a threat to their time.

The next step was to determine the information we desired to help support our research questions and we developed a list of interview questions. To ensure that it would lead to the desired information, we first sent out the questions both to our academic mentor and to the CEO of

MHC. Both provided us critical feedback as to the nature and organization of the questions. Afterwards, we used the feedback to refine the questions. These were then sent back to the CEO, along with a brief description of our project. The CEO in turn sent out the questions to all interview candidates, both internal and external.

Because of the high status of our interview candidates, we wanted to take yet another safety measure to prepare for the interviews and we conducted a pilot interview with a long-standing internal MHC employee in the presence of our academic mentor. The interview was timed to ensure it would not be too long. It also allowed us to get feedback on our interview approach from both the interviewee and our academic mentor. We deemed this approach to be highly useful in crafting our semi-structured interview approach.

The semi-structured approach allowed us to start with certain concepts, especially the ones we were concerned with exploring and explaining. From these concepts, the interviews were allowed to flow into the direction where the interviewee had the most experience or most interest. By incorporating flexibility into the interviews, we gained more relevant data and information. This information helped us develop our view of the servitization process and helped us to categorize our data.

3.4.4.1 The fourteen internal interviews

The internal interviews served multiple purposes. First, they were a means to collect information, especially attitudes and beliefs about the case company. Second, they were a means to collect information on how the management throughout the company thought about the topic of services. Last, but not least, they represented a solid base that could best help us determine how the concept of services could be applied in MHC. *Appendix 8.1* identifies the interviewees and their position.

3.4.4.2 The seven external interviews

The initial goal of the external interviews was to explore the topic of services and servitization. *Appendix 8.2* lists the interviewees and their background experience. As the interviews progressed, we realized that the information gathered from these interviews proved to be most useful in modifying the initial theoretical model we had started out with. The information they provided actually led to a shift in our view of our initial framework and made us realize that we needed to take a more integrated view on the servitization process.

3.4.4.3 Problems

The main problem for the internal interviews was the fact that many of them were accomplished over the phone. Though oral communication was not hindered in any way, this form of interview is more difficult due to the lack of personal contact. Being able to watch a subject's facial expressions and body movements can provide insights into how a person feels regarding the questions discussed. Furthermore, being in close contact also gives better access to archival material, such as previous reports and studies, as these materials are closer at hand for the interviewee to reference and hand to the researcher.

The main problem in the external interviews was access to the type of interviewee we desired. Since we targeted the executive leaders of international corporations, it was often difficult to secure interview time. This difficulty was the major reason why we limited our external interviews to seven.

3.5 Quality of research

Independent of the method and strategy chosen, we wanted ensure that the analysis is of the highest objectivity and quality. Validity and reliability are the methods used to measure the quality of the research.

3.5.1 Validity

3.5.1.1 Internal validity

Internal validity deals with how well the results match reality and the researchers' assumptions as to the underlying cause(s) of a result.

We used multiple methods to enhance our study's internal validity. First, we used the triangulation method by using two researchers with different sources of primary and secondary data to collect, interpret and confirm our results. Second, we checked our answers by taking them and our tentative findings back to the external interviewees and several of the senior internal interviewees during round table discussion hosted by our case company. This provided us with their feedback and constructive comments on our interpretation of the information gathered. This was an extremely effective means of ensuring that we maintained the proper focus.

We also used peer examinations of our information and our tentative findings throughout our process. Often times, our discussion of the information and our interpretation with other research students has improved the clarity of the results and has ensured that we maintained our focus. Furthermore, we followed a collaborative research approach by continuously sending the CEO of our case company updates of the generalized data and our interpretations of it. This continuous dialog helped to ensure that our process remained focused on reality-based results. Lastly, to prevent our biases from influencing the study, we have clarified our assumptions and theoretical orientation in *Chapters 1* and *2*. This allows the reader to understand our "world/business orientation".

3.5.1.2 External validity

External validity is concerned with the extent to which the findings from the case study can be applied to other situations. This "generalizability" of the results is often difficult to demonstrate by using a case study. Nonetheless, we feel that we have enhanced the generalizability of our

results through two methods. First, we attempt to provide a detailed description of the case company and its challenges in becoming more service-oriented. This allows other companies in similar situations to compare themselves against the case study and determine whether the results are applicable to their situation or not. Our external interviews were also important because they helped demonstrate the “typicality” of the situation and enabled us to build a general, more reliable model that we could use to analyze our case company and other companies in similar situations.

3.5.2 Reliability

Reliability deals with the consistency of the results. Thus, a highly reliable study would mean that other researchers using the same methodology would come to the same conclusion (Yin, 9). Nonetheless, reliability in the social science studies is difficult to achieve because human behavior and a researchers’ observations are not static. Therefore, our goal was not whether findings would be found again but whether our results would be consistent with the data collected.

We believe that any researcher interpreting our data using our initial theoretical framework and Bowen’s model would conclude the same results. Similarly, the methods we discussed to enhance our internal validity are also applicable in ensuring reliability. Lastly, in our analysis and in the creation of the new conceptual framework (*Chapter 5*), we discuss how we derived the categories and interpreted the data we collected.

3.5.3 Errors

All research, including case studies, is subject to errors, especially in data collection and interpretation. Nonetheless, by accepting this fact, our vigilance helped negate any serious omissions or additions.

Since we used secondary sources in developing the initial framework, it is possible that we may have misunderstood or misinterpreted them. This is

a possible source of error. To counteract this, we purposefully used multiple sources from multiple authors and discussed the interpretation of the material together and with other people familiar with the service issue. This allowed us to cross check our interpretations and lessen the affects of any errors.

In collecting data from our primary sources, we also have possibilities for errors. We could have asked leading questions based on our previous knowledge and our own opinions on the servitization process. We have tried to prevent this to the extent possible and used interview guides for the basis of our discussions. A greater risk for error though is our interpretation of the interviewees' answers. Although we tape recorded them to ensure we captured the issues and ideas, conversations are normally highly subjective. It is quite possible that we misinterpreted the responses. To prevent this, we invited all external interviewees and several of the internal interviewees to comment on the initial findings at a roundtable hosted by MHC. This helped us ensure that we isolated the correct issues.

3.5.4 Weakness in thesis research

We initially started with our theoretical framework and a deductive approach. However, by the end of the research, we realized that we had taken an adductive approach through the production of our own model. This meant that we used both a deductive and an inductive approach to achieve our results. Although some researchers claimed that this is the best method to obtain reliable and valid results, others disagree (Doctoral Dissertation, 2000). They state that the adductive method can skew the results based on personal biases. Nevertheless, we felt that by working closely with others familiar with the topic, we maintained an unbiased position to the highest degree achievable.

4. External Servitization Experiences & Logics – External Interview Results

*We chose to expand our research outside MHC to include executives from a variety of manufacturing and service companies because the initial model suggests that the relationships in the model can travel and be applied across industry boundaries. Our findings are the result of an accumulation of seven external interviews, all together fourteen hours, which were subsequently incorporated into the original theoretical model developed by Bowen et. al. (see **Figure 2.5**). By the end of each section follows our analysis and conclusions.*

4.1 Strategy

4.1.1 Service development strategy and the new hopes

All of our seven interviewed executives had recognized the shift away from products toward services; likewise, each had realized the importance of including services in the company's business strategy. All believed that their company could obtain a competitive advantage through a differentiation strategy based on services.

All the executives also had a firm grasp as to the *nature* (not definition) of services: customer responsiveness, intangibility, heterogeneity, etc. (*Authors' note: it is here important to bear in mind the difference between understanding the nature of services vs. the definition of services. After all, it is possible to understand the weight and value without being able to clearly define it*). They continually referred to these service characteristics as the basis for differentiation. Consequently, as differentiation is a strategic option, services are an integral part of strategy formation. It was evident from our findings that all involved had decided to use services as a source of differentiation.

However, we found three different categories of service development strategy. The core service companies verbalized the most explicit service strategies with very specific targets and goals. They also discussed the focus that was necessary to uphold such strategies. Though the two service divisions of the traditional manufacturers also had formulated service goals, they claimed their focus path had been sidetracked on several occasions for different reasons. Both of them explained that this sidestepping was due to the lack of clear service goals.

The least explicit service development strategy came from the manufacturers. These strategy formations appeared more vague than clear, which made it obvious that the focus had persistently been diverted from the original intention.

Analyzing the results of strategy and focus, we found a strong connection between a clear and explicit strategy formation and a strong focus on services. Likewise, we uncovered a relationship between a less explicit strategy formation and a less clear focus. Therefore, it is our interpretation and opinion that a *clear focus* stems from an equally *clear and explicit service development strategy*. Stated differently, a lack or vague understanding of services results in vague goals, which helps understand the weak strategy performance.

4.1.2 Service accomplishment

Though all seven external companies presented a service strategy formulation, the focus and accomplishment of such a strategy differed widely. We found at least four companies whose formulated service strategy did not fully match reality. These four executives claimed the inadequate implementation had several reasons. Most importantly, they expressed their frustration with the lack of internal “buy-in”. They discussed the fact that not everyone in their management team fully understood the importance of services to the future of the company and that they were too product-oriented and focused. This prevented the company from achieving a unified front, which was particularly

noticeable in service execution. Even the three companies that had been successful at executing their service goals mentioned the initial difficulty of implementing it. The same three executives repeatedly mentioned the importance of setting out specified goals that directly supported the strategy. They stated that, without specific goals, it is difficult to focus and that a focus is necessary to make the services “more actionable and easier to accomplish”.

The core services companies, Handelsbanken and Scandic Hotels, demonstrated the best overall service execution, a result not surprising to us. It was more or less expected since service drives both their sectors and their companies. Historically, their bottom line had always been both focused and dependent on the success of their service execution, from the top to the very bottom. Likewise, we attribute the success of manufacturing companies to be linked to their extreme focus on producing the best products, i.e. when product differentiation yielded high returns, the entire company was focused on delivering outstanding products, from R&D staff to assembly workers. Accordingly, clear goals stem from a clear understanding of one’s industry.

We also found a less anticipated, although by no means extraordinary outcome, which revealed that both of the service providers excelled in customer contact and responsiveness. These two stated the importance of these two concepts in regard to their service strategy implementation.

One of the service division companies also spoke of these concepts and had, in particular, centered its core businesses on “controlling the customer interface” (*Authors’ note: interface means a situation, way or area in which two things or groups can come together and have an effect on each other*). The executive claimed that this focus had helped to materialize the swift service implementation, a comment that strengthens our belief that there is a correlation between high customer interface and high service implementation. We also saw the opposite true and found a relationship between companies with a high internal focus and low

customer focus. This suggests that the greater the emphasis on controlling the customer interface, the better the service implementation.

