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Value Creation for Reforming Manufacturers
---from goods-dominant logic to service-dominant logic

Degree Thesis of 30 credit points

Service Science
Abstract

Purpose – During the past decades, implementing reforms becomes a popular topic for most manufacturers. With the aim to cope with the environment changes, there are urgent needs for these manufacturing companies to carry on reforms on the existing businesses. At the same time, value creation under a new service dominant logic for manufacturers are cited by many scholars. The aim of this paper is to analyze the new dominant logic, with the comparison of traditional goods dominant logic, recognize the advanced value creation model. To go a step further, this paper also discusses about the way of implementing reforms and new business logic for manufacturers.

Methodology – This paper mainly takes the methodology of literature review. The literatures reviewed here include academic papers, books, and website information. The main field of literatures include: service definition and service characteristics; goods-dominant logic versus service dominant logic; and value creation (co-creation). On the other hand, some small case studies can also be found in this paper.

Findings – After the comparing between goods dominant logic and service dominant logic, this paper suggests the service-dominant logic as a preferred business logic. Because it provides a more interactive way of consumption, presents a value-in-use view rather than value-in-exchange, and requires manufacturers playing a role of assisting customers in value creating process. For those manufacturers wish to implement the service dominant logic, this paper suggests them to take innovations on their business, which including the innovations on products/services, business processes, and business models.

Research limitations/implications – As a relative new field of study, the research is mostly taken by literature review. However, the research on the implementing of new business logic and reforms requires more voice from the real industry.

Practical implications – Manufacturers may position themselves to new roles by involving in the customers’ value creating process. Taking innovations from a integrated view may help manufacturers to achieve the higher value under service dominant logic.

Originality/value – This paper concluded the ongoing service dominant logic development, after which, offers a discussion on the implementing of which for the manufacturing companies.

Keywords – Service-dominant logic, value co-creation, reform
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1. Introduction

During the past decades, the development of technologies and information system changed the industrial world greatly. Face with a flat world nowadays, the operation of manufacturing company is no longer simple as many years before. There is a popular discussion about taking reform to the manufacturing companies. Some manufacturers have achieved great success in the reforming activities, but some not. The implementing of reforms become the prime challenge to many manufacturers.

At the same time, the rapidly developed service study suggests a new service logic to manufacturers, which is coincidently with some manufacturing companies which achieved huge success in reforms and announced as service logic based. So, in this thesis work, I will first introduce the new business logic to manufacturers. After recognized it as the preferred business logic for manufacturers, I will also discuss about the implementing of the new business logic for the manufacturers.

This paper start with the introduction of service study, during the past decades, service became a more and more important concept for economy. After achieving a overall understanding of service development, this paper will focus on the discussion and analysis of goods dominant logic and service dominant logic. Based on the analysis and comparison of these two business logics, this paper try to find out where and how value are created by taking the emerging service logic as the new dominant logic. Former studies on service are mostly focus on the ordinary service providing industries, such as the financial service, medical, and education sectors. However, this paper takes the emphasis on the manufacturing industries, with the study on those manufacturing companies who mainly producing the tangible products. Since more and more scholars have suggested the manufacturing companies involved in the adopting of new dominant logic for their business (Vargo, 2004a; Grönnroos, 2006), my study here is to find out how value can be created or co-created when manufacturers take parts in this process.

Literature review is the major method for the parts of service and service logic studies. According to the literatures, goods dominant logic and service dominant logic are described a lot by scholars. They have introduced the evolution of marketing thought toward the new dominant logic (Vargo, 2004a), concluded how service logic fits the most goods producing business today (Grönnroos, 2006), compared the characteristics of traditional and emerging dominant logic(Vargo, 2004b; Edvardsson, 2005; Grönnroos, 2006; Vargo, 2008b), and how goods and services been served in each logic(Vargo, 2008b; Grönnroos, 2006). Also, scholars mentioned a lot about value-creation or value-production from the service logic. For example, Grönnroos (2006) represents that value creation rely on the relationship and interactions with customers. He also devote to develop the more understandable service-based value-creation logic to both
scholarly and practitioner audience (Grönroos 2008). Even more, the implications of co-produced value with service-centered logic are introduced by Ramirez (1999), which can be used to initiate the revolution in business, organization and management.

After the comparing between these two different logics, this paper concludes service dominant logic as a better choice for most manufacturers. Then the following part of study is focus on the implementation of service dominant logic for manufacturers.

The implementing of service dominant logic is not that easy for most manufacturers, which implies a reforms taken from entire companywide. Challenges may come from both inside and outside the companies, and the keyword for implement the service dominant logic is “innovation”. The studies in the field of services processes, customer experiences, and service development or designing is what been so called “service innovation” (Bitner, 2008). Which field are exactly coincident with the field of service dominant logic study. To achieve the successful implementing of service dominant logic, this paper suggest taking the strategy of innovations, of which innovation are required to take on products/services, service process, and the business models. Innovations on these three aspects contribute on the service innovation, and the foundations for today’s service innovation including the development of IT technology, implementing of human capital management, and good performance on social responsibility (CSR).

This paper starts with the description of methods and literatures that we used for this study. It followed by the introduction of service study and operating development. The goods dominant logic and services dominant logic are analyzed respectively, the discussion include the value creation for manufacturers under both traditional and new dominant logics, with the comparison of which, an preferred choice for manufacturers are suggested. After then, this paper discusses about the strategies for manufacturers to implement service dominant logic. Taking innovation as the key strategy, which has been analyzed according to three different perspectives. At the same time, three foundations for the service innovation are also introduced for manufacturers’ service reforming. Finally, based on the analyses and description for service studies, also the suggestions for implementations, in the discussion part, some comments are provided to make better understanding of value co-creating processes, and achieving success in the service logic shifting.

The discussion about the new service dominant logic and implementing of which may contribute to manufacturers’ reforming process in the real industrial world. This thesis work may help the operators of manufacturing companies to realize the advantages and essential characteristics of service dominant logic, and take care about the key elements suggested by this paper during the implementing process.
2. Methodology

The most important method used for this study is literature review, which include the resources from academic papers, books, and website information.

This paper includes the studies in service development, different business logics, and implementing of new service dominant logic. For the first two parts of study, the main field of literatures been selected for this paper include: the service definition and service characteristics; the discussion about goods-dominant logic and service-dominant logic, including the comparison and development of dominant logics; and value creation (co-creation) for different logics.

The later part study of this paper focus on the implementing of service dominant logic, which part is more related to the real industry world. To this part of study, most literatures come from the real industry world. For example, the consulting book and CEO study from IBM Consulting group are reviewed a lot in this part.

At the same time, for the later part of service dominant logic implementing, some small cases are introduced to illustrate the operating of real examples. The cases introduced here include IBM, Scania, Apple, and so on.
3. Service As New Logic for Business

The discussion of adopting an new logic—the service logic for business has raised the interests of scholars from all worldwide during the past decades. Although the definition of service has been discussed extensively for many years, there is still no common definition in the literature (Grönnroos, 2006), Grönnroos defined services as “processes that consist of a set of activities which take place in interactions between a customer and people, goods and other physical resources, systems and/or infrastructures representing the service provider and possibly involving other customers, which aim at solving customers’ problems”. At the same time, Vargo and Lusch (2004) defined service as “the application of specialized competences (skills and knowledge), through deeds, processes, and performances for the benefit of another entity or the entity itself”.

Definitions of service are given by scholars in different ways (Edvardsson, 2005), some regard service as a category of marketing offerings: According to Gummesson (1995), customers do not buy goods or service, instead they buy offerings which render services which create value. On the other hands, other scholars view service as a perspective on value creation, where Edvardsson (2005) suggested “to focus on defining value-creation through service rather than services as market offerings, and to emphasize value-in-use as defined and experienced by customers”. Although been defined in different ways, some common characteristics about service are found by scholars. First, service represents a “process nature”, what been offered to customers is not a final output, but a whole process. Second, it represents a interactive consumption way. Instead of simply exchange activities, the interaction between providers, consumers and resources are essential for the service process. Third, service takes the co-creation model of value creation. Under the co-creation model, value are neither solely produced by supplier or customer, it is created with the coordinate of both parts.

3.1 Urgent Need for Service Study

Nowadays, service become the essential element of modern global economics, which sector accounts for most of the economic activities. However, despite of the common consensus of increasing importance of service, service is still the least studied part of the economy according to Sophr etc (2007). For most companies today, even to the manufacturing companies, the urgency of taking activities in service is obviously.

For those companies in manufacturing industry, competition has lower the hardware price down, within the global environment, it is especially difficult for them to seek profit only under the traditional product sales model. A good solution found by many manufacturers to get out of this struggle is turning to the practice of adding services to
their products according to Tadahiko (2005). Comparing to the developed products competition, service is a new field for business development. Meanwhile, except the development being taken on technology, service become an even more important innovation field for manufacturing companies. As the product complexity and diversity increased, it is a great opportunity for service innovation on the searching for, obtaining, installing, maintaining, upgrading and disposing of products. Instead of only track value on the output products, these innovation on service will enhance the value creation and enlarge the profit for manufacturing companies.

Figure 3.1 Services represent a growing segment of the developed and developing worlds’ economics

Source: Linda Dailry Pailson (2006), Service Science: A New Field For Today’s Economy

During the past decades, the proportion of service in global economics increased greatly. In most modern industrialized country, the percentage of service in GDP are much higher than other sectors, usually more than 50 percent. For example, according to the National Academy of Engineering report, the service sector accounts for more than 80 percent of the US GDP. Those countries with more than 50 percent service elements include Germany, Japan, Russia, UK, and so on. To the rest world, especially to those developing countries, the proportion of service sectors also increased greatly during the past few years. For example, China’s service sector has
grown 191 percent during the past 25 years according to Linda (2006).

Looking back to the industrial world, many famous multinational manufacturing corporations announced themselves as service providers. IBM realized the tendency of service developing quite early and has been making efforts on shifting to service business from a long time ago. Coming to the 21 century, with the expansion of academic research on service, IBM initiative the industries’ Service Science, Management and Engineering (SSME) and involved in the industry-academic-government interactions. To many automobile manufacturers such as General Motor and Ford, services contribute the most profit to those companies. For example, the automobile finance service of both General Motor and Ford account for more than 50 percent of their profits. And to Scania, the Sweden based truck manufacturer, also announced itself as a service provider that assist customers’ value creation. Such famous companies also include IKEA furniture, Tetra Pak, Metso paper, and so on.

