THE STRATEGIC IMPORTANCE OF AFTER-SALES SERVICES FOR THE INSURANCE OF GROWTH IN CUSTOMER-VALUE-ORIENTED MANAGEMENT: AN OBSERVATION OF SMALL- AND MEDIUM-SIZED INDUSTRIAL GOODS MANUFACTURERS

(Importanța strategică a serviciilor post-vânzare pentru asigurarea creșterii în managementul orientat pe valoarea consumatorului: o analiză a IMM-urilor din sectorul producției de bunuri industriale)

Dr. Tim Bendig
European Business School Germany
tim.bendy@linde.de

Dipl.-Kffr. Nora Oettgen
European Business School Germany
nora.oettgen@ebs.de

Dipl.-Kfm. Tobias Irion
European Business School Germany
tobias.irion@ebs.de

Abstract

Small and medium-sized companies in the investment goods industry find themselves more and more often confronted with radical changes in the conditions of their business environments. The access to one dimensional growth just by selling physical products is becoming increasingly limited. Traditional means are suffering of a constant loss of effectiveness. But even though it has been shown that there are enormous chances in the area of after-sales services in this industry, small- and medium-sized industrial goods manufacturers obtain only about 25% of their turnover with services, due to an insufficient strategic involvement of this topic. On the basis of a long term perspective and against the background of the discussions on stakeholder integration, strategic business segments and the customer-lifetime-value, this paper focuses on the different possibilities of accessing new market potentials by combining and analyzing the implications of different strategic perspectives on after-sales-services and their effects on the customer-lifetime-value.

Keywords:
After-Sales Services; Investment goods industry; Capital goods; Strategic marketing; Strategic business segment.

Rezumat

Companiile mici și mijlocii din industria investițiilor se confruntă din ce în ce mai des cu schimbări radicale în condițiile mediului de afaceri. Accesul la o creștere dimensională doar prin vânzarea produselor fizice este deja limitat. Metodele tradiționale suferă de o pierdere constantă a eficienței. Dar deși a fost arătat că sunt sancă enorme în domeniul serviciilor post-vânzare în această industrie, producătorii de bunuri industriale mici și mijlocii obțin doar 25% din cifra de afaceri cu servicii, din cauza unei implicări insuficiente. Pe baza unei perspective pe termen lung și pe fundalul unor discuții a integrării acționarilor, a segmentelor strategice de afaceri și a menținerii clienților această lucrare se concentrează pe diferitele posibilități de a accesa noi potențialuri ale pieței prin combinarea și analizarea implicațiilor diferitelor perspective strategice ale serviciilor post-vânzare și efectul lor asupra menținerii clienților.

Cuvinte cheie:
Servicii post-vânzare; Bunuri capitale; Marketing strategic; Segmentul strategic de afaceri
1. Problem background

In the area of conflict between ongoing cost pressure, decreasing margins, accelerating product life cycles, a more and more international competitive environment as well as high growth and yield expectations of diverse stakeholder groups, it is more difficult, especially for small and medium-sized companies, to keep up their competitive advantage in medium and long-term in order to ensure their expected value development. It is especially essential for companies in the industrial goods industry with their supporting role in the German macroeconomic value adding process, to open up new revenue and turnover sources (Statistisches Bundesamt Deutschland 2005). The ongoing, and within the near future, intensifying process of radical changing market conditions requires, particularly from these companies, new strategic value creation concepts, which exceed the originally existing, mostly excellent core concepts (Mattmüller/Irion 2004). Exclusively with product development, the manufacturing of high-quality products and the distribution, the objective of increasing corporate figures and thus the sustainable continuance of the company are becoming more and more difficult.

It is true that there is still optimization potential within the corporate development process through which an acceleration of the productivity as a whole can be achieved, but those activities will – especially within the already highly efficient production and distribution methods of German industrial good manufacturers – unavoidably find their limits. Within the scope of a long-term value orientation and therefore an assurance of the company’s livelihood and securing of the future, many small- and medium-sized companies are missing new and relatively stable revenue and turnover sources.