Another interesting finding is that the better the implementation, the better the company is at controlling the customer interface. It appears as though the activities are all circular events. Most product-based companies have never entered this circle and the reason behind this is quite logical: product-based companies do not have a history of strong customer interface control. Until recently, their businesses have traditionally not been dependent on it. In stark contrast, the survival of service providers has *always* been contingent on it.

4.2 Resources

4.2.1 Funds & organization

Common sense tells us that if the bottom line figures are dependent on certain activities, then such activities are organized, prioritized and receive the means to carry them out, i.e. the money, time and people. Four out of the seven executives acknowledged that allocating resources to services had not been prioritized. It was widely maintained among our participants that the allocation of resources is still focused on product manufacturing and marketing, where services receive only a small slice. All except the core service companies stated that it has been and to a certain extent still is, a struggle to convince product-oriented people to set aside funds for a separate service development. They confirmed that many manufacturers still measure the service budget around and against product structures, an approach that has made perfect sense to them for decades.

However, the two service divisions that came out of the manufacturing companies made it very clear that when they were separated as service divisions and driven by service-oriented people, the budgeting process was much more effective.

The conclusion we can draw is that services receive a higher priority when a separate service unit has been established.

4.2.2 Organizational arrangements

We have already discussed how the traditional division between goods and services is no longer valid and has been replaced by a solution concept of value creation. As a result, product providers need to think of the value of the product they deliver as a solution. Three of the seven executives said that in the beginning of their servitization process, there was plenty of reluctance to completely separate the service offerings from the products. They claimed that services are a new concept and that their organizations were afraid of change, particularly away from the product structure.

Our two core service companies (Handelsbanken & Scandic Hotels) had a well-defined *service organization* in place; they had well-structured inventory of service products and their entire organizations appeared to be “marinated” with a service approach. Also, two of the previous traditional manufacturers, ABB & Kalmar Industries, had implemented separate service divisions within their organizations. These four interviewees emphasized how important it had proved for the servitization process to form a separate business unit. Stated differently, it is imperative to plan for changes in the organizational structure so that services will flourish.

Nonetheless, resources do not generate results by themselves, but need to be driven by people who depend on the success of services. Otherwise, services can be regarded as yet another step in product marketing. As we continued our interviews, it became apparent that this was a common pattern among most of the traditional manufacturers, a fact we can only attribute to the historical product-orientation.

4.2.3 Company climate & culture

The allocation of resources – the commitment of time, money and people – is a reflection of the prevailing company culture. A company culture can be defined as all the embedded values and norms a company embraces, both internally and externally.

A common theme among all interviewees was the opinion that the majority of engineering and manufacturing-based companies still embrace a product focused corporate culture. They reckoned that to successfully realize the value of services in a company, it is very important to anchor service values in and around all the dimensions of the company – to be “service marinated”.

Additionally, we found that the failure of anchoring the service values throughout the company to be the greatest threat to a successful service strategy implementation. Across the interviewee panel, it was evident that products and product structures have been the backbone of most of these companies. It was also evident that many of the engineering-based companies still fear leaving or shifting from their previously profitable product infrastructure.

Our concluding thoughts are that a product-dominant company culture find it difficult to support the servitization process, because it is such a new and unique concept to the organization.

4.2.4 Employee skills

Traditional manufacturing-based companies have typically built and centered their strategies on products and subsequent markets. In other words, the products have been the focal point in the organization. All of our interviewees frequently identified the lack of service competence among employees to be a heavy brick in the “service barrier”. The three most frequented employee skills our interviewees claimed to be “product leftovers” were an internal focus, customer inaccessibility and transactional thinking.

The three principal employee skills our participants listed as indispensable in a service-oriented company were external focus, customer accessibility and more solution oriented thinking. Solution oriented thinking prioritizes the ability to handle information, as opposed to transactional thinking, which concentrates on products to a larger extent. The entire panel of interviewees agreed that services require a different mind-set all together; the knowledge base is more “intellectual” in nature and, because of the higher interpersonal involvement, interaction skills gain weight and meaning.

Obviously, there are many obstacles behind servitization and it is important to bear in mind that the educational qualifications, too, are fundamentally different. For example, manufacturers have in the past been focused on how to handle products, while services instead are focused on how to handle information.

4.2.5 Relationships

A direct derivative of people is relationships and, as intangible assets, they denote yet another layer in the service culture atmosphere. In the advent of the network sphere, with increased competition and new market actors, the interactivity between the provider and receiver make relations more important than ever before. Earlier structures were focused according to geographic markets and products. Of course, these concepts are still important, but nowadays it is becoming more and more evident that customer relations will have a heavier impact. Across the board, all executives had a high awareness of the “emerging relationships theory”. The core service companies and service divisions were more aggressive than the others and pinpointed the significance of business relationship management.

It was revealed that one of the first manufacturers to infuse relationship management into its service design in reality was ABB. By making a shift from ABB’s floor to the customers’ plant floor, the ABB engineers changed the meaning of customer relationship by coming closer to the

customers. ABB argued that this allowed the employees to better offer the company's knowledge and abilities, both of which helped to better establish "relations" in the maintenance contracts market.

Though ABB is a perfect example of relationships gaining weight and importance, we would like to point out that all of our interviewees had recognized the same movement. Therefore, we draw the conclusion that a relationship is today no longer an ingredient that exists outside the organization, but a business tool in its own right and an integral part of the business organization, especially when offering services.

4.2.6 Managing customer involvement

Across the board, all of the interviewed companies stressed the importance of getting closer to the customer, moving down the value chain and involving your customers in the design and production process. Customer involvement results in closing the distance between "we, the manufacturer – you, the consumer". It is common knowledge that previously, more conventional industrial designs took place internally as most production improvements were made moving backwards in the production chain.

The two core service companies, which had the best servitization experience, coupled with the service division companies, stated that an increased relationship trading in and of itself decentralized the decision-making process. Running parallel, we in fact found that in order for relationships to have an effect, the decision-making process also needed to be moved closer to the customer. Such a decision transfer also implies a risk, as it necessitates an employee with greater mental and emotional intelligence. As with all forms of decentralization, this too requires a higher degree of management involvement. We also found that the core service companies, in particular, stressed the importance of managing customer involvement, a fact not so surprising considering their business genre.

There are other inherent risks with getting closer to the customer and moving down the value chain. The manufacturing companies we interviewed were afraid of losing control over the core processes that had led to success in the past. Loss of control can lead to quality problems and this is especially true as manufacturers move down the value chain.

Though these risks were brought up during our interviews, there was no place for them in the initial framework. This was the first concern we found that had not been factored in our initial framework. Because it was such a strong and common theme, we understood it needed to be taken into consideration and will include it in our revised model (*Chapter 5*).

4.2.7 Integrate production and marketing

Products can be separately produced and marketed. Due to the simultaneous production and consumption of most services, production is co-mingled with marketing. Because services cannot be put in stock, the production/marketing integration becomes even more highlighted. One of the traditional manufacturers articulated a need for an increased emphasis on the concurrent service production and marketing. The company claimed it crucial to measure the marketing efficiency and that it could only be properly exploited if there is a strong linkage between production and marketing.

The two core service companies had a very a high degree of customer satisfaction awareness. However, one should keep in mind the nature of their sectors is such that the production function is close to the marketing function from the very beginning and that they have more or less constant customer contact. Accordingly, such proximity has been a natural building block in their business model and in this regard, they do hold a time advantage vis-à-vis the traditional manufacturers.

All others argued there is a general need for all functions to come closer together and at the same time progress forward integration of the value chain. ABB's production and marketing, for example, came closer and

closer when the company rerouted its in-house producing engineering staff to external market sites.

The conclusion that can be made from the above is that the closer the producer and marketer are, the higher the effectiveness of the organization. Referring back to our initial model (Bowen's model), the optimal situation is for the production to be completely integrated with marketing because service production is simultaneous with consumption, a notion that until today only the pure service companies have managed to properly exploit.

4.2.8 Measuring organizational effectiveness

One interviewee stated that "selling services is like selling air, nothing concrete". By nature, humans find it difficult to measure abstract creations and translate it into financial efficiency. In our interviews, both of the core service executives and several others said that a measurement system must be put in place for a successful service implementation.

The main problem we discovered was that all of the manufacturing-based companies still measure profitability and losses against product margins. We propose that there are two principal reasons behind this problem. First, the most obvious reason is man's innate tendency to prioritize tangibles. The second is the result of insufficient support systems, in this case accounting and financial systems that prevents people from measuring cost and profit for services.

Furthermore, our interviews revealed that only the two core service companies explicitly spoke of customer satisfaction measurements. They deemed customer satisfaction a key measurement to understand the impact of services. Thus, due to the fact the rest of the interviewees did not explicitly mention a system for measuring customer satisfaction, we are of the opinion that they were unable to truly measure their organizational effectiveness in providing services.

4.2.9 Service budget

As a result of the absent service system and the lack of an appropriate resource allocation, three of the interviewed companies claimed they were unable to determine service productivity and profitability. According to them, the cycle of return, at least in economic theory, is built on cost measurements and the potential of future growth; for example, development does not just come about but must be measured against a potential for future economic gain. Hence, they stated that the lack of a measurement system will prolong or put off service development and the process of servitization.

To revert back to the statement, “selling services is like selling air,” in the previous section, we understand people in traditional manufacturing companies that are used to detailed product cost calculations find it difficult to budget for “air”. Again, we refer to the opening remarks where it was found from our interviews that a service strategy should be implemented by people who truly are committed to pushing the servitization process forward and understand the challenges involved.

4.3 Service development

In rough terms, service development stems from customer value, which, in turn drives profitability. In order to develop services, it is crucial to understand the underlying drives of customer value.

4.3.1 Customer value

There was a strong consensus among all participants that the customer value perception is one of the very first steps towards a higher service-orientation. On the other hand, they also agreed that the very assessment of what constitutes customer value point is becoming increasingly more difficult. For example, customers today typically have more options and better tools available in their decision-making. In turn, this enables them to make quicker decision, but also permits them to change their minds more often. All of our interviewees stated that it is becoming

progressively more difficult to find out and pin down what customers really value.

The two “manufacturing-turned service” organizations, ABB and Kalmar Solution, by far presented the best “recipe” for conducting a thorough analysis of the customer’s value chain. Doing so enabled them to specify exactly where and by how much they could “outdo” their own customers in their production chain; ABB became specialists in different levels of the value chain. Many times it involved a re-engineering of the value chain and bringing new concepts into light. For example, ABB realized that customers valued having the same people to do the power plant manufacturing *and* maintenance and quickly tapped into this market. ABB said it was a matter of looking at the value chain from a different perspective and communicating to the customer where and by how much ABB could add value. This of course implies that they had been able to measure the values against each other.

Everyone in our panel agreed that in order to develop more and different services, they need to understand it from the customer’s value perspective and many of the participants also recognized they need to be more aggressive on this front.