**Figure 3.2 Changes in Sales Structure of Major IT Providers**

![Figure 3.2 Changes in Sales Structure of Major IT Providers](image)

Source: Cusumano, Michael A. (2005), The Business of Software. Compiled by Fujitsu Research Institute

### 3.2 Development of Service Study

Because of its urgency, the development of service study become popular topic for both academic institutions and corporations. To gain an overview of the service
research field, scholars has characterized the evolution of service study in some different ways.

Fisk, R.P., Brown, S.W. and Bitner, M.J. (1993) characterized the evolution of service research in three period until 1993 as: Crawling Out (Pre-1980) period, Scurrying About (1980-85) period, and Walking Erect (1985-93) period. This categorization was accepted by most scholars follow by.

The Crawling Out period is a time of discovery and risk taking according to Fisk etc. The majority of literature in this stage is conceptual. During this period, there was a goods versus services marketing debate that challenged the right of service marketing field to exist. And service marketing and service operations became the distinct field from product marketing and operations. Also, the delineation of service characteristics are taken in this stage as: Intangibility, Heterogeneity, Inseparability and Perishability (IIHP).

Figure 3.3 Evolution of Service Research

**Pre 1980: Crawling Out period** is when service marketing and service operations became distinct from product marketing and operations, in part as conventional service economics reports started to categorize more of the economy as value derived from service activities.

**1980-1985: Scurrying About period** with more published services research moving beyond goods and products but literature still mostly conceptual. A core group of academics and business practitioners developed.

**1985-1992: Walking Erect period** with increasing number of scholars of service, and explosive growth in the literature including service research journals, dissertations and textbooks. Academic events, centres and pioneers in Europe as well as US emerged.

**1993-2000: Making tools period** with more quantitative research - measurement, statistics, and decision support modelling; broadening, deepening and sharpening of the research; continued globalisation and multidisciplinary research; expanded topic areas including service design and delivery, service experiences, service quality and customer satisfaction, service recovery and technology infusion, service computing, service supply chains and eSourcing.

**2000-now: Creating language period** with nearly a dozen models of service emerging, and the concept of a service system beginning to take hold to unite the many perspectives. The field is expanding rapidly with an expansion of literature worldwide and increasing numbers of conferences and centres, with IBM and industries' Service Science, Management and Engineering (SSME) initiative seeking to strengthen industry-academic-government interactions. The service-dominant logic view is gradually replacing the traditional view of goods-versus-services, with a view of service as value-creation that involves both things and activities.

**The future: Building communities period** with an inclusive multidisciplinary approach to service innovation, with science, management, engineering and design being supporting academic disciplines, and with T-Shaped professionals as adaptive innovators to link and unite these disciplines. This will create a measurable growth in service innovation for business and society.


During the Scurrying About period, much more literature are published. During this period, high interest and enthusiasm appeared in service research field. (Fisk, etc. 1993) Two developments were taken in this stage, the first one is the deregulation of service
industries in America, for example, the air transportation, financial services, health care and telecommunication. Another development is a group of academic and business participants’ interaction contributed by the American Marketing Association conferences.

Walking Erect stage can be characterized as “a period of explosive growth in numbers of publications and increasing empirical and theoretical rigor in their content” (Fisk, etc. 1993). Different from the previous stages, literature in this stage focused on some specific problems if service business instead of conceptual descriptions. On the other hand, during the Walking Erect period, an increasing number of marketing academics began to conduct researches in service related field. A great number of service research institutions and academic journals were founded during the Walking Erect period of the evolution.

After Fisk’s research in 1993, the study on evolution of service research was still going on. Scholars in Nordic school regard Walking Erect as a continue stage after Fisk’s research until 2001, while some other scholars represents a start of new stage after 1993. According to the white paper based on Cambridge Service Science, Management and Engineering Symposium (2007), the following periods of service research evolution are characterized as Making Tools period (1993-2000), Creating Language period (2000-now), and future Building Communities period.

3.3 Service Science as New Field of Economy

The popular discussion about service in universities and corporations led to the development of service science, which is a discipline focuses on fundamental science, models, theories and applications to drive innovation, competition, and quality of life through services (Bitner etc. 2006); at the same time, service science also create greater validity and transparency when assessing the value of investments in services (Tadahiko, 2005).

As a leader in promoting services science, IBM hosted meetings on service science subject for many universities and corporations since 2004, which make service science a focused discipline (Linda, 2006). Later, the Cambridge Service Science, Management and Engineering Symposium was hold by Cambridge University and IBM in 2007, more common recognition and knowledge about service science was made continually after then

Accepted by many scholars, service science is a multidisciplinary field, it requires the knowledge from diverse areas. It is a discipline that concerned with “finding ways to increase productivity and innovation in services-related industries and tasks by applying scientific means and methods” (Linda, 2006).
According to the discussion in the Cambridge Service Science, Management and Engineering Symposium, it is suggest to educate the T-shaped professionals or adaptive innovators; Developing interdisciplinary and intercultural approach to service research, building bridges between disciplines through grand research challenges; Reviewing existing approaches to service innovation and provide grand challenges for service systems research, providing fund to service systems research and make the appropriate organizational arrangement which can help to build the industry-academic collaboration.

4. Goods dominant logic versus Service dominant logic

Looking back to the history of service field development, there are still some different view of service. For example, there are two dominant views of service refer to the IHIP (intangibility, heterogeneity, inseparability and perishability) View and SDL (service dominant logic) View. The IHIP View defined service as different form or complement to products, however, the SDL View defined service as everything involving purposeful value co-creation between entities. Coming to the later period of service research revolution, the SDL View is accepted by most scholars instead of IHIP View. So in this paper, discussion is focused on the goods-dominant logic versus the service-dominant logic.

Talking about the Service-Dominant Logic, lessons can be learned from Vargo and Lusch (2004a) to understand the historical development of the changing dominant logic in business. In their article about evolving to a new dominant logic, the evolution of dominant logic in the marketing has been introduced. Briefly, it “has moved from a goods-dominant view, in which tangible output and discrete transactions were central, to a service-dominant view, in which intangibility, exchange processes, and relationships are central”. And this tendency was confirmed by most scholars. According to Normann and Ramirez (1993), who declared that the fundamental logic of value creation is changing. And Grönroos (2006) concluded that the service logic fits the context of most goods producing business best.

Since the tendency of shifting from goods-dominant logic to service-dominant logic was highlighted by many scholars, some advantages must be combined with the new dominant logic. Then, to achieve a better understanding of the alternative dominant logics, we should base our study on the analyses of both different logics. Therefore, we first start with the description of goods-dominant logic.

4.1 Goods- Dominant Logic

Hundreds years ago, as economics became a popular field of study, the discussion was initially focused on the “goods”, no matter industrial or agricultural products, they are
all tangible outputs. At the beginning of 20th century, many scholars started their economics studies which basically focused on the “distribution and exchange of commodities and manufactured products” (Vargo & Lusch, 2004a). The study of “goods”—tangible resources, with embedded value and transactions became the foundation and basic dominant logic for economics from the very beginning of the economics study.

4.1.1 Characteristics of GDL

As an initial logic for the business study, some characteristics of the goods-dominant logic have been concluded by scholars.

Suggested by its name, the goods-dominant logic implies its focus on the final “goods”—outputs in the production, and value are regarded as embedded within the final outputs. This represents the characteristics of focus on “tangible outputs” of goods dominant logic. Usually, under the goods dominant logic thinking, the tangible outputs are exchanged, profits are achieved when actually been delivered to customers. This represents a characteristics of “exchange” under goods dominant logic. At the same time, as tangible outputs, which means the value of products can be inventoried.

According to Vargo (2004a), those companies with the goods-centered view “set all decision variables at a level that enables it to maximize the profit from the sale of output”, and the products “should be standardized and produced away from the market”.

**Figure 4.1 Illustration of Goods Dominant Logic**

Service is not a totally new field of business study even under the goods dominant logic, which represents different meaning under different logics. According to those characteristics of the goods-dominant logic, services usually being viewed as a type of good: which are the restricted type of goods, and were add-on to enhance the value
of goods under the goods dominant logic (Vargo, 2008b).

**4.1.2 Strategies under GDL**

With almost one century’s study of business based on the goods view, some common accepted strategies were concluded by scholars to help companies achieving success under goods dominant logic.

As it been introduced with the characteristics of “tangible outputs” that being “exchanged”, to achieve success under goods dominant logic, companies usually take the most attention on the final product itself. Strategies can be taken as standardization, and implementing the scale of economy to achieve the much lower cost for products. Otherwise, companies can also focus on some specific segments of the market to achieve differentiation, cost efficiency and maximum profit.

Important factors for companies’ success under goods-dominant logic include: standardized products, optimized distribution and inventory, or being differentiation and focus on some specific segments of consumer needs.

**4.1.3 Limitation of GDL**

After being taken as dominant logic of business study for such a long history, the business study and operation under goods dominant logic has become extremely mature. However, after the continuously exploration, some blames and bottlenecks has been found with this traditional dominant logic.

Comparing to the service-based logic which will be described later, the traditional goods-based logic do not provide a interactive way of consumption, it is hard for marketer to know what consumers are doing with the goods, meanwhile, consumption is a black box for marketers (Grönroos, 2006).

**4.2 Service dominant logic**

Having described the traditional goods based logic of business study and operations, we now turn to the discussion of an emerging alternative view – service dominant logic. This service-centered dominant logic is a reoriented philosophy for all marketing offerings, it is not only a logic suitable for those ordinary service-based industries, but also capable to the tangible output (goods) in the process of service provision (Grönroos, 2006).
4.2.1 Operand and Operant Resources

To define the service dominant logic, Vargo and Lusch (2006) firstly introduced the operand and operant resources, which may help us to achieve a better understanding of the initial setting of service dominant logic.