The traditional way to corporate growth in the industrial goods sector, to open up new revenue and turnover sources by entering new markets and therefore the perspective of a one-dimensional growth in product turnover, are accompanied by high corporate risks in terms of specific investments as well as meaningful inner-organizational challenges with concurrently low margins against the background of the shown conditions. Furthermore, this perspective, which focuses on the product, lacks to observe the critical monetary potentials of the customers in the areas of services and after-sales, which by far transcend the original business model. Especially the area of after-sales can represent a revenue figure, insofar as it is assumed that:

- the better part of life cycle costs of industrial goods and industrial plants emerge from maintenance, distribution of spare parts, etc,
- the financial-specific investments for the potential supply of after-sales services compared to the production of industrial goods is clearly lower, at the same time the potential return on investment is clearly higher compared to the product and plant sale,
- turnover, and therefore profit within the area of after-sales services are less intensive cyclical pronounced as the product-oriented field of industrial goods and therefore represent a continuous size in the corporate financial planning,
- the personal and technical know-how to produce after-sales services as well as the necessary reputation already exists in many classical industrial goods companies
- after-sales services are able to give consideration to the customers’ demands through the offer of a complete solution and, at the same time, are able to be emphasized as a product-independent
comparative competitive advantage through their virtually singular character.

Despite the shown chances in the area of after-sales services, small- and medium-sized industrial goods manufacturers obtain only about 25% of their turnover with services, due to an insufficient strategic involvement of this topic – 85% of all small- and medium-sized companies in Germany are not planning on increasing this share of turnover throughout strategic decisions within the next couple of years (Accenture 2004).

In order to make those stated potentials accessible, not only a fundamental change within the corporate paradigm understandings, which means off of a production industry towards a service-oriented industry, a systematic analysis and structuring of innovative and extensive business models is also required. The following explanations will, therefore, not focus on growth through traditional one-dimensional extension of product-oriented distribution, but they will focus on after-sales services as part of a value- and future-oriented business strategy.

2. Conceptual-theoretical framework of an observation of after-sales services

Corporate efforts embark on their strategic embodiment the objective of turnover- and value growth on one hand, and therefore a long-term corporate securing on the other hand. This corporate value orientation has implicitly always been the centre of all economic action, however it has only since the middle of the Eighties been an explicit part of the hierarchical objectives of corporate planning in terms of a shareholder-value discussion (Freeman/Reed 1983; Rappaport 1986; Kraft 1999; Tewes 2003). This value orientation should at this not only concentrate on short-term transactional elements of economic actions, but also look at those values, which arise from a long-term corporate relationship through follow-ups and additional purchasing (Mattmüller 2004).

Referring to the long-term value-based orientation, customer satisfaction is playing an important role for the systematic embodiment of after-sales services, because it is a necessary, even though not adequate requirement, for the resulting aim of customer loyalty and thus the attainable improvement of corporate turnover and return situation. Customer satisfaction as the preliminary stage of customer loyalty describes “(…) the situation depending result of a comparison by the customer between his expectations on one hand and the experienced results on the other hand.” (Stauss 1999, p. 8; similar: Homburg/Stock 2003; Kraft 2002). The customer’s satisfaction with a product (and therefore the short-term transactional, product-oriented business connexion) can result into customer loyalty, which means that the customer is willing to make additional and follow-up purchases. This long-term loyalty results consequently to the targeted consumption of the customer-lifetime-value and therefore to an observation of the value to the manufacturer, which one customer holds throughout the whole period of the corporate relationship and which results from the monetary value of investments for spare procurements but especially from the value of additional and follow-up purchases. The customer-lifetime-value constitutes here from the observation of three different components:

- The forecasted accumulated monetary return flow of the customer (incoming and outgoing payments),

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The time period of the customer relationship (forecasting horizon) as well as
the calculation of the basic discount rate (risk component).