Since value drives service and everyone stated that it is becoming increasingly difficult to determine what the customers actually value, we conclude that a system that measures this “value” becomes very important.

4.3.2 Service definition & inventory

None of our interviewed companies could give us a precise definition of what services actually are (*Authors’ note: please remember that they were clearer and more precise in explaining the nature of services*). However, the two core service companies were clearer than all the rest. Many of the companies also had a fairly slim idea of their service inventory, excluding the core service companies. At the same time, they

all admitted to not being aggressive enough and stated that a clear focus is absolutely essential to list and define services. A majority also believed it is imperative to organize and structure the service offerings; what is our basic service offering and what is our value added service?

Another challenge mentioned by the interviewees was the initial difficulty their company had in distinguishing a service that compliments an existing product (*complementing service*) from a service based on the special competency a company has developed over time (*competency service*). This creates a problem for the company because a complementing service is more difficult to charge for, as customers, at least in the past, have viewed it as a marketing/sales incentive. We found further support of this problem in the academic literature, where it was especially true if the products the services are based around products not considered durable capital goods (Wise, 134).

Competency services often require the company to think much differently about their skills and about their customers' needs. Interviewees experienced in services stated that they could derive an alternative stream of revenue from these competency services while simultaneously supporting their available products and brands. An example of this is an industrial company that offers operations consulting to its customers with the goal of improving overall operation efficiency or effectiveness. However, for the company to fully take advantage of the competency, it often required the establishment of a separate service division.

Another issue we found, in regards to the organization of services, was the necessity to execute services at the local level, while the central organization sorted out and provided the local subsidiaries with necessary resources and capabilities. Each and everyone of our interviewees maintained that the local subsidiaries must have the ability to locally alter the service offering so that unique, local needs can be met.

Despite the fact that all of our interviewees were aware of the necessity of defining services, none of them could in fact give a detailed definition. Nonetheless, all of them were quite clear in expressing the need for a central service inventory and structure. This fact highlighted another weakness in our initial model (Bowen's model).

4.3.3 Proactive vs. reactive

Service is not necessarily always equal to customers' "need"; a few claimed to have taken quite an aggressive role and had from time to time "pushed" the service onto the customer in the event customers were "unaware" of the existence of the service. They claimed that customers do not always know what they want, but are often pleased when provided with something new and useful. Our findings revealed the timing of service offerings to be of vital importance. One interviewee even claimed a poor timing of services to have been its biggest service failure and that timing a proactive approach ought to be derived from a "profound understanding of a customer's need perspective". The two service division companies noted that gaining time advantage vis-à-vis your competitors will become a major factor driving the service industry in the future. One of our interviewees, in particular, stressed the importance of time as a competitive advantage. Information technology has enabled companies to faster and cheaper communicate service offerings, (i.e. it is independent of geographical markets.)

It is our interpretation that the more aggressive actors stressed that a profound understanding of customer need is not a stroke of luck, but stems from proactively studying and examining one's customers. This suggests that they had taken a proactive approach and determined the need of the customers. In turn, this type of analysis is provided by an intelligence system that captures information about the customer and allows all employees, especially those who interact with the customer, the ability to analyze the information. This contains a knowledge base that offers the company insights into customers' needs.

4.3.4 Research & development

Service development calls for its own R&D, not tied to product R&D, a view most of our interviewees agreed to, but few expressed themselves. For instance, Volvo Truck Corporation explained that following the customer through its life cycle and tapping into its entire economic activity can only stem from a solid understanding of customer value, which originates from research in that area. This finding reinforces the previous results that services have not sufficiently amalgamated into the corporate infrastructure. Compared with our findings from the other companies, it also supports the notion that a stand-alone service organization with its own goals, action plan and profit/loss focus provide a better method for developing and offering services in a company.

4.3.5 Support systems

The need for establishing a service support system was recognized across the board of interviewees. One of the service division companies even claimed this is what makes a company the best in a certain area. Amongst other things, it was discovered there was a need for an information system in order to educate the employees and help the company to learn faster and act faster. Likewise there was a need for a system that could capture and decipher information into customer value that, in turn, could be made available to managers and employees.

The majority mentioned the lack of service data and emphasized the development of a measurement system. This requires developing and using a technology intelligence that tracks down financial information such as: where are the costs allocated and how valuable the new service is and to whom it should be offered. The two core service companies in our project had a solid review system in place to quote the costs and the benefits for each of their services.

Several interviewees pointed to the need for a system that would coordinate services and prevent reinventing the wheel from one local market to the next. Although these interviewees stated the importance of

executing services at the local level, they also pointed out that often times these services were roughly the same. Thus, a company could reduce its costs by keeping track of services at the central level and allowing the local subsidiaries to modify them to the local environment. Not only would this reduce organizational redundancy but also improve the inter-communication within the company.

Another key point that most manufacturers brought up is that their customers are increasingly becoming global. As a consequence, their customers are less tolerant of suppliers who are unable to provide the same type and level of service in all countries that the customer is located. Thus, the finding here is that when a company offers services in a global market, it must ensure that the type and level of service is not necessarily identical, but similar in all markets, (i.e. the combined “glocal” markets). In essence, it is yet another argument in support of companies centralizing their service development facilities, so that similar services are offered in the various markets. One can of course argue that the hospitals is a local industry but we beg to differ: the health care industry (not just hospitals) has experienced consolidation and technology (e.g. American Hospital Supply) has enabled the procurement processes to be interconnected, which in turn broadens the market ranges (Vandermerwe and Rada, 320). Nonetheless, the local organizations still need to have the final control in adjusting the service to the local variations needed.

In summary, we conclude that our interviewees preferred a centralized approach over the local subsidiaries compiling data because they recognized the need for headquarters to have an overview of all information, but still tend to the local needs.

4.4. Summary & final conclusion

All of our external interviewees emphasized the movement toward a higher service component in their offerings and smaller product component (where applicable). The interviews identified two reasons for

this: 1) the pressure on product margins and 2) the opportunity for competitive differentiation. This is in completely in line with all existing contemporary literature.

Further, all had recognized the product-to-service transition as a classic change situation, where it is necessary for the change to be supported by top management commitment. For example, it became evident that it needed to be sustained by a strong strategy and clear focus. Only the manufacturers that had “spun off” its service efforts to a separate division had managed to create a service-anchored culture to help eliminate the product culture residuals and isolate the interference risks a new focus can bring. Reading between the lines, it was shown that it was only in this environment where the *dual role of the client*, i.e. the one of simultaneously being a production component and consumer, was fully understood.

It was also found that traditional manufacturers normally did not have the culture to internally anchor service development, meaning that they do not have a tradition of conceptualizing services. Typically, entire organizations were marinated with products, product structures and product mentalities. After all, they hired people with a product philosophy, mainly engineers, to develop and construct products. Hence we can conclude that most product-dependent companies in our interviews had been confronted with the same struggles.

Analyzing the interviews, we detected a less explicit, nonetheless apparent pattern among traditional manufacturers. We discerned a pattern whereby most manufacturers seem to view or implement services as a part of a marketing effort. This is not so surprising if one realizes that most product-based companies have been famous for classifying all intangible features around their products as marketing activities. Production dealt with tangibles and marketing dealt with intangibles. Vandermerwe and Rada confirmed this: “up and until now services have not been sufficiently integrated into corporate competitive analysis and

strategy design. It has been seen as part of the marketing effort and often an unpaid and expensive activity” (322).

A major finding not in line with our initial model was that most of the interviewed companies had not clearly realized *how* they had entered the service development process... “they were just doing it”. It was revealed that the high intangibility of services made it difficult to address the abstract and informal nature of service development compared with product development. One common denominators among our participants was the lack of awareness of any specific checkpoints during the process. Instead, they pointed to the understanding of the circularity of the process as a more appropriate key success factor.

Although we had started out using the external interviews as an exploration of service development, it became more evident that the information collected from these interviews was substantially more comprehensive than defining services and their problem areas. Instead, the challenges of service development were emphasized but these challenges did not fit into the initial model. By the last external interview, we had come to the conclusion that the initial model was insufficient to cover the problem area – the dual role of the client, the “circularity” of events and the informality of the development process. This compelled us to produce our own model that combined our initial framework with the empirical evidence we uncovered.

5. A New Model

During our research, we discovered that our results did not completely fit into our initial model (Figure 2.5). The information we gathered in the external interviews clearly pointed to the strategy and organizational reorientation and need for restructuring, which were brought up in the initial model; clearly the model pointed to under which conditions a company should servitize and what actions it should take. The missing link between our results and the initial model was the implicit and not so clear development challenges that our interviewees mentioned during the servitization process. The common factor amongst the interviewees was that they were unaware of the fact they were in a service development phase. Thus it appears it had been an ad hoc phenomenon, which explains the frustration of the internal obstacles everyone had suffered. Reading between the answering lines and additional research literature, we came to the conclusion that in fact, it was the development process that was the strategic challenge. Therefore, we have developed a new model that better explains the strategic hurdles in the servitization process.

5.1 The initial model's weakness

Our initial model's weakness was its inability to discuss the challenges of service development, as it focused on the strategic choices and organizational reorientation and restructuring. The problem with strategic choices is that a choice is a cognizant decision, whereas in reality the interviewees were not aware of the fact they were in a decision situation, it just seemed "to have happened", "case-by-case". This is supported by everyone's frustration and struggle with the lack of a clear focus and budget.

When we started noticing that our interviewees all discussed the troubles they had with actually developing new services, we felt the need to readjust the scope of our analytical model to include the process of service development. In tandem with the initial model, the fundamental

drives of the new model are also based on strategy reorientation and organizational restructuring a product-dominant company faces when making a move into becoming more service-dominant. The new ingredient is the challenges of the development process because we recognize that it is due to these hurdles the companies have difficulties achieving the goal of service-dependence. In fact, a research article by Claude Martin and David Horne,⁷ had identified the same phenomenon in over 200 US firms, supported our conclusion that service development was a main challenge in both service and industrial companies (Martin and Horne, 27).

