Analysis of Customer Processes in a Mining Company

Lucia Domaracká^{1,*} *Mária* Shejbalová Muchová¹, *Peter* Tauš¹, *Marcela* Taušová¹, and *Marián* Albert¹

¹ Faculty of Mining, Ecology, Process Control and Geotechnologies, Park Komenského 19, 0420 00 Košice, Slovakia

Abstract. The aim of the thesis was to analyze the customer processes in the company. With the help of PEST analysis we found out in which external environment the given company operates. We then analyzed the sales activities of our customers. The main outcome of this work was the elaboration of a SWOT analysis, which showed us the strengths and weaknesses of the company and also the opportunities and threats that come from its external environment. The result of the analyzes was a proposal in the form of a review of its status and recommendations for its further development in the sector under review, which could be adapted to its changes.

1 Customers and their importance for a mining company

Relationships between suppliers and customers form a fundamental relationship in the trading process in all areas. The strength and strength of these relationships are in many cases key elements for the success of both sides. Managing these relationships therefore encompasses all activities ranging from the flow of goods and services from suppliers to customers to coordinating and managing relevant information. [1]

The purchaser or customer is the most important factor of existence for the company. A satisfied customer does not seek competition and remains faithful to his company. An essential factor of a satisfied customer is his knowledge, relationship, needs, wishes, buying behavior and habits. All these factors must be known and fulfilled by the company for a "healthy" customer-to-business relationship. [2]

The company can have customers too much or just a few but of course, there is a professional approach to the services provided to the customer. Otherwise, the company behaves towards a corporate customer and otherwise for the end customer. Customer turnover also contributes to the company's approach to the customer, how much he devotes attention and effort. Customer relationships should not be maintained unless the customer brings profit to the company at any cost. Especially from an economic point of view, this does not make sense to society, with the exception of representative customers. [3]

^{*} Corresponding author: <u>lucia.domaracka@tuke.sk</u>

1.1 Customer Relationship

This process defines so-called relationship marketing that defines the creation, process, maintenance and expansion of customer relationships. This kind of marketing focuses on building customer relationships, marketing networks and defining customer relationship levels. [4]

Level of relationship with costumers according to Kotler:

· Basic - the company sells the product and no longer cares about it,

• Reactive - the seller sells the product and asks the customer to contact the company in case of problems

• Responsible - After selling the product, contact the customer to determine its satisfaction. The company is asking for feedback, or the product has met the requirements, which has not been met by the customer's requirements, thereby giving feedback on product improvement.

• Proactive - the seller contacts the customer for information about improvements or new products

• Partner - The company works with the customer on a regular basis to find out how it can improve its product to achieve a better value overall effect. [5]

1.2 Tools for creating stronger customer relationships and Customer Relationship Management

The essence of customer retention is its knowledge, needs and wishes. Marketing tools for value building for the customer were defined by three factors:

• value building through social benefits

• building value through financial benefits

• building value through structural links. [5]

CRM or Customer Relationship Management means customer relationship management. They represent the processes of communication, coordination, alignment and management of these processes. The main goal of CRM is satisfaction, long-term relationships and getting new contacts for new customers. The balance of business investment and customer satisfaction is another goal of relationship management. The optimum balance is at the satisfaction of both players and, in particular, the goal of maximizing the profit of both parties. The goal is to provide the organization with the benefits of process automation, marketing, customer service and its functions. [5]

The benefits of the CRM method are explained in the following distribution:

• One-stop marketing information (customer names and needs, market competitiveness)

Improved sales

· Increased productivity

• Increased customer care conditions. [5]

Customer Relationship Management will provide the company with better knowledge, customer needs, and customer behavior. The essence is quick feedback, analytical elaboration and use of this acquired information for effective customer interaction and various distribution and communication channels in order to provide the customer with the required values. [6, 7]

2 Analysis of customer-supply processes

We analyze a company that deals with the production of high-calcific and dolomite lime, high-percent limestone and ground limestone aggregates, which are part of various environmental, energy, steel and construction processes. The company currently operates in three plants Vápenka Košice, Vápenka Slavec and Závod Lomy. Each race is specific and unique, and it differs from each other by technology and production focus. Thanks to its access to customers, despite its high competition, the company is the market leader. The Slovak plants concentrate their business on the production of iron and steel, stationery, construction industry and chemistry. Manufacturing processes in the company are environmentally friendly and comply with all environmental protection requirements. [8]

In addressing the analysis of customer processes, we have chosen the following methodological procedures:

PEST analysis

• Customer Analysis

• SWOT analysis.