The whole customer-lifetime-value (CLV) itself consists of the coverage margin (DS) of the core performance (KL) and the after-sales services (ASS) multiplied by the appropriate sales volume in period t. This applies formally as:

$$CLV_t = DS_{KL} - x_{KL} + \sum_{t=1}^{T} \frac{DS_{ASS} - x_{ASS}}{(1+i)^t}$$

Whereas:
- $DSt$: Coverage margin in period t
- $xt$: Sales volume for KL and ASS in period t
- $t$: Period ($t = 1, \ldots, T$)
- $i$: discount rate

As stated above, central starting points to a sustainable value orientation arise especially from the aspect of after-sales services for the analyzed industrial goods manufacturers. Dennis/Kambi for example state that „After-Sales (…) can contribute with as much as 50 percent of all profits for the typical manufacturing company“ (Dennis/Kambi 2003, S. 42) – depending on the industrial goods industry, this percent rate can account for up to 90% (Noch 1995; Accenture 2004). Therefore, not the observation of a short-term transactional relationship leads to a significant influence of the customer lifetime value, but only the observation of the lifecycle in excess of the pure purchasing process significantly influences the generation of value. Due to the mostly nonrecurring transactions, which, if not nonrecurring are at least far away from each other in time, the steadily shorter market cycles and the growing intensity in competition, it should become a strategic aim to expand the customer relationship’s lifecycle further than just focussing on the pure purchasing process in order to extend the observing time and therefore the time of value generation (referring to: Sichwart/Senti 1995) (Figure no. 1).

**Figure no. 1 - The Integrated After-Sales Lifecycle**

The target-oriented embodiment of after-sales services should, due to the economic relevance, be a central management job within the strategic corporate planning process. In this context, the reason for a change in
paradigms within the corporate strategy can be found as well, since the so far understanding of after-sales services has to be defined completely new. Up to this moment, after-sales services have been looked at as secondary services or additional services and therefore as services which "(...) companies generate besides their main performance in order to stimulate and to permit the selling of their main performances." (Frisch 1989, S. 47; ähnlich: Baumbach 2004). The special marketing perspective of an industrial company should thereby arrange the secondary services towards the distribution channel of its products (Fassott 1995). According to the corporate production process, an understanding according to definitions of secondary services can therefore be systematized in secondary services of the pre-purchasing phase, secondary services of the purchasing phase and secondary services of the post-purchasing phase. (Figure no.2).

Figure no. 2 - Systematic Of Secondary Services

After-sales services are therefore "services (...) within the post-purchasing phase, which are in close relationship to the distribution of an industrial good." (Mattmüller/Irion 2004, p. 23) and which, in the context of the stated systematic, play the central role within a customer-value oriented management. Based on an observation of the significance of after-sales services in the industrial goods sector, the systematic analysis and embodiment of innovative and enclosing business models which see after-sales services in an extended context beyond secondary or additional services will be discussed in the following.

3. Strategic dimensions of after-sales services

Against the background of the statements above, which underline the relevance of after-sales services for industrial goods manufacturers and offer a description of the industry’s status quo, possible strategic implementations for a market oriented management will be shown off subsequently. The argumentation will mainly be based on the theoretical construct of strategic business segment (Ansoff 1966; Meyer 1992; Mattmüller 2004) – for a better understanding of the following argumentation; the key points of the construct will have to be explained.

A strategic business segment as a theoretical construct has to be seen as a combination of the dimensions ‘target group’ and ‘supply’. To the strategic perspective of a market-oriented management, finding such supply-target group-combinations as well as choosing them makes up the crucial question within the corporate overall-concept.
Interferențe economice

(Mattmüller/Tunder 2004). That way, a company can target group-oriented be divided into several areas of activity, which require different working. This wide range of main criteria for bearing capacity of a strategic business segment can be further examined by four other criteria (Brixle 1993; Mattmüller 2004):

- distinct external market, i.e. is there a distinct customer problem within this strategic business segment?
- Strategic independence, i.e. a change in this segment does not influence the company’s other strategic segments
- Different competitive environment, i.e. are there different barriers of market entry and market exit for every single strategic business segment, or does the structure of competition vary within the different strategic business segments?
- Stability over time, i.e. the strategic business segment, as well as the whole company is assumed to have a long-time existence

However, there are no explicit or general rules for defining a strategic business segment that is why this paper will discuss two basic possibilities to embellish the resulting strategic scope and its implications for the management.