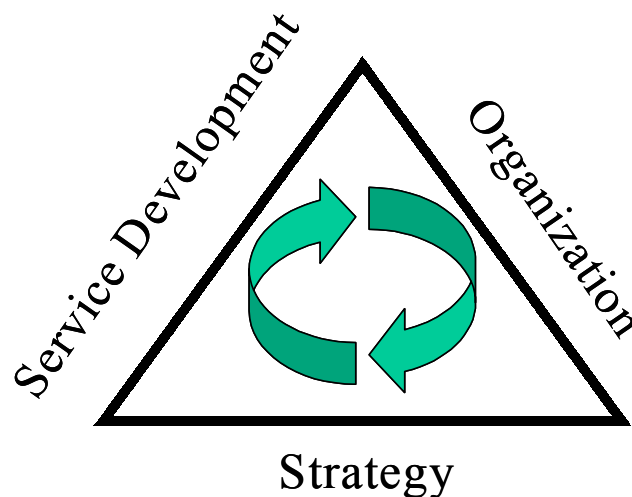


Figure 5.1 The Service Triangle

At this point, our research indicates that servitization is dependent on three key components and we portrayed these components as a circular triangle (*Figure 5.1*). Our experience also shows that the process of servitization is not an action list where one event precedes another, but are events of circularity. The corners represent the interaction between the different processes in servitization we found to be the key factors: “strategy & service development”, “strategy & organization” and “service development & organization”. Due to the complexity of service development and the servitization process, we deem it helpful to go through certain portions of our previous analysis to clarify the new

⁷ C. R. Martin is a professor at the University of Michigan and D. A. Horne a professor at California State University at Long Beach.

dimensions of our model compared to the original model presented by Bowen.

5.2 Service development

The first “leg” of our model is service development. Out of all the strategic shifts a product-dominant company needs to consider when moving into becoming a service-dominant company, our interview results and research point to two main challenges:

- The difference in adjusting to and managing the dual (consuming and producing) role of the client.
- The challenge with the development of new services to add to the portfolio (Martin and Horne, 27).

The simultaneity of production and consumption in services infuses a confusing moment into the process, because by virtue of definition (**2.3.2.3 Degree of simultaneity**), a firm can no longer have a service offering unless the client also participates in the production and delivery. Thus, we conclude that it becomes necessary for companies to have a different perception of the client. Though our initial model discussed the need for increased customer involvement, it failed to highlight the dual role of client as both a consumer and a component in production.

The reorientation toward services and the new role of client productivity gives rise to many abstract measurements. The results from our interviews indicate an inability of the product-dominant firms to address these abstractions.

The second hurdle brings up a subset of two key issues regarding the difficulty with the development of new services. First, Martin and Horne stated that almost all of their interviewees regard the service development process as informal. In the service sector, the “development process is based on an *ad hoc* nature, ‘new services happen’ rather than being formally developed”. This is in sharp contrast to product development,

where the stages are more precise and the process *per se* is not subject to questioning (Martin and Horne, 31).

Second, the perception among executives is that, in service development, capital investments are lower, risks are minimal and the timeframe is shorter than for product development. Looking at services from a product investment perspective, this is perhaps true. However, this miscalculation excludes two factors: human capital investment and computer system support. Martin and Horne's report that companies, which are in the process of servitization have experienced heavy capital investments in these two areas (Martin and Horne, 34).

We concluded that these miscalculations stem mainly from a product-oriented company culture where managers are not familiar with investments in services.

Despite the fact that all the literature and interviewees had stressed the informality of the service development process, it became evident that there were certain similarities in developing services. Although Bowen's model did not highlight these issues, they were inferred to and discussed by all external interviewees. The following four components had been key issues in every servitization (see *Appendix 9.4* for corresponding figure):

- The listing of services
- Analyzing customer value
- Defining services
- Organizing of services

5.2.1 List services

Throughout our data collection, the majority of the interviewees mentioned that neither they nor their employees were initially aware of all of the services their company offered to the customer. More importantly, these services often varied between the central organization and the local

subsidiaries. The interviewees stated that this situation often resulted in employee and customer confusion regarding the services the company truly offered. Several external interviewees highlighted the confusion as to what services are offered and where they are offered, because many companies are now dealing with more global customers. Furthermore, the interviewees said that as their customers grow they are increasingly limiting the suppliers they use. This often means that the customer will select the supplier who can provide the same product and level of service in the different countries.

To solve this confusion, both our interviews and empirical evidence from our service literature stated that successful companies conducted service inventories (Siar Bossard, 1994). These inventories normally were led by the central organization. The end result was an all-inclusive list of services that both the central organization and the subsidiaries provide to customers. After the inventory, the central organization organized these inventories and made them available to everyone. This allowed employees throughout the organization to truly understand the scope and location of services provided.

5.2.2 Analyze customer value perception

Every interviewee highlighted the fact that ultimately every product or service is developed to help solve a customer's problem. Although Bowen never directly states this concept in his model, he only inferred that this is a factor to consider. However, all interviewees claimed that a company must understand their customers' value perception and need to ask themselves:

- Is there a need for this service?
- What services do our competitors offer?
- Is there an expected level of service?
- Will the customers' pay for the service?

Based on the above questions, we made an attempt to develop a simple matrix analysis tool (**Table 5.1** below). This matrix provides a generic method for the systematic analysis of a customer's value perception of each service a company offers or is planning to offer. Furthermore, it helps highlight the opportunities the company can explore. Though only a simple method, it is relevant in that it helps the company strengthen the service development “leg” of its servitization triangle.

Service	Is it needed?	What do our competitors offer?	Is it expected?	Will the customer pay?
X	Yes	Similar	Yes	No
Y	Yes	Not similar	Yes	Possibly
Z	Yes	Not similar	No	Yes

Table 5.1

In determining “need”, it is critical to not only think about the current market but, more importantly, also where the market will be in the future and if a viable “need” will exist at that time. Further on, the company analyzes who will have this “need” and what role the “needer” plays in the customer demand process. Is the person the end user, the purchaser, the manager, etc?

A simple competitor analysis often uncovers the services the competitors provide to customers. This benchmarking process allows the company to study: 1) what do the competitors offer; 2) how do they offer it; 3) what do they charge; and 4) what do the customers think? From these points, a company can understand the competitive landscape in services in its sector. This information can help the company understand whether the service is “expected” or not.

“Expected service level” helps the company understand the minimum level of service it must provide to its customers. These services must be provided if the company wants to enter the competitive services landscape. Often times, these services, in the industrial environment, are

the ones that the supplying company will not be able to earn a profit on. However, this test is also used only to ensure the supplier can offer the full range of services and products so that the customer company can limit its supplier to the “best in class”.

The last and most important question is whether the customer will pay for the service. If the customer is willing to pay, the company should definitely take the analysis to the next step and classify the service and categorize it as either a basic or a value added service.

5.2.3 Define services

Since our indirect findings revealed that many of the companies had in the past been unaware of the difference between using services as a marketing tool and an actual service offer, we incorporated this issue into our model. The most important concept here is that a company must first address the differences between basic service and value added service.

5.2.3.1 Basic service

“Basic services” are services that customers expect and are unwilling to pay for.

The above statement came from many interviewees and stems from several factors. First, some services are so closely associated with the product that neither the customer nor the supplying company realizes that the service is actually a service. Second, a high level of competition in the industry could allow customers to be more demanding of their suppliers. This suggests that suppliers will most likely use multiple layers of services just to compete. Thus, the possibility for the company to gain value from these services is very low.

5.2.3.2 Value added service

Besides “basic services”, a company can offer “value-added” services (VAS). In this thesis, we define *VAS as services that add value to the company offering them, either through increased differentiation or*

through an alternate method of generating revenue/profit. Thus, a service that a customer might value is not a VAS in our thesis unless it also adds value to the supplying company. This definition was strongly held by all the external interviewees as well.

Value added services can be either complementary or competency based services. Furthermore, many interviewees stated that a VAS could also be one or several *basic* services, as long as the company performs the basic service(s) so well that it differentiates the company or the customers are willing to pay more because of its performance. An example of this is the premium that United Parcel Service can charge because of its superior online package tracking compared with other package carriers. They take the concept of package tracking, which most package carriers offer in the US market and demonstrate the increased value that their system provides over those of their competitors (Haddad).

5.2.4 Organize services

When organizing the services, our findings showed that a missing component in the process was the lack of communication between the central and the local organizations. Our results suggested that letting the central organization take the lead and provide local subsidiaries with resources and capability could enhance the process of servitization. This is why we have incorporated the category into our model. Furthermore, we felt it important to describe our two subcategories for organizing service: central and local.

5.2.4.1 Central

Our research indicates that most executives believed that the role of the central organization should be one of managing and archiving past information. This allows the executive management to provide a clear scope for present and future services. However, this was not mentioned in our initial (Bowen's) model. Many of the external interviewees stressed the importance of developing and providing a mechanism to capture and disseminate knowledge regarding services throughout the entire

company. They emphasized that these mechanisms enable the entire organization to understand the services it offers, where it offers them, how to offer them and a cost estimate of the service. Furthermore, most said that any system implemented should also allow employees at all levels to make recommendations and changes to the current service offering. Our model regards the above considerations in this subcategory.

5.2.4.2 Local

In this subcategory in our model, we wanted to describe what went on at the local levels as companies servitize, something that our initial model did not account for. One important activity we found and included in the model was that companies often allow their local offices to build on the standardized packages offered from the central organization. For the most part, we found that the executives allowed the local subsidiaries to modify any service they feel necessary to increase their competitive standing in the local market.

Local subsidiaries are also responsible for executing services at the local level. Typically, they interface with the local customers on a routinely basis. As such, our model indicates that they must have the flexibility and authority to execute the services. They must also be allowed to develop new services with the help of the central organization. This again serves as a method that the company can leverage, both its resources and its increasing knowledge base.

Lastly, a key to success that was continually stressed by the external interviewees, which we also included in our model, was that the local subsidiary must provide feedback to the corporate level on the standard service packages, as well as any trends or opportunities it can detect in its markets or in the sector in general. This information would then be applied to new or modified service packages that the company would develop in the future. Furthermore, this communication also helps disseminate information and knowledge, two keys in developing and maintaining a strong service-orientation.

5.3 Organization - analysis of company culture

The second leg of the “servitization triangle” deals with the organization and the company culture. This important area consists of three main sub-categories depicted in *Appendix 9.5*. Although our framework in the area of organization is not fundamentally different than our initial framework (the Bowen model), the way we categorize and subcategorize this part of the process is significant. We took the key organizational issues that our interviewees discussed and attempted to map their thoughts and their approach in a generalized manner. We believe that this part of our model offers a more logical and practical way to approach the cultural/organizational issues that surround servitization than in the initial (Bowen) model.

5.3.1 Analyze employee skills

A fundamental difference we found between a service-based industrial company and a product-based industrial company is the focus on employees. Employees form the backbone of any service-based organization. These employees are often better equipped for the company’s daily business in a more fluid competitive landscape, where every customer interaction makes a difference. This requires greater *mental and emotional intelligence* because decision is pushed down to the employee who is in contact with the customer. Although Bowen also points this fact out in his model, he only highlights that the skills of the customer contact people be evaluated. Our model takes into consideration that as the organization transitions to services, all personnel are more stringently evaluated with regards to mental and emotional intelligence. Besides hiring higher quality employees, we found that a service-based strategy also requires the company to *better train and educate current* and future employees. Training, as a minimum, included the importance of service and how the employee can enhance the customer’s experience. Furthermore, many external interviewees stated that the companies must also train their employees in managing customer relationships. Our model highlights this training as a significant action that companies take as they servitize, more so than the Bowen model.