2.1 PEST analysis

2.1.1 Political environment

The political situation in 2019 is calm in Slovakia. The Slovak Republic is a stable member of the EU, OECD, Eurozone and these membership has a positive impact on several areas of business. In Slovakia, value added tax (VAT), which is 20%, is used to tax consumption. Another tax that the company must pay to the state is the corporate income tax, which is 21%. At present, a left-wing government is in power, with a particular emphasis on the socially weaker. Efforts to improve the business environment are noticeable, despite the considerable bureaucracy involved in the offices and the relatively high tax levy. It should be noted that Slovakia's environmental taxes are the lowest in the EU and, at the same time, workers' wages are lower than the EU average, which can be an advantage for businesses in this area.

At present, no reform is planned, which could fundamentally affect the company's mining business. However, it is necessary to monitor all amendments to the law, in the field of mining and environmental protection.

2.1.2 Economic environment

Currently, the Slovak Republic is at the peak of the economic cycle. The average unemployment rate was 5.04% in 2018, which is historically the lowest percentage since the SR was founded. Since 2014, unemployment in Slovakia has been declining, due to the inflow of foreign capital and the associated creation of new jobs. In the mining and quarrying industry, 6,232 people were employed in 2017, the least in the last five years in the industry. In 2017, an average of 232 people were employed in the company under review. Average unemployment in the Košice region, in which the company was operating in 2018 was 8.17%.

The average inflation rate, as measured by the consumer price index, was 2.5% in 2018 compared to the previous year. Gross domestic product amounted to CZK 88.6 billion. And a year-on-year change of 3.5%. The average nominal monthly wage in the mining and quarrying industry in 2017 was EUR 1 077, which is EUR 35 more than the industry

average wages. The overall tax burden was 39.2% in 2018, down 0.2 percentage point from 2018.

Revenues from own performances and goods in mining and quarrying amounted to 515,192 thou. EUR, an increase of 1.5% compared to 2016. Labor productivity in 2017 in the industry was EUR 82,666.43. All these data were drawn from the Statistical Office of the Slovak Republic. [9]

2.1.3 Social and cultural environment

Currently, 5,450,278 inhabitants live in the Slovak Republic, of which 2,660,944 are men and 2,789,334 are women. The average age of the population in Slovakia is 40.82 years. In 2018, 57,808 newborns were born and 54,293 people died. Nowadays, we can observe the trend of aging of the population, which we can explain as a loss of productive people. 7 253 people moved abroad from Slovakia last year and 7 188 people moved to Slovakia. In 2017, the net monetary monthly income of the household was EUR 455.83 and the household's net cash expenses were EUR 366.21. However, the composition of the population does not affect the company, as its main customers are large companies with whom they have contracts. Despite these facts, it is important to observe the aging of the population, as the skilled workforce in the mining and quarrying sector is dwindling and the new comes only sporadically.

2.1.4 Technological environment

The technological environment is linked to investment in innovation and science and research. In the field of mining and quarrying, there are many modern methods and equipment that put an emphasis on saving the environment. This issue is often discussed by both professional society and the media. The company has to spend considerable funds on the more environmentally friendly extraction and processing of mineral resources. Only in 2017 did the company invest less than 2 mil. EUR for renewal of production facilities and deducting facilities.

Expenditure on research and development reached 749 mil. EUR, which is 108.2 mil. EUR more. The expenditures of enterprises connected with innovations in the Slovak Republic, which operate in the area of mining and quarrying, reached the value of 7 971 thousand EUR.

2.1.5 Evaluation of PEST analysis

From the point of view of the political environment, we could say that the company does not have to expect any significant interventions in its business activities in the near future, but it must be prepared for various situations connected, for example, with the environment, as its business activity directly affects the country and the population living in its surroundings.

We could evaluate the economic environment as positive, as the economy in Slovakia is thriving and there is a lot of interest in the market, whether new employees, clients or foreign partners. The problem arises from the lack of skilled labor, as there are fewer educated workers in the mining and mining sectors. This problem can be solved systematically either by training new workers or by various training courses in the field, but it requires an initial investment.

The Košice Region, where the company operates, is located in the Technical University of Košice, which also includes the Mining Faculty, which produces several experts a year who are able to apply in the given company. This potential is to be complemented by high school graduates with a technical focus on lower jobs in the company.

In the future, an even greater inflow of capital into this area is expected, as production is increasingly optimized and adapted to modern trends. The robotics is also contributing to changes in the technological environment, resulting in more efficient production processes.

From the results of the PEST analysis, we can say that the environment in which the company operates is quite satisfactory, except for some negative areas that need to be accepted.

3 Customer Analysis

We analyzed internal documents when analyzing customers. From the analyzed information we learned some interesting facts from which it will be necessary to take appropriate measures such as:

• Sales of dolomite in tones for the period 2014 to 2018,

• Selling dolomite to customers, of which two are key customers

In the case of other customers, from the point of view of the importance to the company, we could say that they do not have such an impact on the company's operation, because their purchases do not play such a big role in the overall sales, but if we take them as a whole smaller customers then also significant in this business. Contribute. Year-on-year, there were no major changes in the customer field, some are stable every year, others are only one-time. The number of customers did not change dramatically, the company had the most customers in 2016, namely eighteen, while the lowest number in 2015 was twelve.