Basically, operand resources refer to those resources that are tangible and static on which operation is performed to produce an effect, for example, the visible goods and equipments. Compare of which, the operant resources implies those resources that are usually intangible and dynamic, and which are employed to create value by act on operand resources or other operant resources. The typical operant resources can be the skills and knowledge.

According to Vargo and Lusch (2006), the service dominant logic implies a continuous social and economic processes which largely focused on operant resources. By using the intangible sources such as skills and knowledge, where value is co-created by consumers in an interactive way.

4.2.2 Characteristics of SDL

Also, as an emerging view of business study and operations, some common characteristics of service logic are cited by scholars.

Grönroos (2006) described service centered logic with “process nature” and the characteristic of “consume while produce”. According to Grönroos (2008), different from the goods dominant logic, value for customers are not embedded in products, instead, it emerges in customers’ sphere as value-in-use in their value generating process. Similar opinion is hold by Vargo and Lusch (2008b), who also consider service as a process, in which resources are used to benefit others.

At the same time, another characteristic of “interaction” for service logic are cited by some other scholars. For example, Grönroos (2006) announced a focus on interactions instead of exchange by Nordic School.

And Edvardsson (2005) concluded a view of value creation rather than market offering when describe the characteristics of service. The same work done by Edvardsson, Gustafsson and Roos (2005) based on views 11 academic experts’ view suggested “looking service as a perspective on value creation through the lens of customer”.

To sum up, there are three common accepted characteristics about service dominant
logic. First, it represents a process nature; second, it emphasis on the interaction instead of the products exchanges; and third, the service dominant logic is customer centered, focus on the value creation for customers.

**Figure 4.2 Illustration of Service Dominant Logic**

4.2.3 Strategies under SDL

Different from the goods-dominant logic, companies with service-centered view does not only pay attention to the output, so the strategies taken under service dominant logic for achieving success is different from the goods dominant logic, usually, under the service dominant logic, companies will pay more attention on their customers. Has discussed about the characteristics of service dominant logic above, the focus is principally on the customers, then companies will always try to understanding customers by implementing the communication and the interaction processes. After achieving the understanding of customers’ needs, based on which, then the companies can offered customers with the most convenient resources and assisting for the value creation.
4.3 Comparison of Goods- and Service-Dominant Logic

Under the background of shifting from goods dominant logic to service dominant logic, it is essential for us to get a deeper level understanding of both logics. With this purpose, when discussing about the alternative dominant logics for business, the significant part of our study is to find out those different characteristics of both logics as I introduced above. Meanwhile, the comparison between goods-dominant and service-dominant logics will be necessary for our study.

From the goods dominant logic to service dominant logic, with the comparison of which, we can find the differences of each logics in different aspects; By comparing different logic, we can find out the advantages and disadvantages of each logics in different ways; Furthermore, the comparison may enable the improvement of different logics after the weakness of which been revealed.

As I have summarized some characteristics of different logics above, differences can be find in many aspects according to different dominant logics. In the former studies, scholars have concluded these different in many literatures. For example, according to Grönroos(2006), service logic provide a interactive way of consumption, while it is not the truth in goods dominant logic. Under the goods dominant logic, value are regard embedded within the products, which presents a value-in-exchange view. According to earlier studies, some scholars even argued that value was regarded as destroyed under the goods logic (Ramirez, 1999); However, come to the age of the service logic, value are regard as emerging in the process of consumption, meanwhile it holds a view of value-in-use in the process.(Grönroos, 2008)

Some scholars also took the comparison of goods dominant logic and service dominant logic directly in the former studies. These kind of comparison usually been taken under different settings and from various aspects. For example, As I have mentioned the differences between operand and operant resources above, Vargo and Lusch (2004a) summarized the differences between the goods- and service-centered views by using the distinction of operand and operant resources. From this point of observation, Vargo and Lusch represent that goods- and service-centered views are different at six aspects, of which refer to: the primary unit of exchange, role of goods, role of customer, determination and meaning of value, firm-customer interaction, and source of economic growth under different views or dominant logic.

However, the study of the differences and comparisons between goods dominant logic and service dominant logic is far from enough. More than what have been concluded by Vargo and other scholars from their dimensions and initial settings, here I also try to summarize some other differences between goods- and service-dominant logic according to the aspects and dimensions of my own. Since my study for this paper is focus on the manufacturing industry, my setting of comparison here is basically about
the differences for the manufacturers. And after the reviewing of many scholars’
literature and different points of view, according to which, also regard to what I have
found, I summarized and build following table to show those differences from some
different aspects for the manufacturing companies.

<table>
<thead>
<tr>
<th>Table 1. Difference between Goods- and Service-Dominant Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do they focus (Core element)?</strong></td>
</tr>
<tr>
<td>End Output</td>
</tr>
<tr>
<td>Tangible goods</td>
</tr>
<tr>
<td><strong>Where do value resident?</strong></td>
</tr>
<tr>
<td>Value-in-exchange</td>
</tr>
<tr>
<td><strong>Value in consumption</strong></td>
</tr>
<tr>
<td><strong>Strategy to compete/ Achieving advantages</strong></td>
</tr>
<tr>
<td>Distribution</td>
</tr>
<tr>
<td>Inventory etc.</td>
</tr>
<tr>
<td><strong>What do services mean?</strong></td>
</tr>
<tr>
<td>Used to enhance to value of goods</td>
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<tr>
<td><strong>What do Goods mean?</strong></td>
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<td>End output</td>
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The aspects I taken for this comparison include: To different views, what do they
focused on and what are core part for them? Where do value resident in according to
different logics? What happened to value while consumption? What are the strategies
for competition or achieving advantage? And what do services and goods mean in
both logics? (See table 1)

*What do they focus (Core element)?*

Goods dominant logic and service dominant logic have quite different emphases. Usually, under the goods dominant logic, just as the name of which suggested, the
focus is taken on the end outputs, which is the tangible goods of the production;

However, under the service dominant logic, the situation is different. For a
manufacturing company taken service dominant logic, although the end outputs are
also produced, the focus is not only on the tangible outputs. Moreover, it will also pay
attention on other elements equally. As we introduced a characteristic of “process
nature” for service, the focus of service dominant logic is taken on the whole service
providing process. This process may includes designing, producing, sales of products,
also the after-sale services and so on.
**Where do value resident?**

Value is always the essential part of business study and operation. Then, according to different logics, where do value resident separately?

As goods dominant logic takes focus on the tangible outputs, value is resident in the end outputs. Value has been stored in the products, and will appeals when been exchanged and make profits. Under this assumption, goods dominant logic represents a value-in-exchange view.

To service dominant logic, which pay attention on the whole process of producing and service providing, value is not regard only embedded with the final tangible outputs. Inside the whole process, value can be find in each specific elements. When needed, the value can be created in designing, producing, using, and maintaining processes and so on. Which according to some scholars, represents a different view of value-in-use. (See Figure 4.3)

**Figure 4.3 Different Meaning of Value in GDL & SDL**

![Figure 4.3](image)

**Value in consumption**

The views of value-in-exchange and value-in-use implies totally different attitude towards value. Then, what will be the meaning for value when consumed under different logics?
Goods dominant logic regards value as being exchanged when the exchange of products is taken place. Before the moment of exchange, such activities like the designing, producing, or delivery of products represents a value accumulation process. After which, when exchange finished, the consumption process of customers for the products is regard as destroyed. This traditional view of value is accepted by many former scholars and operators. For example, this thinking can be easily found in the basic accounting principle of depreciation.

The consumption process for service dominant logic start from very beginning when comparing the goods dominant logic. Value-in-use view suggested that the consumption process start from as early as the designing stage, or even earlier. Not like the goods dominant logic which only regard manufacturers themselves as value creator, service dominant logic think customers are also the value creator in the whole business process. Involving customers in the whole process, companies with service dominant logic will build a value creation model between customers and themselves. As the consumption are regards as the whole business process, value are not being shifted or destroyed, but co-created by customers and manufacturers.

*Strategy to compete/achieve advantages*

As I have briefly introduced the strategies for different logics to compete and achieve advantages when describing the goods dominant logic and service dominant logic above. With different characteristics and emphases, the comparing of different strategies for achieving success under different logics will be quite a good path for better understanding of each logic.

For the goods dominant logic, since its basic focus is on the final outputs, to achieve the competitive advantages, one strategy usually taken by companies under goods-dominant logic is to make efforts on standardization, distribution and inventory of products. By taking efforts on standardization, companies may achieve the scale of economy, with appropriate efforts on the management of distribution and inventory, the cost of products can be controlled to enlarge the profits. Other strategies usually used by companies under the same situation include focus and differentiation strategies (Porter, 1985), which strategies are mostly focus on the achieving of competitive advantages of products.

While, for the service-centered companies, the achieving of competences for them is quite different from the goods-centered companies. As a logic taking focus on customer needs, companies with service dominant logic will always try to understand the customers and satisfy them with various services. Not like the goods centered view, to satisfy customers is a challenge work since the customers’ situations and preferences will differs a lot. The ability of providing such various services will come from knowledge and skills. Since these companies have been customer centered and paid much more attention on their specific needs. Strategies for them should be the
trying of achieving optimized management over the various customers’ needs.

**What do services mean to different logics?**

At the same time, to achieve a better understanding of both goods and service logic, it is necessary for us to learn something about the role of services in different logics. Services is not a new topic for business study as we introduced before, and it will be interesting for us to discuss about what services means in both the goods dominant logic and service dominant logic.

Focus on the final output, goods-dominant logic views services as a type of goods. The study of services started very early, but which is mostly based on the goods dominant logic. In the former study of services under goods dominant logic, the content of services include distribution, inventory of products, also include before-and after-sell services. However, these services are regard as the restricted type of goods under goods dominant logic, and they are used to enhance the value of goods.

While the meaning of services under service dominant logic is totally different. Service dominant logic view service as the application of competence (for example, the knowledge and skills) for the benefit of another party. (Vargo, 2008b)

**What do goods mean to different logics?**

Conversely, what do goods mean to different logics? Since this paper is focus on the study of manufacturing industry, “goods” is an important elements for both goods dominant logic and service dominant logic. So, it is also essential for us to realize the role of goods in different logics.