3.1. After-Sales Services As Additional Services within Existing Strategic Business Segments

As already mentioned, the basic conditions in the market, especially for small- and medium-sized companies are becoming more difficult. In order to ensure the existence, respectively the growth of a company whilst the return in the businesses original focus declines, two alternatives come into mind at a first glance, which aim to assure the cumulative number of transactions and therefore, in the long run, to assure the revenue and turnover. Those alternatives are:

- The entry in geographical markets, which have not been worked yet and
- The expansion of the product portfolio within its original competence.

From the corporate point of view, both possibilities could be an entry in a new market. Within the last-mentioned alternative, after-sales services can be summed up, which then can be considered as follow-up business to the sale of an industrial good. Through the evaluation of the above shown criteria to define a strategic business segment, an entry into a new market does not necessarily mean that a new strategic business segment is developed. A virtual example of a company from the synthetics industry will show the growth strategy as follows (Figure no. 3).

The strategic direction, shown in figure no. 3 concerns the strategy of perpetuation aiming to further tap the full potential of existing customers (Mattmüller 2004). Within the shown company, the existing strategic business segment is enlarged by offering services to the product portfolio of the delivered machinery – e.g. maintenance contracts. The resulting turnover potential for the company has already been mentioned before. This potential can hereby be explained through the positive development of the customer equity for the offering company. By means of after-sales services, the length of the relationship to the customer, which plays a central role in calculating the customer-lifetime-value, will increase (Ploss 2001). Generally, comparatively lower transaction costs will result from a long-term relationship for both partners (Reichheld 1997). Those can again be looked at as one reason for the customers decreasing willingness to change companies, since this would result in a loss of the transaction cost savings (Peter 1999). As a matter of course the possibility to the manufacturer to
successfully offer a follow-up transaction increases with the duration of a business relationship. The meaning of after-sales services is hereby shown within a scheme of reciprocity, since the customer-lifetime-value grows due to the expansion of business activities by the manufacturer as well as due to the duration of the business relationship and the possibility of a repurchase. Summed up, the manufacturer might be able to, at least partly, break out of the ongoing price competition (Meffert 1994).

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**Figure no. 3 - Extension of a Strategic Business Segment Through After-Sales Services**

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some advantages of a long-term managerial paradigm, which focuses on the customer value, become clear. In excess, there is further potential in a systematic use of the customer-lifetime-value concept, which will then go in one hand with an expansion of the business model. Consequently, after-sales services should not only be seen as a follow-up to the actual material transaction. By uncoupling it from the actual main business, other potential customers will come into focus of interest, who before have not necessarily demanded the offers. Due to this fact, the claim is asserted that the industrial goods sector has to move on from a manufacturing and delivering industry to a service-oriented industry with adequate offerings. Recapitulating the facts, the main aim is not only the expansion of the product portfolio and/or the opening of new markets, but the creation of industrial goods manufacturers with broad business approaches which are tailored on service in order to be competitive now and in the future. A strategic and organisational reorientation and repositioning of the companies becomes a necessary condition (Kaerner/Gräßler 2004). The resulting strategic consequences will be drawn up in the following.

3.2 After-Sales Services As Independent Strategic Business Segment

With the extended understanding of not seeing the source of return of after-sales services necessarily in the preceding sale of products (machinery), the manufacturer’s chances in the market for industrial services grow significantly. Within this context, the concept of customer-lifetime-value experiences a significant growth of importance to the management of the offering company. The key strength of the concept is based on observing the smallest market segment – the individual customer – and to be able to make a decision on how to treat this customer. Against this background of ambitioning an efficient allocation of resources, the appropriateness of the customer-lifetime-value for segmenting and according to this defining customer-individual offers is again underlined (Bruhn 2002; Keller-Johnson 2003).