The last subcategory our model emphasizes in “employee skills” is the need for companies to *change employees’ focus from product-orientation to one of solution-orientation*. This is a result of multiple comments from our external interviewees that offering “value added services” require a change in employee focus. However, all of these respondees also mentioned that this change is incredibly hard and often met with stiff resistance. Thus, by mapping this fact in our model, we provide notice of this challenge during servitization.

5.3.2 Analyze the organization

In the category of “Analyze the organization,” all of the considerations that we map out are covered by our initial (Bowen) model. Therefore, we will keep not go too much in depth since we have covered much of this in *Chapter 2.5*.

After creating a motivated and highly educated workforce, the next step our external interviewees mentioned and the next subcategory was to organize them in a way that delivers the optimal value to both the company and the customer. This means *developing a customer-oriented sales organization* that uses key account managers to reduce “sales turbulence” and maximize the long-term relationship. Similarly, companies also start *integrating marketing and production* so they can ensure that the customer’s needs are met.

As companies seek *longer-term relationships*, they often seek to form partnerships with certain “selected” customers to “share” the value to the relationship. In many cases, partnering leads to many benefits for both parties, such as reduced costs, improved efficiency and improved knowledge transfer. The result is a win-win situation and the bond between the two companies evolves into a more interdependent relationship.

Lastly, top management must also look at the relationship between the company and its employees. To summarize one interviewee: “In the past,

bureaucratic organizations existed to ensure that no one employee could “do” too much damage. Unfortunately, it also prevented people from making changes that could have benefited the organization.” The service-based organization of today and tomorrow require minimum bureaucracy with decision-making power pushed to the lowest level.

As decision-making is pushed down, employees working with the customer have greater leeway to accommodate the production of the service and the building of a longer-term relationship. Similarly, the employee also realizes his importance not only in revenue and profit generation, but also in leveraging the company’s assets – maximizing the gain while minimizing the risks. Although Bowen brings this up in his category of “utilize unobtrusive control mechanisms at organizational/customer interface,” we will take this concept further. Our interviewees and hence our model, suggest that in order to create and maintain this positive atmosphere, a company must develop *support systems* that reinforce this *employee empowerment*.

5.3.3 Analyze the support systems

There are many support systems within every company. However, Bowen et. al. do not emphasize the importance of these systems. Although, there are many internal support systems and each differs from company to company, our results point to three generalized support systems that are the most important. These systems are critical in driving change in any organization. Thus, they are especially important when transitioning from products to services.

First, we found that servitization forces a company to *align its HR policies with the service/solution mentality*. A prime example of this is the transfer of decision-making from management to individual employees. Second, the company must also *align pay policies and incentives with service/solution mentality*. We found that many in companies pay was not only based on a commission that is calculated by amount sold, pay also took into account other, less tangible factors. These

factors include customer satisfaction and ability to generate new services or solutions that the company can offer the customer.

Lastly, all we found that most of the interviewed companies had or were trying to establish better *local and central customer feedback systems*. These systems were important for the companies to monitor the customers' response, both positive and negative, to products and services. This then allows the company to track its performance, identify the strengths and weaknesses and make necessary corrections or improvements in a timely fashion.

This "real time" feedback system must "encourage" the customer to share his/her opinions.⁸ This serves two purposes: 1) it makes the customer feel as though the company cares about the customer and subsequent needs and 2) it helps the company identify underlying customer needs and desires. Both are important in developing the customer relationship as well as in the development of future products and services that meet the customers' needs. Thus, this is one of the first interactions between "company culture" and "service development" that our model takes into account, which the initial (Bowen) model did not.

5.4 Service strategy

The third leg and base of our triangle is strategy. It is one of the main ingredients in the servitization process. Moving from a product-dependent to a service-dependent organization is a typical changing situation. Normally, change is not a serendipitous event, but the result of strong and committed management. In our initial model, the *strategic choices* were the main focus of a servitization *success*. However, as previously mentioned, our interviews revealed that it was, instead, going through the *strategic challenges* of the *process* of servitization that had been a key factor.

⁸ This point was emphasized by Scandic but supported by other interviews.

5.4.1 Resource allocation

Bowen never specifically states that resources should follow the decision to servitize. From our results, this is a major weakness in his model. One of the biggest issues that we found was that most companies do not properly allocate resources in support of their strategy. The mismatch between strategy and resources could best be explained by the lack of clear service related goals and targets. Most companies are very familiar with laying out clear goals for new products, but services, due to their intangible nature, are only discussed in general form. As a consequence of the generality and the of the disparity between strategy and resources, many problems can be incurred.

5.4.2 Strategic challenges

We have mentioned that the process of servitization has many circular components. As stated in the “service development”, section 5.2, most companies had difficulties defining services. In fact, most of them did not understand, until afterwards, that they actually had started to servitize. The result was that they were restructuring and redirecting their organizations and thereby changing their companies’ strategy without having a *clear focus and measurable goals*.

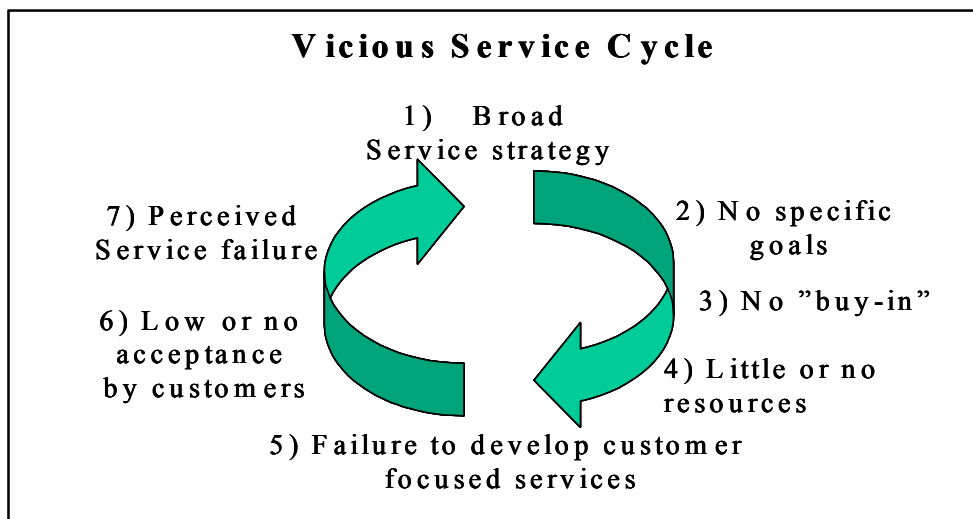
Goals provide a company with a more specific direction than a mission or vision. Moreover, many interviewees mentioned the fact that “what gets measured gets done.” Thus, we concluded that goals help unify a company’s strategic direction and buy-in from both management and employees. This buy-in is a crucial factor if a company desires to successfully servitize. We found a direct relationship between the companies that specified the importance of service-related goals and their contentment with allocation of resources, to the company’s service effort and success. This is why we have highlighted the “*resource allocation*” issue in our model.

Goals often serve as a company’s game plan or map. They are often easy to understand and both management and employees can understand the

specified and implied tasks to implement them. A clear understanding of the goals often leads to the company properly allocating resources based on the priority of the goal. Thus, strategic actions with clear goals receive resources. Therein lies the problem with services.

All of the companies we interviewed said that they wanted to offer services and be more service conscious, but many never established related goals. As a consequence, services never became a stated and measured priority and did not receive their proper allocation of resources. This often results in a slow or false starts in the provision of service to customers. False starts lead to frustration with service and even less allocated resources, because company management often says, “you see, we’re not succeeding at service, we should stick to what we do best – products!” This type of service failure is what we refer to as the “Vicious Service Cycle,” displayed in *Figure 5.2* below.

Figure 5.2 Vicious Service Cycle



Although the vicious service cycle continues to be a problem for many companies undergoing the servitization process, if top management can identify the problem with particular focus on the formulation of goals and allocation of resources, it could be rectified. That is why we have presented this issue. We found that *problem identification* within the

servitization process is lacking because most managers do not have enough experience in diagnosing it.

5.5 The big picture

Now that we have laid out and explained the virtuous servitization triangle, it helps to see a visual representation of the entire servitization process (*Figure 5.3*). For simplicity's sake, we have drawn the model in a linear fashion.

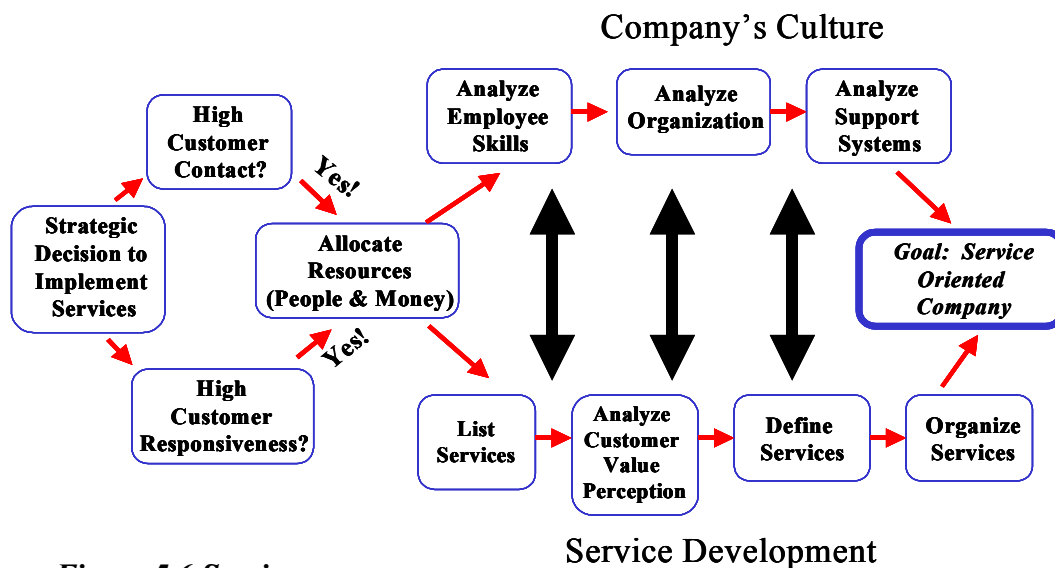


Figure 5.6 Service Development Process

The goal of this visualization is to map out and clarify our view of the servitization process. However, we must highlight the fact that all three areas: strategy, organization and service development affect each other. Unfortunately, this interaction between each area is very complex and we would need to undertake more research to truly understand the multiple interactions. Nonetheless, companies that wish to servitize must understand that each step in the process has multiple consequences, not only in the process specific “leg”, but also in affecting the process and changes in the other “legs”. This is a major difference between our model and Bowen’s model.