First, what do goods mean to goods dominant logic? As it has been described a lot above, goods are the exchangeable resources and usually the end outputs, which are the value carriers and core elements for business.

Then, to the service dominant logic, goods are equally important as other resources for value creation. Together with other intangible resources, goods under service dominant logic are regard as appliance and resources that can be used for service provision.

**5. Value creation for manufacturers, GDL or SDL?**

After the study of goods dominant logic and service dominant logic from the academic view, we come to the discussion of the development and choice of different logics from the manufacturing industrial view. When we looking back to the history of economy development, the former business study and operation was originally
built on a goods-centered view that concerned about the manufactured tangible outputs.

As the developing of economy was going on, the exchanging activities have been taken into a wider and wider perspective with more than the manufactured goods involved, where services emerged as a significant perspective for the marketing of manufactured goods. (Vargo, 2004b) Although the goods-based view is still hold by many manufacturers in their way of creating value, however, since some limitation for this traditional logic has been found by many scholars and operators, at the same time, some successful experience of adopting new dominant logic has cited by both academic and business institutions. It will be interesting to discuss the way of value creation for manufactures when shifting from goods-dominant logic to the service-dominant logic.

Dealing with the service related issues became an popular topic for most companies. This is not a significant topic only to the traditional service providing industries such as medical and transport departments, but also to the manufacturing industry which produce the tangible goods. This view of involving manufacturing industries into the newly service dominant logic has been supported by many scholars. For example, Gummesson (2000) argued that distinction between goods and service has become a burden for marketing, and Grönroos (2000a) gave a proposal that goods and service should not be kept apart anymore.

The discussion of adopting the appropriate logic for manufacturers’ value creation should be started with the description of value creation under both goods and service dominant logics. With the understanding of both, with the comparison of which, and we can recognize the better choice for manufactures.

5.1 Value Creation under Goods Dominant Logic

To the manufacturing companies under goods dominant logic, the value of which is embedded in their products--the tangible goods, and this kind of value has been defined as “exchange-value” according to Vargo (2004a). Meanwhile, we can recognize the features of value in goods-dominant logic as: first, value is embedded within the products; and second, it has been represented as a value-in-exchange logic. These two characteristics of value under goods-dominant logic are also cited by Grönroos (2008) in the same way.

Under this view, the achieving of value is mostly depend on manufacturers’ products--the final outputs itself. To customers, the value are achieved from the products delivered by the providers, meanwhile, higher value comes from higher quality and lower perceptions about the goods from customers. To the providers in our discussion -- the manufacturers, will try to raise value through quality improvement,
standardize the produces to achieve maximize profit and efficiency.

However, as we discussed about the services became a unavoidable topic for most companies, when talking about the goods-dominant logic for manufacturing companies, which does not exactly means the eliminating of services. Instead, under goods dominant logic, the services have been regarded as a part of goods offerings, or the elements of companies’ intangible products. As introduced by Vargo (2008b), in the goods-dominant logic, services are regard as added on the products to enhance the value of goods.

As a traditional logic which has been used for a long history, goods dominant logic is one that easy to understand, easy to implement and common accepted logic for many years. However, it has also been argued with obviously disadvantages even to the manufacturing industry. For example, under this logic, it is difficult for manufacturers and customers to get involved in an interactive way of consumption. Most time, only the tangible goods are perceived by customers, although sometimes goods can be supported by some marketing communication activities, still marketers do not know what the customers are doing with the goods (Grönroos 2006). At the same time, with the fiercely competition in manufacturing industry, it is always important for companies to learn from the customers to improve their products, however, the purpose will probably be blocked by the “black-box” under goods-dominant logic.

5.2 Value Creation under Service Dominant Logic

Value creation for companies under service dominant logic is different from the companies under goods dominant logic. When we were discussing about the differences between GDL and SDL above in this paper, we realized that the meaning and residence of value are different under different logics. Under service dominant logic, value is not simply embedded in the products. Instead, it implies “a continuous series of social and economic processes” (Vargo, 2004a) in which value are co-created by customers and suppliers. According to Grönroos (2000b), who also emphasis the value creation on the relationship with customers. He stated that the focus should not on the output goods, but on the customers’ value-creating processes, where value are emerged for customers.

Back to our topic of value creation for manufacturers, the question will be: will the service logic suitable for the intangible goods manufacturers? Answer here is yes, this new dominant logic is totally applicable to the manufacturing industry. As Grönroos (2006) proposal that “the service centered dominant logic represents a reoriented philosophy that is applicable to all marketing offerings, including those that involve tangible output (goods) in the process of service provision”. Under this view, the products provided by the manufacturers—the tangible goods under the service-dominant logic, are served as appliances for service provision, rather than end
outputs in goods-dominant logic. (Vargo, 2004a)

As the model of value co-creation has been common accepted by most scholars, even further discussion is taken into deciding the role of provider and customer in the value co-creation process. Earlier in the discussion, providers were regard as value creators, and customers are suggested to act as co-creators of value (Vargo, 2004). However, in later studies, Grönroos (2008) suggested customers should be the creators of value, meanwhile, providers take the role of value co-creators. The manufacturers were suggested to change their own position from making something for customers to assisting customers of creating value. The role manufacturers taken are not a sole producers of produces any more, instead, they are the co-creators and the one who help customers to create value.

More recently for this discussion, a value facilitation model was introduced by Grönroos (2008), in which model manufacturer only take the part as a value facilitator. He suggested a value-generating process taken by customer, and the manufacturer provides customers with the necessary resources for this process. The resources include both tangible goods and intangible services, and the manufacturer involved in the customers’ value creation indirectly. At the same time, the manufacturer create opportunities to interact with customers and engages in value fulfillment for customers directly.

To sum up, a manufacturer with service-dominant logic usually focus on assisting customers’ value creating process, initiating the interactions with customers and looking for opportunities of engaging in the customers’ value-creating process.

5.3 SDL as Optimum Choice for Manufacturers

After the discussion and comparison of value creation by different dominant logics, we believe the service-dominant logic should be the most reasonable choice for most manufacturers.

The advantages of service dominant logic is obviously when we come to the description of the important characteristics for service: the interaction between providers and customers, the customer-centered thinking, and the value co-creation model. When taking a service-dominant logic, manufacturers will pay great attention on these characteristics of service. By the meaning of interaction, manufacturers communicate with customers frequently to know about their specific needs. Talking about the customer-centered thinking, which means the manufacturers will thinking from customers’ view points. And to the co-creating of value, it is essential for manufacturers to look at customers’ value-creating by themselves instead of simply try to create value for customers.
These kind of advantages are cited by many scholars. For example, Normann (1993) suggested to promote the interactive value co-creation process. First, those companies under service dominant logic mobilize their customers to get into the value-creating process by themselves. As the manufacturers play a role as value co-creator or value facilitator (Grönroos, 2008), they provide customers with services and goods as resources, assisting customers with their own value creating processes. Second, service dominant logic encourage manufacturing companies to implement the reconfiguration of their relationships and business systems. What manufacturers can offer for supporting customers’ value creating processes will affects the processes a lot. Modified offerings can be made to customers after the reconfiguration with both suppliers and customers of the manufacturers. Normann also indicated that the service dominant logic “conceive the entire value-creating system and make it work”. It means the manufacturers under service dominant logic can create a dialogue with customers, it may enable the purpose of repeating and keeping the value co-creating process continuously going.

Back to the three main characteristics of service logic, the service orientated manufacturers always focus on customers’ needs, pay attention on customers’ consumption and daily practices. Better understanding of customers are achieved by interaction and communication with customers. And based on these, manufacturers may provided customers with better resources and assisting for the value creating processes.

After we realize the advantages of service dominant logic for manufacturers, the following discussion comes to the implementing of service dominant logic to those manufacturers, especially to those traditional manufacturing companies with goods dominant logic, how do they achieve success in business model shifting and obtain the greater value under new logic.

6. Implementing SDL for Manufacturers

For our discussion, service dominant logic has been proved with obvious advantages for manufacturing companies. To sum up, it enables the interaction between manufacturers and customers; it involves customers into the value co-creation activities and make a better understanding of customers’ needs; also, it encourages a clearer vision for the whole process of value co-creation. The implementing of service dominant logic usually enhance the competence of manufacturing companies in the fiercely competition. At the same time, it will also enlarges their profit by efforts on all segments of whole process.
6.1 Benefits Brought by Service Dominant Logic

The view of providing products and the view of providing service represents two different meaning for customers’ value chain. According to the description form the IBM Consulting, customers’ value locked by products provider and service provider differs a lot. With the products providing view, focus on the specific element(s) of customers’ value chain, companies will try to implement a lower cost but efficient method, change the fixed amount of input from customers, to the fixed amount of output required by customers; (see Figure 6.1)

Figure 6.1 Difference between Products Providing and Service Providing View

![Diagram showing the difference between Products Providing and Service Providing View]

Figure 6.1 Difference between Products Providing and Service Providing View

On the other hand, for the service providing view, manufacturers will pay attention on the customers’ value chain, try to find out the specific element(s) that could improve the productivity, by enforcing and adding ingredients, increase the value of customers value chain.

6.2 Types of Service Provided by Manufacturers

As we discussed above, the most direct benefit and attraction for manufacturing companies to take the service logic as dominant logic, is the much higher profit for
them. Suggested by the IBM Consulting group, there are three kinds of service that can be provided by the manufacturing companies, which refer to: the after-sale service, value adding service and professional service. “After-sale service” is the most familiar type of service for most manufacturers and customers, which has been existed and provided by most manufacturers for a long history; “Value adding service” and “professional service” provided by manufacturers are relatively new, as the shifting from GDL to SDL is going on, more and more companies pay attention on these two segments. From “After-sale service” to “professional service”, the challenge (especially the requirements for knowledge and skills) is increasing; However, as long as the challenge for different types of service was increased, the profit of which will also increased in the same direction. (see Figure 6.2)

“After-sale service” represents the most traditional type of services provided by manufacturers. It includes the delivery, repairing, maintaining and so on. Profits can be achieved when providing such kind of service. However, under the fierce competing environment today, with the aim to attract customers, a great amount of the after-sale service nowadays are provided by manufacturers to customers as the guarantee of quality, which is usually for free. Under this situation, the profit for after-sale service providing is quite low nowadays.

