Business Development of the repair process in Customer Service

A case study of ALPHA BETA

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This article is based on a master thesis written in 2008 at Lund University, in cooperation with the company Alpha Beta. The purpose of the thesis was to describe and analyse how ALPHA BETA’s repair business was organised and a second purpose was to propose focus points for making today’s repair process more effective. The work had its base in the theories SWOT, PESTEL and Value chain to map the business environment and principal-agent theory for analysing the relationship with contracted partners. From these theories, the purpose could be fulfilled and the thesis is concluded with three focus areas that are vital for ALPHA BETA.

Introduction

Alpha Beta is a company within consumer electronics, mainly producing one type of electronic devices. As some products break while being in the market, Alpha Beta needs, as any other company, to be able to handle repair of their produced units. This is managed by the Customer Service (CS) Unit, which is organized under Sales & Marketing.

Background

The market for the electronic device business in which ALPHA BETA is operating, started almost 20 years ago. At this time, ALPHA BETA didn’t exist as a standalone company, but was a part of a company with a broader product range within electronics. In the following paragraphs, we will still mention this company ALPHA BETA.

In the starting years, the annual number of units sold was only 3000 and everything was produced in ALPHA BETA’s factory in Sweden. As the electronic device business was only a small part of the overall product portfolio, most of the electronic devices were sold in connection with ALPHA BETA’s sales and installation of the core products. Since the business was small, the aftermarket was not particularly in focus. Repairs were performed by retailers, and units that could not be repaired were sent back to the factory in Sweden.

The volumes increased rapidly and already one year after the introduction of the electronic devices ALPHA BETA contracted a network of specialist service centres to repair faulty devices around the world. The centres replaced the retailers’ role. Units that the specialist service centres were unable to repair were still sent back to the factory in Sweden.

Since the service centres had a low success rate in repairing more advanced faults, Alpha Beta added a network of more advanced service centres in the nineties. However, these centres only lasted a few years, since they were regarded too costly when Alpha Beta went through a big organisational change in 2001.

As sales volumes increased and the technology of the electronic devices became more advanced in the following years, Alpha Beta again needed more advanced repair. This made them to re-introduce the advanced service centres and also add an even higher level, factory repair.

Purpose and problem definition

Repair business in the electronic device industry is very costly for the companies. The repair volume is highly concentrated to the warranty time, due to the relation between repair cost and purchase price. The repair price is often a large share of the purchase price and the customers therefore rarely repair a unit when the warranty time has expired. Since the cost of repair during the warranty time is covered by ALPHA BETA themselves, the repair business is not bringing any income to the company.

The purpose of the thesis is to describe and analyse how ALPHA BETA’s repair business is organised and structured today. The second purpose of this thesis is to propose focus points for making today’s repair process more effective.

Focus and delimitations

This thesis will have both a commercial and an academic target group. Since the project is written at the request of ALPHA BETA, they will be considered the
primary target group. The academic target group is mainly last year students at Lund University, who have taken courses in production and strategy.

The work is delimited to not cover technical details in the repair process, all employees’ role in the organization or a detailed logistic solution.

Methodology
The thesis that is the base for this article is a case study, in which we have mainly used a qualitative methodology.

The sources of information have mainly been interviews and written documentation. We have also made a direct observation in the form of a field visit to a repair factory. Visiting the factory and to see the studied unit in action was very helpful since it made the picture as a whole much clearer. Participant observations and archival records have been used to a lower degree.

Theoretical frame of reference
The work had its base in the theories SWOT, PESTEL and Value chain to map the business environment and principal-agent theory for analysing the relationship with contracted partners.

The value chain aims for a company to understand which activities are value adding to the customer and which are not. It was created by Michael Porter and is used to describe activities within and around an organisation. The chain can be divided into primary and secondary activities. Primary activities can directly be related to a product or a service.

Primary activities are very important for an organisation but these activities need support in order to be carried out in an effective way. That’s why the value chain also includes supporting activities. The supporting activities’ role is to help improve the efficiency of the primary activities.

A SWOT analysis is a model that summaries the key issues from the business environment and the strategic capabilities of an organisation that are most likely to impact on strategy development. The model can also be used to create strategic options and set course for future actions. The aim when using the model is to identify the organisation’s strengths and weaknesses and also whether the organisation is capable of dealing with the external threats and opportunities of the market.

If the strategic capability of an organisation is to be understood, it is preferable that the SWOT -analysis is comparative. Best practice is if the strength, weaknesses, opportunities and threats of an organisation can be compared with competitors.

PESTEL is a framework to map macro aspects that influence the company. The name is an acronym of the six categories of which it consists. The categories are Political, Economical, Social, Technological, Environmental and Legal aspects. Further, key drivers of change and the differential impact of the six categories should be identified. In each market, one category or a combined effect of some categories are dominant in terms of making an impact, and these are defined as key drivers of change. The last step is to develop scenarios, which is especially helpful if the level of uncertainty is high.[1]

Principal-Agent theory has the purpose of establishing the most efficient contract between a principal and an agent. It has two main applications. The first one is to solve the agency problem, which arises when (a) the principal and the agent have different goals and (b) it is expensive for the principal to verify the agent’s actions. The second problem handles risk sharing, which is a consequence of the principal and the agent having different risk preferences.

Contracts can be either behavior based or outcome based. Which one is optimal depends on a number of factors, such as the degree of asymmetric information, the parties risk preferences, measurability of outcome, and programmability of the task performed.[2]

Conclusions
We have identified three key areas which today make a great impact and will most likely in the future make a major impact on the repair process. These areas need to be considered when looking at the future for CS and the repair process.

The first key area we have identified is flexibility. This is important in order to be able to respond to an even faster moving business environment in the future, which is one scenario from the PESTEL-analysis. A fast moving environment can easily change sales and/or the return rate. This results in increased or decreased repair volumes, which CS must be prepared to meet. Overcapacity will incur too high costs, while undercapacity can result in poor service and jeopardise the brand reputation.

Our second area in focus is the geographic location for repair centres, as this has a great effect on the repair process. These areas need to be considered when looking at the future for CS and the repair process.

Our last key area is the contract writing with the service centres. This is central since the terms in the contract strongly affect how the service partner will work, which of course directly relates to cost and quality of their output.
ALPHA BETA’s contracts with its service partners is outcome based, mainly since the characteristics of the task performed have low programmability. ALPHA BETA still collects information about the process, mainly through audits. This is a more common thing to do in a behavioral based contract, but ALPHA BETA uses the information to get a better base for setting the terms. There is of course also a cost related to the gaining of information, which needs to be put in relation to the profits from establishing a better contract.

Suggestions for future studies
Based on three focus points from our conclusion, we have worked out three suggestions for future studies within the repair process at ALPHA BETA.

Our first suggestion involves flexibility. As we have written before, ALPHA BETA is likely to face a situation where the market changes even quicker and they need to be even more flexible than today. Consequently, ALPHA BETA needs to be ahead of the market and focus on developing technology for more flexible repair.

Our second suggestion is to change repair to be on a global base. We have identified that freight costs and regulations might be more dominant in the future, but today, labor costs is still a very important factor. By consolidating volumes from the regions and have global repair in a country with low labor costs, for example China, costs could possibly be reduced. A big part of this investigation should cover how TAT can be reached in a global repair structure.

Our last suggestion aims to give ALPHA BETA more efficient contracts with the service partners. By comparing outputs from our service centres, ALPHA BETA could gain information that leads them to find success factors and findings about the characteristics of repair.

List of References