Our next step was to apply our model to deductively analyze the servitization process of a company. We did this with MHC, since we had the opportunity to work closely with the company and the CEO.

6. MHC Analysis

In this chapter, we used the model generated in the previous chapter as the basis for describing and exploring the challenges that MHC faces in regards to servitization.

6.1 Strategy

Since its spin off from SCA, MHC has predominantly been focused on improving itself in the first two phases of the Strategic Business Development model: Effective & Efficient and Better & Faster (**Figure 2.2**). Now, as it completes its transition from the Second Phase to the Third Phase, service has become of increasing strategic importance and is being felt by the organization. For example, eleven out of fourteen employees knew about the company's move to soft products (i.e. services), however, only two mentioned seeing any change in the company's typical product-based orientation. Thus, we see a clear "know" vs. "do" gap in service strategy formulation and implementation. This appeared to be especially evident in the allocation of funds and personnel to develop new or existing services. Twelve of the internal interviewees mentioned that the current resource-constrained environment made it difficult to truly implement a service strategy beyond what the company currently provides.

Although resources are starting to flow into service development projects, as of October 2000, there was little previous work in this area. We believe that the underlying reason for this stemmed from a large internal difference of opinion on the value of services to the company. It was evident after completing the internal interviews that there were two major opinions as to services: 1) MHC should expand its services beyond bundling them with products and 2) MHC should only develop or expand services that are complementary to its products. These differences of opinion were deeply felt throughout the entire organization.

In particular, seven of the internal interviews mentioned that MHC should start unbundling some of the services so that the company could derive greater value. One example of a service that three interviewees gave was the change over service that MHC initially provided to hospitals moving from reusable gowns to disposables. Currently, this service is bundled in the contract that the hospitals initially sign. However, these employees felt that the level of service and knowledge provided should justify selling this as a separate, unbundled service. Nonetheless, even the interviewees that mentioned unbundling certain services did not believe that every service could nor should be unbundled from the product, only those that truly add value to the company.

Overall, we found that MHC has a large internal difference in sentiment on service. Everyone has a basic understanding of service and why services are important. However, very few have a clear picture of the company's strategic goals in regards to services. Most see that value can be gained from unbundling services or adding new unbundled services, but no one felt that this would happen because of either the product-orientation of the company, or the lack of adequate resource allocation to turn the strategies and ideas real.

Our results show that it often takes a long time to achieve a buy-in from the employees and senior management. Comparing the above results to those of the external companies that we analyzed, MHC remains in the initial phase of servitization; the internal differences in sentiment is a clear indication of its beginning stage. However, our research also indicates that when a company, such as MHC, reaches the initial stage, it is important for it to not lose its focus on servitization. Looking back at our external findings, it had proved advantages to continually emphasize the need of service specific goals, change the organization and continued emphasis on the service development process. However, the only real problem is the difficulty of knowing when you have entered the process of servitization. Remember the ad hoc nature and the subsequent unawareness of having entered the service development process. Thus,

we can conclude it was not the understanding of service specific goals or organizational changes that had been the main problem source. Instead, it was the service development process per se that had proved to be the main quandary, which, for example, have resulted in unclear goals.

6.2 Service development

MHC, especially the Klinidrape[®] division, has always prided itself in providing exceptional product-related service to its customers. This allowed the company to establish a large share in disposables within the European market. However, MHC now faces two related challenges in the current business environment. First, six interviewees mentioned that MHC's competitors now offer the same level of service and that its competitors are also starting to pioneer new services. Second, nine of the interviewees do not believe that MHC has been successful in developing new services, nor will be in the near future. Twelve of the interviewees pointed this development lag due to any type of formal or informal service development process. We will explore and explain these issues in more detail throughout this section.

6.2.1 Service definition

In accordance with the external findings, the definition of service is one of least clear areas. Looking at the results from our MHC interviews, we found that the employees refer to almost every service that it provides as a value added service. The majority of the interviewees pointed to the training that MHC offers when a customer makes its initial product purchase as a value added service. However, all interviewees also discussed that their competitors offer similar training, though not of MHC's quality. Because of this fact, customers are less willing to pay for MHC's service; hence the training may better be classified a basic service.

Another disjointed result was the view of the Klinidrape[®] Forum; close to half of the interviewees regarded it as a marketing tool whereas the rest regarded it as a value added service. What had been a somewhat blurred

trend in our external interviews was a distinct trend in MHC, the confusion between marketing tools and service. These MHC results reinforce our earlier comments about traditional companies viewing services as a marketing device, where they viewed MHC a provider and the customer a receiver.

Nevertheless, there are other consequences of dividing the provider from the receiver in services: the production cannot be separated from the consumption, i.e. the consumer becomes part of the production (degree of simultaneity). In this regard, there were stark differences between MHC and the external interviewees and the examination of the dual role of the customer. As previously stated, we found that most of the external interviewees had looked into the dual role of the customer (receiver and producer), whereas MHC had not. From the information we gathered, it was clear that MHC viewed the customer's role in service the same as in product purchasing, that of only a receiver.

It is our interpretation then, that not properly understanding, or taking into account the dual role of the consumer results in vague service strategies, which in turn explains the difficulty of establishing goals.

Speaking of the services MHC currently offers, only a few interviewees mentioned the difference between basic and value added service. They also pointed to MHC's poor performance in the basic service area, especially in terms of logistics. One interviewee was especially frustrated and stated that if MHC wanted to embrace the idea of offering value added services, MHC first needs to emphasize and fix the basic services that it offered. When we probed deeper into this comment, it became obvious that many MHC employees did not fully comprehend that these "basic services", such as on time logistics, are prerequisites in order to compete in both the wound care and the surgical disposable market.

The company also displayed difficulties in deciding what classification of service it should enter. Although the majority of the employees only

wanted to expand into complimenting services around products, others would like to venture into more competency-based services. We suggest this inconsistency to be a possible source of friction within the company that prevents many employees from “buying” into a more service-oriented approach to business. This lack of “buy in” can, if not handled, could put MHC into what we termed the Vicious Service Cycle in *Figure 5.2*.

6.2.2 Service offering

Every interviewee mentioned that MHC has a relatively strong service offering. Most also believe that they have also failed to take advantage of this strength and that they have fallen short in several ways. First, the company has no definitive list as to the services that it or its local national subsidiaries offer. One interviewee described the fact that many of the company’s local subsidiaries have developed innovative services, but they either stayed in that country, or are cut due to the lack of back-up resources.

Second, MHC has no process that allows either the central or local national subsidiaries to share their service ideas. This often leads to what one employee termed a “reinvention of the wheel”. This reference was made to the fact that one local subsidiary might expend its resources to develop a service idea that other subsidiaries have already developed.

Thus, we conclude that MHC lacks a central collecting unit for its overall service offers and does not currently have a sufficient process in place to spread good ideas inside the organizations. The general sentiment from the interviewees is that both of these challenges prevent MHC, as a whole, from properly communicating, articulating services and provide solutions to all of its customers.

Comparing these results with our external interview companies, again we find that MHC is at the beginning of the servitization process. All of our external interviewees mentioned the initial difficulty they had

determining the services that they actually provided. Linking our external findings with MHC's findings it is suggested that MHC may be able to be in a better starting position if they have a perspicuous view of its entire service inventory.

6.2. Customers' value perception

The foundation for all businesses, especially in service, is the customers' needs. Because of MHC's line of business, one could argue the *actual* customer is the patient. However, we will refer to the people in the hospital as the targeted customer, nurses, purchasers, and management. We found that most interviewees from the corporate headquarters did not have a very strong idea of these customers' needs. For example, one interviewee admitted that MHC staff has experienced difficulty in quantifying and defining the services provided. Although our research showed that the local national subsidiaries had a better understanding of their customers, half still claimed not to have a thorough understanding of their customers' value perception or that this value perception constantly changes.

Seven interviewees felt that the problem of customer value perception in MHC is derived from the fact that various customers each has different needs, as well as different abilities to influence the product purchasing system. In the case of disposable products, the head operating nurse, the purchaser and the hospitals management have the greatest influence on the purchase decision. Nonetheless, most interviewees had not been to see a customer within the past two to three months, nor had any surveys on customer needs and wants been conducted in three years. When questioned further, eight interviewees claimed that when they asked customers what they desired, they always seemed satisfied with the current level of services provided and rarely asked for a new or different type of service.

Thus, it is our understanding that MHC takes a rather reactive approach to understand customers' value. As a point of comparison, we would like to

revert back to our external findings where quite a few had taken an aggressive role and pushed the service onto the customers. The conclusion we can draw is that MHC's failure of taking a proactive and aggressive role has led to the catching up of their competitors, as noted in the beginning of this chapter.

Another challenge that all interviewees discussed was MHC's inability to charge for current services offered. All stated that getting a customer to pay for any service they provided was exceedingly difficult for two reasons. First, most nurses and hospital purchasers expect medical product companies to offer certain services (basic services), such as education and product training. In the case of training, hospitals expect the selling company to train its nursing staff on its products because most hospitals have a limited training budget. Second, MHC's competitors offer similar services while (often times) competing with a lower price.

This information led us to the conclusion that MHC was in a very difficult situation because the medical product industry, especially wound management and disposable products, required a very high level of basic service. Likewise, because other competing companies offer such a high level of basic service, it is difficult to introduce new value added services that *compliment* existing products. This puts MHC in a position as the company must continue to offer personnel intensive services with all future sales of its product, unless it can redesign the services to require fewer personnel to accomplish the same task.

Although MHC might be in a difficult situation when offering complimentary services around existing products, our research indicates that several other companies had experienced similar difficult positions. To resolve this, these companies changed their approach when launching new products. These new products, though better than the old ones, often lacked the full range of included service, especially when the companies competed on bidding. Instead these companies labeled the service portion as an extra cost and laid out specifically what the service included and

why it was better than what the competitors offered. Although this is an option for MHC, it may prove difficult to enforce in its current competitive environment.

In summary, we found that MHC does not have a strong grasp of its customers' value perception. Other companies in our research indicate that they have had, and still have, similar problems. To solve this problem, the external companies made an effort to increase their knowledge of their customers and the different roles that they could play in services. Again, this turns back to our earlier findings on the new, dual role of the client.

6.2.4 Service organization

The last part of the service development process is the execution organization. In the past, all local offices had the primary responsibility for developing services that fit their market. This approach was and remains successful. However, the problem we uncovered is that there are often misunderstandings between the local subsidiary and the central organization regarding services.

The most problematic area we found was that there was no clear service role for the head office, nor did the head office provide the guidance that most local subsidiaries would have liked. This lack of coordination is a possible explanation why MHC's service strategy remains disjointed. Furthermore, we feel that this lack of coordination also could be a secondary reason why MHC faces such difficulty charging for services (the primary being the competitiveness of the sectors it competes in).