Figure 6.2 Different Types of Service Provided by Manufacturers
“Value adding service” means by focusing on its own products, providing customers with service with added value. For example, some equipments producers will provide customers with training service related to the operation of their products—the equipments. And Scania provides their customers with “used truck resale” service to help customers sale their used Scania trucks. These kind of service are usually based on companies’ own products, it requires higher knowledge and skills for service provider, and with relative higher profit.

Different from these two services, “professional service” is not directly related to the manufacturers’ products. Such as the consulting services provided by IBM, this kind of service is not related to any IBM products, especially to those management consulting services. The professional service requires extremely high knowledge and skills, and it brings much higher profit on the same way.

6.3 Success SDL Implementing of Some Manufacturers

Coming to the 21 century, more and more manufacturing companies realized the necessity of shifting to a new service logic. Looking at the realistic manufacturing world, there are several companies achieved huge success by taking a new services centered view, at the same time, more and more manufacturers announced themselves as service providers.

Figure 6.3 Example of Consulting Service provided by IBM

IBM is the forerunner and success example of manufacturers that shifting from goods logic to service logic. After IBM sold its PC business to Lenovo, IBM focus its attention on service providing. As a IT based company, the services provided by IBM
is IT related, but not limited. The services provided by IBM include IT services, business consulting services, application services, outsourcing services, training services, small and medium business services and more other services. The profits brought by these services have accounted the most significant elements of all IBM group’s profits.

Taking IBM’s business consulting service as example. We introduced three different types of service provided by manufacturers above, and here we can recognize the IBM business consulting service as the “professional service”. The IBM business consulting service is not related to any hardware products of IBM, it is all about the management consulting services provided to other customers’ company. And this business consulting services brings great profits to IBM.

Not limited to the IT manufacturing companies, the service logic are taken by manufacturers in other industries two. For example, in the automobile industry, the truck manufacturers—Scania also acts as a service provider. More than only providing product such as trucks and buses, Scania also provide customers with various of services. These services include assistance service, rental service, outsourcing service, even workshop service.

6.4 Strategies for SDL Implementing

The benefit of shifting to a service logic is attractable, but the implementing of which also implies great challenge for most manufacturers. The logic shifting process is a entire operation taken on the whole company, it usually brings huge reforming and changes to the companies. Looking at the experience of IBM, when IBM shifting its attention most from products to services, a huge change has been taken on the organization. For example, its PC business has been entirely sold out to Lenovo, and the centre of work has been moved to the service related departments.

Then, organizational reforms are necessary for those companies that wish to implement the new service logic. The idea of organizational reform has been popular discussed during the past several years. There is a common recognition of compressed profit for most industry led by fierce competition, and the only solution proved by many companies is to take the organizational reform, involving those themselves into the higher profit value chains.

The next step is to find out the key factors that contribute to the successful shifting of business logic and organizational reform. The key word here is “Innovation”, which is also a popular word being discussed a lot in the past few years.

In the realistic industrial world, the operation of logic shifting and service related organizational reform developed rapidly. The solutions for this topic was being
continuously give out by many companies. Most companies emphasize the necessity of “Innovation”, according to the suggestion given by IBM GBS (Global Business Service) Department, innovation should be taken in three aspects: product innovation, process innovation, and business model innovation. Any of these three aspects is necessary for the successful achieving of service logic shifting.

Our discussion in the following parts should focus on these key factors that may enable manufacturers’ shifting process from goods dominant logic to service dominant logic. I set “Innovation” as a key word for this study, and focus on service innovation, process innovation, and business model innovation separately. And after all, a discussion of the foundations for these innovation will also given in this paper.

7. Innovation—Way for SDL Implementing

Innovation becomes a most popular issue for today’s economy. As we have discussed, the service dominant logic itself represents a view of innovation. Innovated on the principal business logic, shifting from goods dominant logic to service dominant logic requires manufacturers take innovations go through their entire business processes. In the following part, we will discuss about the innovations taken on products/services, business processes, and the business model innovations.

7.1 Products and Services Innovation

To implement service dominant logic, the first innovation should be taken on the products, or services—as we indicated a service providing view under service logic. The success implementing requires innovated services rather than those traditional services. Nowadays, it is common for manufacturers to provide simple after-sale services as addition to the products. Meanwhile, which appears a necessity for manufacturers to do more than that. Under the premise of service dominant logic, many manufacturers start to focus on the needs of customers, and try to involve customers into the value co-creation process.

Taking the automobile manufacturers for example, with the better understanding of customers, much more personalized services are provided by Scania truck. Those innovated services cover the whole using life of the products: At the beginning, before purchase, Scania involves customers into the design of personalized trucks, which is been called the “Bodybuilder” service. Customers can build a most suitable truck for their own; After the purchase, Scania provides customers with supporting services, such as the “Assistance” and “Accessories” services; Even at the end of the consumption process, Scania will take care of customers resale activities. All of these services covered whole process of consumption of Scania truck. Manufacturers provide innovated services with the concern of customers’ needs, especially their own
value creation processes. Scania found its customers usually use Scania trucks for transportation business, so Scania take innovations and gives out services to support customers’ business activities.

At the same time, with the development of new technologies, even innovations can be taken by manufacturers to serve their customers. There are two ways that the new technologies can be used to assist the service innovations: First, the technology itself as a service. For example, with the development of satellite navigate system during the past years, nowadays GPS location service has become necessary support for many drivers; Second, the technology development enable automobile manufacturers to take innovation on the services provided to customers. The development of IT technology helps manufacturers to built the information database of customers, which enable the better understanding and communication between which. To Scania, it even combined the satellite navigate system with the centre database of customers, which makes Scania capable to provide customers with more reliable and suitable assistance in any place of the world.

Products and services innovation is the start point of service dominant logic shifting for manufacturers, however, it is not a process without challenges. To achieve the success, there are two elements account the most importance: First, it is important to build up and maintain the good relationship with customers; Second, the designing and providing of services should closely follow the requirements and capacities.

### 7.1.1 Building and Maintaining Customer Relationship

Good relationship with customers is the foundation for service innovation. What the manufacturers need to achieve is the good understanding of customers’ needs, and satisfy customers by providing the right services in the right ways. It is no longer the competition on simple products, instead, manufacturers compete to serve customers in the most convenience ways. Then, building up and maintaining good relationship with customers becoming a significant topic for most manufacturers, especially to those manufacturers with the aim to shift to a service logic.

With the competition on building better relationships with customers, customers’ loyalty and satisfaction become the most important factors for manufacturers’ value creation. According to a research about customer relationship management done by Heskett, Sasser, and Schlesinger (1997), the customer loyalty is the most important determinant of profits for manufacturers. At the same time, the interaction between the customers and manufacturers has impact on the customers perceived service quality (Edvardsson and Strandvik, 2000).

The challenge for building and maintaining such relationship is the variability of customers’ needs. A good relationship management should be based on the good
solution to customers’ variability. Dell is a company which deal with this problem quite well. Dell provides the face to face consulting sale model to big customers, and organizes the special business service team to serve them. It builds the long-term relationship with customers, reflect customers needs on products and supporting services. Also, with advanced information management technology. Dell record the needs in its database, which can help to maintain the relationship with customers.

After-sale services can be the start point of building a good customer relationship. To many manufacturers, especially to those goods dominant logic based ones, after-sale service is the most important way for them to maintain the relationship with customers. With the aim of providing innovated services to customers, after-sale services can be a good start point for manufacturers. Innovated first on the traditional after-sale services, and go further by leading customers to various continuous services provided in all business process.

Going deeper for the discussion about building and maintaining good relationship with customers, there are two required capacities for manufacturers. First, the ability to satisfy customers’ expectation when get in touch with customers. What the customers have perceived is quite important for manufacturers, and they need to make sure fulfill the demanding of customers. For example, to solve a problem customer expert the duration of one week, manufacturers need to have this service finished in one week to satisfy customers’ expectation. If manufacturers can have this job done within three days, then it is fulfill of expectation and higher perceived service by customers. Second, the ability to share customers information with all employees efficiently. After the contacting with customers, the needs and requirements of customers should be realized by all related employees to achieve a better understanding of customers. Make sure the information symmetry among all service providing staff will enhance customers’ trust on manufacturers.

Customer relationship building and maintaining is a employee lead process. So to achieve better relationship with customers, the first line employees are key factor. There are some suggestions for relationship improving by taking efforts on employees. Firstly, the service quality improving, quality of service provided by employees is the basic for customers’ perception; At the same time, it is important to increasing the interactions between employees and customers, which is the founding for the service quality improving, and will contribute to the relationship building.

**7.1.2 Services Design and Development**

On the other hand, based on the good relationship with customers, service design and development become the next discussion for products and service innovation. Design of services and products should focused on customers’ value. In the real industry world, it is common that technical researchers are independent with the marketing
operators, information asymmetric makes service and products designed by researchers and engineers usually far away from the demands from markets. So, the basic requirement for services and products innovation is to integrate the technical and marketing department, even the technical researchers, they should also familiar with the customers’ value when designing products and services.

There are many Manufacturers with advanced technical abilities, but not actually so good at the products and services developing. The problem appears in the corporation between design or research department and marketing department. The most advanced products or services in technology does not necessary mean the success in business operating. So a suggestion here is to set up the diverse system, make designing and developing work connect with market demands. Either the designing and developing of services and products without concerning about market, or the market operating without the help of newly advanced technical support, will lead to the low efficiency and missing of success services and goods innovation.

Another suggestion is to let the designers and developers get in touch with the market, realize the market changes rapidly, and accordingly taken research on which. This is a project initiated by IBM in 2002, call On Demand Innovation Services, ODIS. The aim of ODIS is to make research (or design and develop) department contribute to the service marketing department. It set three targets as: first, the researcher join the business project to listen voice from customers directly, solve customers’ problem with the technical capacities; Second, take customers’ problems as general technical topic, make these problems as hints for future studies; Third, with training, enable the researchers or technical staff with marketing skills.