However, in order to be able to meet the claim of a market-oriented organisation within a company, the strategic implementations, which arise from this, will have to be analysed first. Starting from the example given above to define strategic business segments the question arises, if it makes sense to see the supply of services as part of the existing strategic business segments. Reverting to the criteria to express and define an independent strategic business segment and the therefore necessary different market activities, it follows that:

- A distinct external market can be assumed, since the customer’s problem, which has to be solved is not the supply of machinery for production, but the service which is necessary for maintenance (and eventually further things).
- Under the premises of an extended focus of the company, the strategic independence can also be assumed, since the first strategic business segment, the production of industrial goods, is not touched by the decisions made in the field of after-sales services. This is especially the case, when the after-sales services are services for machinery, which have not been produced by the company itself.
- Different competitive environment can be found as well, since the supply of after-sales services, independent of the actual main business, is not an innovation – there already are companies which show a specialization in this area without
actually producing physical products themselves (Manke 2004).

- Furthermore, stability over time can be assumed for the business with after-sales services. The demand should at least remain stable throughout the useful life of the machinery. A look into practice of many processing companies often shows a much further going period of time.

In conclusion, the supply of after-sales services can therefore be interpreted as creation of an independent strategic business segment. In this case, the offering companies would have left the strategic direction of perpetuation and chosen a new direction, namely the one of a diversification. This strategy always comes along with the creation of a new strategic business segment (Mattmüller 2004). Figure no. 4 shows the result of the diversification’s implementation on the basis of the known example. As consequence, the expansion of the business activities of a company from the industrial goods sector through services can be seen as an entry into a new market. This new market is beyond this original business activity and therefore makes the creation of new organisations and distribution processes necessary in order to actively work the market (Manke 2004). The implications which result by the definition of a new strategic business segment to the management which are explained in the following.

![Figure no. 4 - Expansion of the Strategic Business Segment Portfolio through After-Sales Services](image)

Strategic business segments are only virtual constructs; the above described definitions of two business segments nevertheless show meaningful consequences for their company. Once the independence of a strategic business segment has been proven, the necessary consequence which follows is its own
distinct market. By defining a second business segment, the base for deducting independent goals and tasks is build, which in the end leads to an independent management of the business segment (Mattmüller 2004). Depending on the size of the business segment, such a definition should in the bottom line be taken into account when it comes to the company’s structural organisation. All in all, the described definition of independent strategic business segments can be seen as the first step to meet the above mentioned requirement of a market-orientation by the manufacturers of industrial goods.

4. Implications and Conclusion

The potentials of after-sales services have been shown within this paper. In order to use this potential, the responsible part of the management can basically go into two different directions. On one hand side, there is the strategy of perpetuation, and on the other hand, the strategy of diversification.

A Perpetuation is used, once the after-sales services are recognized as an additional source of return for the company, though, within the transaction process, they follow the actual manufacturing and therefore exchange of physical goods. There is obviously closeness to the company’s original core competence. Such a strategy can relatively easy be used to ensure growth when entering new markets. E.g. while expanding internationally, the customer can be worked systematically in terms of after-sales services.

Consequently the entry into a new market can therefore become profitable more quickly. The concept of customer-lifetime-value seems to be useful here to find out which customer the most profitable is, but it should also be used to sensitize the company for the positive effects of after-sales services.

By looking at after-sales services as differing from the original strategic business segment, the creating of an own strategic business segment is justified. Such a construction goes along with many consequences for a market-oriented organisation.

To the management of the new strategic business unit, the customer-lifetime-value now plays a much more important role than just sensitizing the company. This concept rather has a strongly risk-reducing influence on creating this business segment, since, with its help, the company’s resources will be coordinated optimally to work the market.

The reason for this can mainly be seen in the low level of aggregation – the one of the individual customer. To sum up, to the described organisation, which focuses on the market’s demands, the formulation of a strategy first of all makes up a necessary premise to deduce aims and targets. The presented strategic approaches should not have been valued as better or worse. The resulting strategic implications are the ones to come to the front.

The concept of the customer-lifetime-value should here not be seen as an independent strategy, but its integrating character needs to be highlighted. By defining several strategic business segments, it becomes possible to divide the returns, generated with one customer, on different business segments and therefore different intra-organisational structures with different types of working the market. The customer-lifetime-value brings both different perspectives back together by its judgmental statement and therefore helps to accommodate the superior interests of the whole company.
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