6.3 Culture

There are three significant areas that our model highlights: employee skills, organizational arrangement and support systems. We used this framework to see what steps MHC is using as it undergoes the servitization process.

6.3.1 Employee skills

MHC's key resource is its employees. The company prides itself on hiring subject matter experts, nurses and sales people. All interviewees mentioned that MHC believes that not only can the nurses better relate to their customers but also that they can bring a level of experience and expertise that someone without a nursing background cannot provide. Thus, MHC bases its employment on a highly skilled work force with strong training. In fact, twelve interviewees stated they are the leader in bringing highly qualified experts to their customers.

Another strength that MHC is developing is its commitment to build a more relationship-based business, instead of solely focusing on the transactional side of business. To accomplish this, the company has recently reorganized its sales force into key account managers with supporting product specialists. Their goal is to emphasize their commitment to build better relationships with their customers and, in turn, increase both sales and profitability of the customer base.

Though MHC often has strong ties with the head nurses, it has a relatively weak relationship with the senior management of its customers, especially in the larger hospitals. Eleven interviewees mentioned that this type of focus could pose a serious risk to the company in the future as hospital management becomes even more important. Once mainly political appointees with no mandate to control cost or effectiveness, hospital management has become more professional and focused on the bottom-line numbers. Five interviewees pointed out that their competitors had a much better relationship with senior hospital management and even focused on them as part of their sales effort. Presently, MHC has not kept pace with its competitors regarding establishing relationships with the senior hospital management. One interviewee pointed out that this weakness has and will prevent MHC from delivering its message and could have a negative impact on MHC relationship building in the future.

MHC also faces the challenge of instilling a service or solution-based orientation instead of a product-orientation that remains highly prevalent throughout the organization. Most interviewees constantly mentioned the view that the company sold products. Very few ever mentioned the possibility of service being successfully unbundled from the product, due to emphasis on products and following, this product-oriented view might constrain the servitization process, as it implies a move from product-orientation toward service-orientation. In fact, several of our external interviewees cautioned that a product-orientation could result in a company's management following a "me too" type strategy, which could result in a negative experience as the company tries to imitate competitors that are servitizing. Again, it is our interpretation that a passive approach towards service development vis-à-vis your competitors almost surely will lead to your rivals catching up.

6.3.2 Organization analysis

In many ways, MHC has an organization that most would consider to have a strong customer focus. Not only have they reorganized their sales staff and integrated their production and marketing, they are also establishing better long-term relations with their customers. However, the main challenge that MHC faces is its culture's strong aversion to risk. Seemingly empowered in many ways, the company's staff did not appear to take any risks in creating new services and especially so when the service is not bundled with a product. Even though many pointed out the company's competencies in many critical, knowledge-based areas, most believed that offering a pure service would never be successful due to the inability for such a service to be properly developed and sold. However, it is also our understanding that this risk aversion may in fact not stem from not wanting to take risks per se, but from not understanding the new risks that services bring about. For example, we have already brought up the notion of the dual role of the client and the subsequent risks it can give rise to, as client becomes a part of the production chain.

On another level, MHC must also ensure that all organizational changes affect each local national subsidiary. For example, there was a clear difference in the local subsidiaries as to the desire and ability to influence the bid specifications. We found a correlation between the subsidiaries' desire and ability to influence the bidding specifications and the level of service-orientation. The higher the ability to influence the bidding, the higher the level of service-orientation, which can be explained by the translation of the bidding influence into a better understanding of their customers' activities. As a result, it is our interpretation that they saw the tender as a method to better communicate the range of services provided to the purchasers and head nurses and at the same time gain a better understanding of their clients' role.

Hence, we see an opportunity for MHC to take advantage of this bidding knowledge by using a centralized collection unit and then dispersing it.

6.3.3 Support systems

Support systems are crucial to any business. These systems are often the basis of the company's culture. Therefore, it is very important for a company to successfully craft these systems to ensure a positive service or solution-oriented culture. In MHC's case, this means rewriting its human resource policies, especially concerning pay. According to the interviewees, sales people's compensation is based on transactional sales, as opposed to being based on a combination of sales and customer satisfaction, a method that both the service and manufacturing companies we previously interviewed are using. By basing compensation on this combination, MHC could help influence the culture to become one more focused on relationships, services and solutions.

6.4 The bottom line

MHC is typical of most manufacturing companies. It is a product-based company that maintains its organization, focus and competencies around its products. This product-dominated approach led us to find a corresponding weakness in MHC's ability to understand and grasp the

different aspects of the service transition. The lack of understanding became obvious when we looked at how the company translated its strategy into specific service-related goals. Using the results from our external interviews, it is our understanding that without clearly stated goals, management risks losing the focus necessary to accomplish a service transition.

As we continued our research, we started to recognize that the company was starting more actionable projects. The senior management realizes the need for services in bringing the company into the future. Subsequent awareness has recently led to a more developed role for services in the company's vision and mission. However, it is our understanding and interpretation that this awareness has to be diffused throughout every unit and function. Moreover, the awareness needs not only to be raised but also realized. Though MHC is progressing in the right direction, there are still obvious disparities within the organization, which can be detected in the disjointed focus and the shortcomings of setting service goals. In our analysis, this is the main culprit preventing a greater flow of resources and a higher level of "buy in" throughout the company. Without resources and "buy-in", MHC will find it difficult to proceed.

Lastly, based on our findings from companies that had servitized, we believe it will be more difficult for MHC to successfully add services to its product portfolio without the creation of a separate service section. The reasoning behind is due to the divided sentiment and the strong product focus within the organization.

The servitization process is circular, as we have previously described and thus it becomes difficult to point to one particular defective wedge of the circle. Using our interviews and related research as support, we do know, however, that the complete service circle is composed of many interlocked wedges that need to be appropriately connected in order for a servitization to be successfully implemented.

7. Final Conclusions & Implications

7.1 Final conclusions

Traditionally, manufacturers have derived value by locking in “product secrets” and gained market share through geographical conquests. Strategic business development meant product expansion and achieving economies of scale. As structure usually follows strategy, the organizational structure has consequently been focused on how a company has arranged its products and markets. However, rapid technological development has commoditized product differentiation and squeezed products margins. Consequently, manufacturers have sought alternative routes to increase the opportunity for competitive differentiation and found that they could do so by increasing the service component in their offerings.

Due to the very unique and different natures of service, many companies experience problems identifying the service propeller. In other words, one cannot simply add services to an existing organization without revamping it; services change too many aspects of doing business.

Our empirical findings and relevant literature have produced the revised model, the “Service Triangle”. As shown in *Figure 5.1*, the three legs: strategy, organization and service development, represent the model. Furthermore, we found that:

- ✓ The concept of strategy is accepted and not really a controversial subject.
- ✓ The concept of changing the organization and culture in order to servitize is understood but is somewhat less anchored.
- ✓ The concept of service development, however, is by and large unidentified and difficult to comprehend. In reality, this process proves to be the “strategic challenge.”

In the initial (Bowen) model, the strategic *choice* was the main issue with the organizational changes to be followed. In contrast, our interviews revealed that tackling the strategic *challenges* of the *process* of servitization that had been the key issue.

All interviewees confirmed the need to restructure a company's organization and reorient the company culture. We found two main reasons behind establishing a separate service unit: 1) a conventional product-dominant entity raises too many internal obstacles and lack the focus and 2) a new focus on services can interfere with and jeopardize the traditional operations.

“Service development” proved to be the most difficult concept for companies to comprehend. Although, we attempted to map, describe and explain the service development *process*, neither the interviews nor the literature offered a clear picture. Similarly, it was difficult to distinguish exactly *what* to servitize or *how* to servitize. In fact, a good number admitted to not being fully aware of the process or where in the process they were. Our interviewees stated that development “just seems to happen” or that it is a “case-by-case” situation. In other words, companies do not realize how they are approaching it...they are just doing it. Thus, we can confirm that the actual development process is an *ad hoc* procedure as mentioned by previously introduced literature.

Therefore, as neither the interviews nor the literature was able to provide us with a concrete foundation of the service development process, we cannot provide a service development manual. This means that what we have done is essentially explained a general process that companies are following. As a result, we must emphasize that our model is only a clarification of how they are doing it, not a “finite” model of how they should do it.

Nevertheless, we can point out the strategic challenges in service development that our empirical findings and relevant literature have highlighted:

1. **The difficulty of adjusting to the dual role of the consumer.** In services, not only is the production simultaneous with consumption, but the role of the client is represented both as a component in the production and as a consumer. It became evident that for a product-dependent organization, this new and unique role of the client is alien and unknown. It is a prerequisite for a service-dependent organization to successfully understand dual role of the client. The implication of not being able to adjust to the dual role of the client is that services cannot be fully integrated into the company. Internet banking is an excellent example of where clients actually produce the service themselves. Banks, such as Handelsbanken, have chosen not to launch Internet banking as a marketing device, but as a service their clients need to pay for.
2. **The difficulty of addressing abstractions.** The reorientation toward services and the new role of client productivity gives rise to many abstract measurements. The results from our interviews indicate an inability of the product-dominant firms to address these abstractions, which in turn complicate the cost/profit analysis. An example of an abstract measurement is the different investment profile that stem from the service development, where the investment analysis for development is more related to human capital than product capital. Typically, a product development investment has a definite start and end, whereas the service development has less finite boundaries. It is more difficult to know where, in the investment circle, you are (circularity of the process).
3. **The difficulty of perceived risk.** The notion that capital investment in service development is low highlights a problem area. The main problem is that the perceptions do not take full

account of either the “human systems” component or the computer system support (Martin & Horne, 34). We would like to point out that in service development, the risk involved is not necessarily based on the amount of capital invested but is more contingent on the circularity of the process and the “human systems” factor.

7.2 Implications for MHC

With the support of our final conclusions, we cannot claim that the new model has the ambition to provide MHC with a servitization solution. Since service development appears to be an *ad hoc* phenomenon and, by virtue of its definition, we find it difficult to provide many tangible answers.

In spite of this we can point out that MHC needs to recognize, understand and address the strategic challenges and hurdles in the servitization process. It must adjust to the dual role that customers play in services and address the abstractions and intangibles that are inherent in services. We reckon that preparing for these challenges and hurdles will enable MHC to undergo the process of servitization quicker with more success.

Throughout our case study, internal interviews and time spent at MHC’s headquarters, we found that MHC has a strong product-based culture. Our results indicate that this is a definite weakness when undergoing servitization. Nonetheless, it also has a very open-minded culture with a strong competence base and forceful ambition of continuous development. We believe that these characteristics will provide MHC a solid platform to implement a both servitization and service development program.

7.3 Suggestion for future research

The scope of our thesis aimed to concentrate on servitization. We have focused on issues such as strategy, organization and service development processes that stem from the internal environment and how this can add

to the collection of offerings. There are, of course, other methods of developing services other than the internal ones we highlighted. For example, mergers and acquisitions are external, sources of service development that we recommend exploring.