Services providing is always human centered, in services innovation cannot be taken without the providers. So it implies a necessity of people training for services innovation. As many scholars suggested to train T-shaped talent by educations, in the real world business, the MOT (Management of Technology) talent are required according to IBM (2008)’s proposal. MOT implies the technical staffs in management level should also know about the marketing and business operating. It is necessary for technical managers accumulate experience in marketing department, and as the member of new services developing team, accumulate the experience of changing technologies to innovated services and products.

### 7.2 Service Process Innovation

As we discussed a process nature for service, the building of service process is always the significant topic for manufacturing companies. Service dominant logic implies a very different business process from the traditional goods view. For those companies wish to shift to the new dominant logic, it is necessary for them to take innovation on their old business process.
We know that under the service dominant logic, innovation works always take the start point from customers’ value creation, so the innovation on process is the one to better satisfy customers’ value creation. Based on this idea, service process innovation is the innovation on a series of manufacturing companies’ inside process, which being used to assist customers’ value creation.

Taking innovation on service process is important in two ways: First, customers’ value creation usually requires a series of services provided by manufacturers, a integrated process should be set up here to enable the complete customer value creation. Second, by taking innovation on service process, manufacturers could achieve the information symmetric, and share information with all inside elements and departments, which will help to involve all those elements and departments of manufacturers into the customers’ value creation.

### 7.2.1 Value Creation in Manufacturing Process

Under the traditional goods dominant logic, strategies are mostly based on the lowering down of cost. With this premise, it is popular for manufacturers move the manufacturing line to other countries or regions. This move makes cheaper labor forces for those manufacturers, and for the same reason of cost saving, which can also done by taking the outsourcing manufacturing.

#### 7.2.1.1 Process Innovation on Self-Manufacturing

Moving manufacturing line to countries and regions such as China and India, or taking the outsourcing manufacturing model to achieve cost advantages, are exactly the suggested strategies for competition before. And it actually brought huge benefits to many manufacturers who taken these strategies. However, coming to a new era for business competition, only the advantages in cost is no longer the best solution. And with more and more manufacturers involved in this moves, profit are expected to lower and lower under this strategies.

Recently, the discussion of “self-manufacturing” are becoming popular again. Different for the view of outsourcing manufacturing, “self manufacturing” encourages taking the manufacturing process by companies themselves. Even we know those cost saving strategies may bring benefits to manufacturers, nowadays, they also being disapproved with many problems. Only focus on the lowering down of cost, the outsourcing manufacturing way ignores the integration for whole process of companies activities. As we discussed the service dominant logic with a process nature which taking activities in all process in customers’ value creation, the self manufacturing model may appears more advantages.

Self manufacturing has being regard as the most essential element of manufacturers’
value creation process. Looking into the real industry world, many successful manufacturers have great faiths on the self manufacturing operation, and they take it as the core process innovation point from a global view. Self manufacturing enhances the co-operation between different departments inside the companies. To some successful manufacturers, with innovations on automatic manufacturing and improving on process efficiency, the disadvantage on labor cost can be eliminated. For example, many Japanese electronic products manufacturing improved their manufacturing processes and achieved the higher efficiency in manufacturing, as soon as the cost has been lower down, they move back their manufacturing in China back to Japan. This moves make better communicating between the manufacturing department and other departments, which encourages the improvement on products and service design, supply chain process, and then whole process of their businesses.

7.2.1.2 Value Creation by Innovate on Manufacturing Process

The aim of innovation on manufacturing process is to enlarge the value creation of manufacturers. To strengthen the value creation for manufacturers, there are two prerequisites concern about the process management suggested by IBM GBS (2008): First is to provide “diversified” products and services “rapidly”. “Rapidly” means the manufacturers need to shorten the duration from the planning of products to the time of offering which to the markets. And “diversified” means the products or services should be accepted and needed by more customers as possible; Second, reducing the cost caused by quality problems. We know, with the first prerequisite, the providing high quality products and services become a even challenger problem. The quality of products and services is essential for manufacturers, the control of quality is always the necessary topic for manufacturers.

Then, how to implement the innovation on process management to achieve these two prerequisites? From the process management view, the rapid offering of services and products requires shortening of time in the services and products preparing period. This requires the shortening of time in a series of process include projects planning, equipments designing, services and products designing, and so on. To achieve the shortest time in the whole process, the using of some IT technical should be a better solution.

For example, the ERP system has become a well known tool for many companies nowadays. According to Nilsson (2008), ERP systems refer to the “large integrated standard application packages that fully cover the provision of information required in a company.” As a tool making efforts on whole process of manufacturers’ products and service providing, ERP systems are made up of a series of extensive administrative solutions. Those elements include management accounting, human resource management, production, logistics, sales control and so on. Introduced by Nilsson, most of the ERP systems on the market have traditionally been designed with a focus on manufacturing companies, as we discussed about the service dominant
logic for manufacturers, it is also suitable as the supply of various ERP systems for service-oriented business organizations has gradually increased during the last years. The implementing of such ERP systems in manufacturing companies will encourage integrated operation between all departments and help to optimize the whole process of services and products providing.

Another suggestion is to build a manufacturing process with the ability to reflect on changes in markets and productions. This kind of processes enable symmetric information between different departments inside the manufacturing companies, also it build a way of communication with outside markets and customers.

Under such process, usually two effects can be achieved: First, information about the markets and customers may reflect to manufacturing process quickly, those departments related to the manufacturing process will realized the markets and order changes immediately; Second, the information about manufacturing process will also be reflected to the marketing and business operating departments, reflect to the customers quickly. Knowing about what was happening to the manufacturing process will also be greatly helpful to the providing of services and products to customers.

7.2.2 Supply Chain Management and Process Innovation

During the past decades, by taking innovations on supply chain management, many manufacturers successfully lowered down the costs and reduced the time of products preparing period, these greatly helps the improving of inside efficiency for those manufacturers. According to a study about practice at supply chain management done by IBM consulting group, during the 1990s, the supply chain management has been taken by many companies with concerns about whole process from the merchandising of materials to the delivery of products to customers. All those activities hold the targets of maximum customer satisfaction and minimum costs. The optimizing of processes inside and between manufacturers has been proved helpful to cost saving and cash flow enlarging. However, with the competing and operating situations changes been taken in manufacturing companies in the past few years, more and more manufacturers realized, the traditional supply chain management with the aim of cost saving is not enough for today’s competition any more.

7.2.2.1 Innovation on Supply Chain Management

Service dominant logic stands a customer centered idea for whole process, and the interaction between customers and manufacturers are very important for the value creation process. As more and more manufacturers take service logic for their business, the only focus on cost saving of traditional supply chain management is no longer enough for CEOs.
According to The Global CEO Study 2004 done by IBM consulting group, what CEOs concern most is no longer the “cost reducing”, instead, it has been shift to the “competitive strategies to other companies”. Coincident with what suggested by the service logic, the three core strategies concerned by CEOs refer to: differentiation of products and services; developing of new business model; and rapid reaction to customers. Reviewing what we have described about the service dominant logic, it represents a perfectly match between which.

A mature supply chain management requires the optimization be taken inside and between companies. Under the service dominant logic, the developing of supply chain set customers as start point, the relationship between customers, business partners, suppliers and service providers are closely connected. The suggested strategies for supply chain improving include: eliminate the repeating business process in the supply chain; Enforce the relationship inside and between different organization, promoting win-win situation for both sides of supply chain; Try to achieve equivalent between demand and supply by planning and forecasting; Promoting a cycle supply chain management; Share risk with partners; And using real time information to build customer lead process with stronger reacting capacities. (IBM GBS, 2008)

7.2.2.2 A New Generation of Supply Chain Management

In today’s economy, customers’ demand on products and services become more and more diversified, and the reaction time for products or services providers become shorter and shorter. Dealing with this change, a new generation of supply chain management has been suggested by IBM consulting group.

According to IBM, the traditional supply chain management implies a “order-control” view, and the new generation of which suggests a “sensing-reflect” model. The sensing-reflect model means by sensing customers’ expectation, pursue for the ability of optimizing customers and corporation value from integrated process view, and reflect to which as soon as possible. The “sensing-reflect” supply chain management differed from the traditional “order-control” model in three dimensions.

First, from the organizational dimension, order-control model makes clear missions for each department of whole organizations, each departments only follow the orders from managers. However the sensing-reflect model requires mutual works start from the decision making step, with the clear goal for whole organization, each department acting by themselves.

Second, from the business process dimension, traditional order-control model focus on reducing of time for each elements of the process to enhance the co-operation between different departments. However, time reducing is not the only focus for sensing-reflect model, instead, the supply chain management of sensing-reflect model focus more on the handle and reflection to customers’ changes.
Third, from the system dimension, order-control model usually make decision by the simulation system, simulation is taken with the reference to producing capacity and raw materials. However, to the sensing-reflect model, the situation for which is much complicate. It implies a integration of the consideration of all planning, basic and decision making systems.

### 7.3 Business Model Innovation

After the discussion of innovations take on products and services themselves, also the innovations on service process, our discussion comes to the innovation on business model. Innovations on produces or services and innovations on processes are significant parts of the implementing of service dominant logic for manufacturers. However, as we discussed that the service dominant logic implies a integrate changing in whole business, it will be helpful to discuss the overall business model innovation for implementing of service dominant logic. (see Figure 8.3)

#### Figure 7.3 Business Model Innovation

![Business Model Innovation Diagram]

#### 7.3.1 Elements of Business Model

According to IBM GBS(2008), there are four essential elements for business model.
These elements include: products/services, markets, business processes, and the fundamental environment for the other three elements. The discussion of business model should cover all of these four elements.

Products and services are the basic elements for business model. A good business model should firstly start with the providing of products or services satisfied by customers. Usually, manufacturers’ products or services should be differentiated, attract customers by good quality, designing, or anything else which cause the preference of customers.

The markets is another important element for business model. The key work here is to realize the customers’ characteristics, finding the right target markets, and dealing with the segmentation. It is a challenge work, with the process of globalization, many factors such as region and country differences should be taken part as the consideration of segmenting works.

The business process is the element which connects the products/services element with the markets element. Under the service dominant logic, the business process represents most significant part of value creation. There are two concerns about business process: first, pursuing of value creation in the whole value creation process, and second, simplifying the business process to achieve efficiency for whole business operations.

The last element of business model – the environment element is different from other three elements in some ways. Unlike the products/service, the targeting of markets, or the business processes, this element of environmental factor is usually not decide by manufacturers themselves. Environment includes the study of culture, custom, languages, and nationality differences, and it requires the integration between these environmental factors and other three elements.

### 7.3.2 Achieving Business Model Success

A successful business model requires good operations on all the four elements introduced above, and to constitute these elements and build a continuously increasing business model, there are some factors need to be considered. The first factor is the profitability, manufacturers should enabled with the ability to create value and make profits; Second, the manufacturers need to build the dynamic systems to react on the changes taken on customers, markets and environment; Third, the strategic view are needed by many manufacturers to realize and handle the environmental tendency of the industry, with which to optimize the using of resource for value creation; Also, manufacturers need to realize and protect the intellectual capital, maintaining the core competence in the whole industry.
7.3.2.1 Profitability of Manufacturers

Shifting to the service dominant logic, value creation is regarded as activities go along with manufacturers’ whole business process. The way to create value and make profit is not only by focusing on products. As we discussed about the characteristics of service dominant logic above, to make the manufacturers profitable, attention should be given to the interaction between customers and manufacturers, and take care of the whole process of business activities.

In the real world today, there are many manufacturers doing well on the value creation section. Taking Apple Inc. for example, the selling of iPod is not the only way of profit making, they provide music information by the iTunes concept, which brings even more profit than the sales of iPod hardware. It is essential for manufacturers to find out the innovated way of value creation. Many equipment manufacturers making profits by leasing their products to customers, and most automobile companies earn the biggest part of money by providing automobile finance services. Not limited by products, innovated ways of making profits will ensure the successful business model for manufacturers.

Focusing on supply chain management as introduced in the former part of this paper, and also taking attention on the strategic cost management, with the concern of both, it helps to enable the profitability of manufacturers. The view of strategic cost management suggests the integrated management on whole life cycle of manufacturers business. Taking the dimensions of product, process and region, strategic cost management makes visible cost and profit structure. Then, combined with the supply chain management, manufacturers may build a integrated and efficient process of value creation, which also ensures the achieving of business model innovations for manufacturer.

7.3.2.2 Building Dynamic Systems with Reacting Ability

Concern about the process nature of service, building such dynamic systems for manufacturers are process related discussion. The discussion about process under the traditional goods dominant logic is with the purpose of lowering down the costs, so usually, manufacturers focus on simplifying of business process only. Nowadays, this aim can be achieved easily with the developments of IT and network technologies. However, as we realized a more and more complex and diversified demands from customers, the purpose of process improving should not only focus on cost saving anymore. It is essential to build a dynamic system which enabled with the ability to react on the changes of customers’ demands.

Building such a dynamic system requires the whole business process of manufacturers is able to make adjustments according to changes. The first step is to standardize the inside process of manufacturers, including the IT elements of which. Involve the IT
elements into the building of dynamic system, enable its ability to react to changes. Taking the subdivided elements of whole process as the interacting units, make each elements react rapidly and finally build a dynamic system with reacting ability.

### 7.3.2.3 Strategic View of Manufacturers

Essentially, the initiation of business model innovation requires a strategic view. The strategic view is contributed by concerns from three dimensions: corporate reform view, service leading view, and environmental view.

*Figure 7.3.2 Strategic View of Manufacturers*

Strategic view is the stimulator of business model innovation for manufacturers, it comes from the willing to take reform in corporations, the idea of taking a service leading view, and the concern about environmental problems. The first premise for manufacturers to get a strategic view is for them to take the corporate reform view. A new business model innovation implies a integrated changes in the whole corporation wide, reforms are absolutely necessary for the changing of business model. As we discussed above, the shifting from goods dominant logic to service dominant logic itself implies a companywide reform. Also, a service leading view is necessary for the achieving of a strategic view for manufacturers. Instead of a products centered view which focus only on the tangible products, manufacturers need to pay attention on whole process of their business.
Value creation are accompanied with all business process, and it is time for manufacturers to act as a service providers to win a integrated value creation chain.

At the same time, attentions on environmental affairs are needed by manufacturers. Globalization and informationization changed the world a lot, the environmental changes will affect the economy world greatly. To achieve the sustainability of operation, manufacturers need to concern about the Corporate Social Responsibility (CSR) problems.

### 7.3.2.4 Core Competence for Manufacturers

The business model innovation will bring new competence to manufacturers, conversely, the core competence can also enable the business model innovation for manufacturers. The core competence for manufacturers has been changed a lot along with the development of business study and operations.

In the past, the core competence for manufacturers comes from the technology advantages. As we discussed in the goods dominant logic, to achieve competitive advantages, manufacturers usually focus on the improving of products quality and lowering down of prices. Under this situation, advantages in technology may help the manufacturers to improve quality in one way, and lower down cost by saving resources in another way.

However, comes to a period of new business logics, situations has been changed a lot. Nowadays, manufacturers pay more attention on customers. As the demands of customers are quite differed and diversified, the prime task is to satisfy the various demands of customers. As we discussed in the service dominant logic, the core competence comes from the knowledge and skills of service providers. It does not mean the technologies are not important anymore, it is because with the various demands from customers, the highest quality or lowest prices is not exactly what needed by customers. The competence is the knowledge and skills which help to satisfy customers most. And to the technologies, they are also been used a lot to achieve the ability of satisfy various of customer demands.

### 7.3.3 Common Recognition of Business Model Innovation

After we have discussed about the key factors for achieving business model success, we can realize that the innovation on business model is not simply some small adjustments on existing business model, instead, it usually requires reform from all companywide. Just as introduced above, shifting from goods dominant logic to service dominant logic is a whole process program, it requires changes taken in almost every segments of manufacturers’ business process.
The implementing of business model innovation which taken on whole business process requires the coordination from all members in the organizations. In the real world implementing, resistances can always be found from both managers and employees. The business model innovation requires the harmony from all members of the organization, from top managers to the first line employees. To make sure of the successful implementing, the managers should firstly hold the common recognition; then the strong leadership are needed by those managers; and finally, employees from all processes should hold the same recognition about new business model and coordinate in the reform activities.

8. Foundations for Service Innovation

Now, we have realized the importance of innovation for today’s service economy, and it is also the common accepted ideas for implementing of service dominant logic for manufacturers. The study of service innovation becomes so popular during the past few years, which studies including the discussion of service innovation challenges in the field of services processes, customer experiences, service development or designing, and so on. (Bitner, 2008)

As we discussed about the innovations for service dominant logic implementing for manufacturers from different perspectives (the products/services innovation, process innovation, and business model innovation), it is time for us to discuss about the foundations to implement such innovations. Those innovation fields suggested by the idea of “service innovation” is coincident with what we discussed above, and it is
exactly what needed by the manufacturers with the willing to adopting a new service dominant logic.

Therefore, the following discussion comes to the foundations of service innovation for manufacturers. The carrying out of the service innovation for manufacturers is contributed a lot by the IT technology development, IT technologies have being used to build fundamental structures and reforming operations; Second, the innovated way of human capital management are taken by many manufacturers as another foundation of service innovation; At the same time, corporate social responsibility (CSR) also becomes a necessary discussion for most manufacturers.

### 8.1 Development of IT Technology

With the development of technology, the scope of IT technologies has been expanded. The concept of IT technology is not simply limited in the computer technologies any more. Nowadays, combined with various of demands from customers, IT technology has being used to satisfy each aspects of customers’ daily lives. IT technology has been regard as the power of supporting reforms and changes inside companies, it has been enabled with the ability to provide services and solutions both inside and outside companies. In the process of shifting from service dominant logic to service dominant logic, IT technology is the foundation of service innovation.

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**Figure 8.1 Two Kinds of Relationship Between IT Tech. and Business Operation**

Sources: IBM Consulting
There are two kinds of relationship between IT technology and business operation introduced by IBM consulting. The first kind of relationship implies the effective using of IT technologies in the business operation. From the business operating perspective, using the IT technologies to build the integrated architecture of business operation, and then push the business process transformation; Another kind relationship refers to the IT technology driven business operation, which means taking IT technology as the factor that initiate the business operation transformation. For example, with the development of network technologies, Apple sells music and videos in iTunes.

The benefits brought by IT technology to the business operation of manufacturers are obviously, these benefits can be summarized as:

First, improving the efficiency of business processes. Some traditional works with fixed model can be done by IT equipments instead of humans. For example, the modern IT inventory management systems usually build a more efficient connection between different segments of operation. The IT technology saves human resources and cut the dealing time for each specific works, by reducing cost and simplify the business processes, it helps to achieve a efficient process for manufacturers.

Second, breaking out the bottlenecks in traditional business operations. IT technology development will make things used to be impossible become true. For example, the online payment systems make the selling activities taking places without the face to face contact.

Third, IT technology help manufacturers achieving competitive advantages. Markets becoming more and more various in today’s economy, it is a huge challenge for the manufacturers to catch customers’ preferences and building the competitive advantages among competitors. However, the development of IT technologies enables the interaction between manufacturers and customers in many ways, and which make manufacturers easier to achieve the competitive advantages.

Moreover, as we discussed the IT technology driven business transformation above, the development of IT technology also create the room for innovation of new business models. Many successful examples can be find here, such as the online order system of Dell computers, the online shopping model by Ebay, and so on. The benefit of creating new business models of IT technology becomes the most attractive one for many manufacturers nowadays, especially for those manufacturers with the willing to take reform and shifting to a new service dominant logic.

8.2 Human Capital Management

Another foundation for the service innovation refers to human capital management.
As we discussed, under the service dominant logic, core competence come from the knowledge and skills, of which the employees are the most important carriers. To implement the success service innovation, attention on human capital management are required by the manufacturers.

Human capital management start with the hiring and training of good employees. It is not the only target for manufacturers to attract the best people, but also provide these human capital with growing opportunities, build the environment for them to achieve new skills and capacities. Reviewing the old positioning, evaluating, and salary regulations, taking the human capital management with a worldwide view. Invest on the digging and training of future leaders, aim on achieve successful service innovation in the long run.