The area of new service development is an emerging and relatively untouched subject area. While we have hinted at some differences between new service development and product development, we suggest interested readers probe the similarities and the contrast between the two processes.

Finally, we have realized that there is no existing research model on *how* to successfully develop and implement a process of new service development. As a result, there is no normative model or manual. Although we have attempted to clarify the process, much further work must be done, focusing only on this process.

8. Bibliography

8.1. Books

Cooper, D. and Schindler P. (1998) *Business Research Methods*. Boston: McGraw Hill.

Dicken, Peter (1998) *Global Shift: Transforming the World Economy*. London: Paul Chapman Publishing Ltd.

Grant, R.M. (1995) *Contemporary Strategy Analysis*. Massachusetts: Blackwell Publishers.

Grönroos, C. (1990) *Service Management and Marketing: Managing the moments of truth in service competition*. Lexington Books.

Hamel, Gary and CK Prahalad (1994) *Competing for the Future*. Boston: Harvard Business School Press.

Hamel, Gary (2000) *Leading the Revolution*. Boston: Harvard Business School Press.

Kasper, Hans, Piet van Helsdingen, and Wouter de Vries Jr. (1999) *Service Marketing Management*. Chichester: John Wiley & Sons.

Kotler, P. (1997) *Marketing Management: Analysis, planning, implementation and control*. Englewood Cliffs, NJ: Prentice-Hall

Merriam, S.B: (1998) *Qualitative Research and Case Study Application in Education*, Josey Bass.

Van Looy, Bart, Roland Van Dierdonck, and Paul Gemmel (1998) *Services Management an Integrated Approach*. London: Financial Times Pitman Publishing.

Yin, R. (1994) *Case Study Research – Design and Methods*, California: Sage Publications.

8.2 Articles

Anderson, James and James Narus (1995) Capturing the Value of Supplementary Services. *Harvard Business Review*. January-February: 75-83.

Bowen, David, Caren Siehl and Benjamin Schneider (1989) A Framework for Analyzing Customer Service Orientation in Manufacturing. *Academy of Management Review*. 14/1: 75-95.

Drucker, Peter F. (1994) Theory of Business. *Harvard Business Review*. September-October: 95-104.

Gummesson, Evert (1994) Service Management: An Evaluation and the Future. *International Journal of Service Industry Management*. 5/1: 77-96.

Haddad, Charles (2000) Big Brown's Big Coup. *Business Week*. 18 September.

Hamel, Gary (1997) Killer Strategies. *Fortune*. 135/12: 70-84.

Heskett, James L., Tomas Jones, Gary Loveman, W. Earl Sasser Jr., and Leonard Schlesinger (1994) Putting the Service-Profit Chain to Work. *Harvard Business Review*. March-April: 164-174.

Martin, Claude and David Horne (1992) Restructuring Towards a Service Orientation: The Strategic Challenges. *International Journal of Service Industry Management*. 2/1: 25-38.

Quinn, J.B. and Gagnon, C.E. (1986) 'Will services follow manufacturing into decline?', *Harvard Business Review*, Nov-Dec, 95-103.

Quinn, James, Thomas Doorley and Penny Paquette (1990) Beyond Products: Service Based Strategy. Harvard Business Review. March-April: 58-67.

SCA Mölnlycke (1996) Value Added Service Report.

Skarzynski, Peter and Linda Yates (1999) How Do Companies Get to the Future First? Management Review.

Siar Bossard Consulting (1994) Customer Economics: A Key Parameter in a Value Creation Process.

Siar Bossard Consulting (1995) Customer Service Business Development or Managing Your Customer.

Vandermerwe, Sandra, and Juan Rada (1988) Servitization of Business: Adding Value by Adding Services. European Management Journal. 6/4: 314-324.

Wise, Richard and Peter Baumgartner (1999) Go Downstream: The New Profit Imperative in Manufacturing. Harvard Business Review. September-October: 133-141.

Ziegler, Ulla, Martin Silverstein, and Thomas Gartenman (1999) Preparing for Managed Care in Europe. Boston Consulting Group Report.

8.3 Internet sources

<http://www.abbott.com/>

<http://www.baxter.com/>

<http://www.embion.com/>

<http://www.equipmd.com/>

<http://www.medibuy.com/index.jsp>

<http://www.molnlyckehc.com/index2.asp>

<http://www.neoforma.com/hm/ndNSAPI.nd/Home/pgHomeMain>

<http://www.omnicell.com/index.asp>

8.4 Other

Ishii, Peter. Creative Director, Framfab, LT6 Office, Göteborg, September 2000.

Doctoral dissertation: Sigvald J. Harryson, Managing Know-Who Based Companies (2000) Edward Elgar, Cheltenham, UK.

8.5 Interviews

8.5.1 External Interviews

Nilsson, Roland, CEO, Scandic Hotels, 000904.

Hansson, Mats, Marketing Director Europe, Volvo Truck AB, 000920.

Jonsson, Stefan, CFO, AB Volvo, 000706.

Svahn, Ulf, Vice President, Kalmar Solutions, 000704.

Ylivakeri, Raimo, Executive Vice President, Kalmar Industries, 000815.

Widerberg, M. Johan, CEO, Handelsbanken – Regent West, 000809.

Johansson, Billy, CEO, Electro-Invest ABB AB, 000828.

8.5.2 Internal Interviews

Cooper, Phil, Director - United Kingdom, 000803.

Ewert, Christian, Vice-President, Sales - Sweden, 0009005

Andersson Dag, Vice-President, Surgical - Sweden, 000809.

Hentschel, Peter, Vice-President, Wound Management - Sweden, 000816.

Waller, Åsa, Wound Management - Sweden, 000620.

Rydin, Inger, Surgical - Sweden, 000823.

Jonson, Ulf, Advanced Wound Management - Sweden, 000816.

Kalin, Göran, Wound Management - Sweden, 000816.

Hughes, Bertrand, Director - United States, 000621.

Escribano, Gregorio, Director - Spain, 000725.

Van der Meer, Henk, Director - Benelux, 000816.

Tassan Gurle, Graziano, Director - Italy, 000807.

Boysen, Jesper, Director - Denmark, 000807.

Malmsten, Håkan, Key Account Manager - Sweden, Surgical, 000620.

9. Appendices

9.1 Interview questions

Company Specific Questions

1. How has your company responded to the increased demand for services?
2. What were the business obstacles you faced when implementing a more service-oriented strategy?
3. What are the three most important considerations to implementing a more service-oriented business strategy?
4. How do you charge for services, especially ones that used to be free? How do the customers respond?
5. How do you develop new, innovative services?
6. Do customers ask for services? Do you implement these suggestions?
7. What is your company's approach to services, are services bundled together with products or offered separately?

Industry-specific Questions

8. How has the growth of services affected your industry?
9. What are the two best service innovations in your industry?
10. What was the biggest service failure in your industry?

General Questions

11. What service developments have most affected today's business environment?
12. What service developments will take place in the future?
13. How will these changes shape the future business environment?

9.2 Internal interviewees

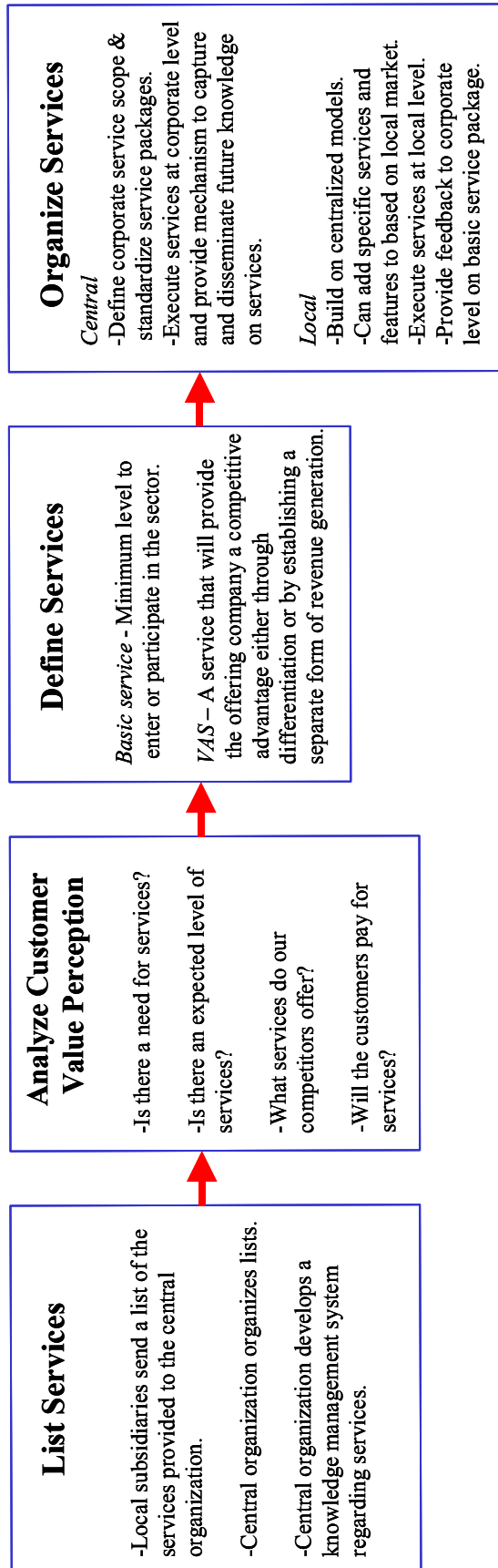
Christian Ewert	Vice-President, Sales
Dag Andersson	Vice-President, Surgical
Inger Rydin	Communications, Surgical
Håkan Malmsten	KAM, Surgical (Pilot interview)
Peter Hentschel	Vice-President, Wound
Göran Kalin	Marketing, Wound
Åsa Waller	Marketing Manager, Wound
Ulf Jonson	Marketing Manager, Advanced Wound
Bertrand Hughes	Director, USA
Gregorio Escribano	Director, Spain
Henk Van der Meer	Director, Benelux
Graziano Tassan Gurle	Director, Italy
Jesper Boysen	Director, Denmark
Phil Cooper	Director, UK

9.3 External interviewees

Roland Nilson	CEO, Scandic Hotels AB
M. Johan Widerberg	CEO, Handelsbanken, West Region
Ulf Swahn	Vice President, Kalmar Solutions
Stefan Jonsson	CFO, Volvo AB
Raimo Ylivakeri	Vice President, Kalmar Industries
Billy Johansson	CEO, Electro-Invest (ABB) AB
Mats Hansson	Marketing Director, Volvo Truck Corp. AB

9.4 The service development process

Service Development Process



9.5 Company culture analysis

Company Culture Analysis