Not conflict with what I described above, technology is always essential for innovations of manufacturers. However, only with advance in technology is not enough, the next step is to combine the technology advantages with business operations. This is what so called Management of Technology (MOT) by IBM consulting (2008). MOT implies the digging of value from technologies, and then create new products/services and new business.

In fact, the challenge for most manufacturers is to find the people with abilities from both technical and management perspectives. Manufacturers need those people who hold the advanced technical skills, at the same time with the ability to handle management affairs. This kind of human capital is just the MOT talents, to ensure the service innovation for manufacturing companies, the human capital management on MOT talents is quite a challenge.

The developing of MOT talents for manufacturers requires the building of relative human capital management systems and regulations. The difficult is to let technical people obtain a integrated view of management from whole companywide view. A suggested solution is to train the technical people by letting them move from “knowing what” to “knowing how”, it may improve their practice operating capacities. Going further, as the target of “knowing how” have been achieved, further training can provide for them to achieve the higher level of “knowing why”, under which the technical people may become the MOT talents.

### 8.3 Corporate Social Responsibility

In today’s economy, Corporate Social Responsibility (CSR) become more and more important concepts for manufacturers. Under a service dominant logic, it represents as the foundation of manufacturers’ service innovation and sustainability.

Corporate social responsibility suggests the free, justice and transparent trading and
competition in the markets; it cares about the manufacturers’ practices in environment managements, the human resources management regulations; also, the discussion about CSR involves the importance of corporate management under social responsibility.

Under the service dominant logic, the focus is always given to the customers. CSR encourages the responsibility to society, and it enforce the connects between manufacturers and society. Surviving in such a fiercely competition environment, to maintain the sustainable business, manufacturers should realize the importance of CSR implementing. CSR suggest corporate to contribute to the society, greater contribution of manufacturers, higher dependency the society will taken on the manufacturers, meanwhile, manufacturers may apply influence on society by the CSR activities. All the manufacturers should take the social responsibilities, making themselves as parts of the society, and achieving the sustainable business in the long run.
9. Discussion

In this paper, we have discussed about the development of service study and operations; the development of different logics: goods dominant logic and service dominant logic for business; and the ways for manufacturers to implement the service dominant logic. Coming to the 21st century, the operations for manufacturers are no longer like some years before. The competing environment has changed and moved to a service emphasis view. For my study in this paper, it suggests the manufacturing companies to realize the importance of service in today’s economy, take innovations on the business logic from a integrated view, and implementing the reforms by taking service innovation strategically.

9.1 Realize the Importance of Service

The worldwide discussion on service represents the increasing importance of service for today’s economy. As been illustrated in this paper, service sectors have taken the most significant part of economy for most developed countries. And to the developing countries, service become the main power for economy increasing. For example, the tendency of decreasing percentages in agricultural and industrial and increasing proportion in service field have been cited in BRIC (Brazil, Russia, Indian and China) and the rest world. A urgent need for service study appears, which leads more and more academic researchers and real world business operators involved into the service related researches and business implementations.

The study of service starts relatively early in 1950s, a few scholars started to pay attentions on the study of service sector. However, it has not become the mainstream of business until 1980s. (See Appendix 1) Coming to the 1980s, service attracted more and more attentions from scholars and business operators. Summarized by scholars during the Cambridge Service Science, Management and Engineering Symposium, the service development experienced the Crawling out period, Scurrying about period, Walking erect period, Making tools period, Creating language period and will go even further in the future.

With the development of service study, the service concept is not only be regarded as an independent sector of economy. Moreover, it represents a new logic for business. And service is no longer the only topic for those traditional service sectors such as hospital or restaurants. The service study nowadays has become a significant topic even for most manufacturers. The importance of which not only come from their after-sale services that combined with their products, in fact, it lead to a further discussion about the changing of business logic by implementing service dominant logic for manufacturers.
9.2 Business Logic Innovating from a Integrated View

In this paper, two different business logics have been introduced and compared. From which we can find the service dominant logic differs a lot from the traditional goods dominant logic in many aspects. And it is easy for us to achieve the conclusion that the service centered logic which suggests dynamic relationships and co-create value with consumers is preferred by scholars and business operators to the goods dominant logic which focus on the exchange of tangible output with embedded value.

The goods dominant logic holds the view of value-in-exchange, value are embedded in the end output, when the output is consumed by customers, value are regard as destroying. This is totally different from the logic of service-dominant. Viewing value as be used in the whole process of service, there is no exchange happens during the consumption. The strategies suggested by different logics also differs, some even opposite. Goods-logic may think standardization to be important, but it is conflict with the service-view of focus on specific needs. Companies may not change their strategy to the totally opposite direction, what they need to do is involving into the changing of whole logic about business, and take an integrated improvement on whole marketing strategies.

However, the study of different business logics for manufacturers should not only focus on the details differences. Shifting to the new business logic requires an entire reform taken on the whole business processes rather than the simple improvement on partial segments. The differences between these two logics we have concluded in the table.1 also supported the view of total logic change for companies. According to the differences we list in Table.1, it will be hard for a company to take one change among which without taking the changing in basic logic. The shifting of business logic for manufacturers is a integrated work requires recognition from whole companywide, otherwise, the manufacturers may bear the risk of conflicts in the implementing and merely have the chance to achieve success.

9.3 Implement Reform and SDL Properly

After the discussion and selection of appropriate business logics for manufacturers, the challenge comes to the implementing of selected logic. Service dominant logic holds advantages on one hand, and brings challenges of implementing on the other hand. It is suggested that manufacturers should taking appropriate ways to implement the reforms and service dominant logic properly and strategically.

The proper implementing of service dominant logic requires frequently reviews on service characteristics. Back to the characteristics we concluded about service, the characteristic of “process nature” represents a ongoing services providing process
rather than a simple output. The “interaction” property mans service provider should take part in the communication with customers, always be aware of what customers are doing with their services. Also the characteristic of co-creation for value requires providers to get involved into the value creating process and create value together with customers. On the other hand, all of these characteristics are closely related the customers. Then we can see, service-dominant logic is essentially a customer-based logic. This may also be the most significant differences between service-dominant logic and goods-dominant logic. Basically, goods-logic pay more attention on the quality of the products they offered. Although more and more services issues are also added into the goods-dominant logic, as a customer-centered logic, service-dominant logic still appeared to be more advanced in dealing with customers’ issues. The implementing of service dominant logic for manufacturers should always based on the characteristic and essential of service.

Figure 9 Implementing Service Dominant Logic for Manufacturers

To implement the reform and service dominant logic strategically, manufacturers should pay attention on the innovations. Service innovation can be used as the most
principal strategies for most manufacturing companies. For the strategic implementing of service dominant logic, innovations can be taken on products/services, service processes, and business models. And to achieve the success in service innovation, manufacturers should deal with the fundamental problems of IT technology management, human capital management, and corporate social responsibility (CSR). (See figure 9)

Looking around the industrial world, there are abundant successful cases such as IBM who perform quite well when shifting from a traditional goods dominant logic to service dominant logic. And to some other successful manufacturing companies, such as Apple or Dell, even they have not announced as taking service dominant logic yet, their value creation models are actually already be service centered. The service dominant logic brings huge benefits to manufacturers, and it will become the major logic for value creation in the short future. However, it does never mean that will be easy for manufacturers to achieve the same success by just following the steps of those companies. Different from strategies in goods-dominant logic, when taking service logic, more customer centered means much complex the strategies for manufacturers. What the manufacturers should do is always take the customers’ perspective, interact with customers frequently, provide customers with the best resources (including both tangible products and intangible services) for their value creation. Since the service dominant logic represents the innovated business logic, the manufacturers should take innovations as the principal strategy and implement innovations on both products/services and business processes, at the same time, pay enough attentions on the foundations of IT technology, human capital management and corporate social responsibility.
References

Literatures:


References:


Books:


[26]. IBM Consulting Group (2004), Practice @ Supply Chain Management. Nikkei Business Publications


Websites:


[32]. Scania global homepage: http://www.scania.com/
Appendixes I

This is the history of service development suggested by Cambridge Service Science, Management and Engineering Symposium hold by University of Cambridge and IBM in 2007. See in the white book: Succeeding through service innovation: A service perspective for education, research, business and government.

History and future outlook of service research

Pre 1980: Crawling out period is when service marketing and service operations became distinct from product marketing and operations, in part as conventional service economics reports started to categorize more of the economy as value derived from service activities.

1980-1985: Scurrying about period with more published services research moving beyond goods and products but literature still mostly conceptual. A core group of academics and business practitioners developed.

1985-1992: Walking erect period with increasing number of scholars of service, and explosive growth in the literature including service research journals, dissertations and textbooks. Academic events, centres and pioneers in Europe as well as US emerged.

1993-2000: Making tools period with more quantitative research - measurement, statistics, and decision support modeling; broadening, deepening and sharpening of the research; continued globalization and multidisciplinary research; expanded topic areas including service design and delivery, service experiences, service quality and customer satisfaction, service recovery and technology infusion, service computing, service supply chains and e-sourcing.

2000-now: Creating language period with nearly a dozen models of service emerging, and the concept of a service system beginning to take hold to unite the many perspectives. The field is expanding rapidly with an expansion of literature worldwide and increasing numbers of conferences and centers, with IBM and industries’ Service Science, Management and Engineering (SSME) initiative seeking to strengthen industry-academic-government interactions. The service-dominant logic view is gradually replacing the traditional view of goods-versus-services, with a view of service as value co-creation that involves both things and activities.

The future: Building communities period with an inclusive multidisciplinary approach to service innovation, with science, management, engineering and design being supporting academic disciplines, and with T-Shaped professionals as adaptive innovators to link and unite these disciplines. This will create a measurable growth in service innovation for business and society.

Sources: University of Cambridge & IBM (2007)
Appendixes II

Shares of total gross value added, 2002 – Major activities

![Bar chart showing distribution of gross value added across different sectors for various countries in 2002.](image)

**Distribution of gross value added of the services sector, 2002**

![Bar chart showing distribution of gross value added within the services sector for various countries in 2002.](image)