In the future, it would be desirable and desirable for the company to find other major customers in order to reduce its negative impact if one of the current major customers is lost. Diversifying a multitude of customers is very important in this kind of business, and society should not neglect it because in the future it may be in trouble.

3.1 Designing solutions to maintain a stable market position

When elaborating this analysis, we used both the company's internal documents and the PEST analysis prepared above. From each of the SWOT analysis areas, we have selected the three most important factors, which we then sorted into a matrix (see Table 1).

Strengths	Objectified Value	Weaknesses	Objectified Value
Stable market position	10	Insufficient marketing	15
Variety of products	24	Few major purchasers	10
Good location in the region	12	Worse traffic availability	18
Σ	46	Σ	43
Opportunities	Objectified Value	Threats	Objectified Value
Utilizing innovation in the industry	24	High tax payments	10
The influx of developers in the construction industry	15	Growing competition	12
Developing cooperation with new market players	10	Lack of skilled labo	24
Σ	49	Σ	46

Table 1. The resulting point evaluation of the SWOT analysis.

From the factors mentioned in the SWOT analysis matrix, we have drawn up a decision matrix in which objective values were the most important for us, the totals of which determined the strategy at the end of the SWOT analysis (see Table 1).

In our case, this means that the company should use the offensive strategy. From its internal point of view, strengths prevail over weaknesses and from outside, opportunities prevail over threats. The company has such an inner strength that it can take advantage of incoming opportunities on the market. Based on the results of the SWOT analysis, we can say that the company has internal assumptions to apply this offensive strategy to its further activities.

Compared to its competitors, the company has a long-standing stable market position and has enough opportunities for further growth. The diversity of its products contributes to this. The convenient location within the region is also one of its main assets. From these points, we could say that the company has a firm footing and an even more dominant market position can be built on these foundations.

However, in the future, it would be appropriate for an enterprise to eliminate its weaknesses, or at least to limit their negative impact on its further operations. The company should focus more on marketing and promoting its products, as this sphere has been evaluated as its weakness. At the same time, it would be desirable to find other major customers on the market and thus spread the risk of losses. It would be advisable to build a new access path for better customer access.

4 Conclusion

At present, we can observe a phenomenon in the whole territory of the Slovak Republic, when new buildings, apartment buildings, shopping centers, halls, stadiums and many other properties are being built at every corner. This fact is undeniable and therefore the company should take advantage of this market opportunity and reach out to construction company managers to acquire new customers [10, 11]. Developing innovations for more efficient mining is also one area where an enterprise could seize opportunities and outperform its competitors. At the same time, it is possible to catch new entrants and to develop cooperation with them [12, 13].

The threats from the external environment of the company are worth noting the lack of skilled workforce, as a number of experts in the sector are already in service and new experts are scarce, which could have a negative impact on the business in the future. At the same time, new companies are growing in the market, trying to get customers and this factor should not be underestimated because the company could lose some of its major customers. A high tax-paying burden is an external threat that a business cannot eliminate in any way, but must reckon with it.

To improve customer processes, we recommend that companies focus on improving their marketing activities. This includes improving customer communications and reaching new customers.

This study was funded by grant VEGA (scientific grant agency) No VEGA 1/0754/18

"Evaluation of geometric and topological properties of residential buildings to support the construction of smart cities" and KEGA 002TUKE-4/2017 "Innovative didactic methods of education process at university and their importance in increasing education mastership of teachers and development of student's competences."

References

- 1. Supplier-customer relations 2019. URL: http://dodavatelskoodberatelskevztahy.blogspot.com>
- 2. J. Veber, *Management* (Management Press, Praha, 2009)
- 3. *Processes in the supply chain*. URL: https://www.systemonline.cz/it-pro-logistiku/procesy-v-dodavatelskem-retezci.htm (2019)
- 4. Customers Customers. URL: https://www.managementmania.com (2019)>
- 5. P. Kotler, Moderní marketing (Grada publishing, Praha, 2007)
- 6. M. Grasseová, Analýza podniku v rukou manažéra (Computer press a.s., Brno, 2010)
- 7. M. Pilík, Prumyslový marketing (UTB Zlín, Praha, 2008)
- 8. Company Carmeuse 2019. URL: https://www.carmeuse.eu
- 9. *Statistical Office of the SR* 2019. URL: https://slovak.statistics.sk/wps/portal/ext/themes/demography
- 10. M. Cehlár, L. Domaracká, I. Šimko, M. Puzder, ESPM, 1, 39-43 (2015)
- 11. S. Khouri, K. Sandorova, M. Cehlar, K. Horansky, Transformations in Business and Economics, **16: 2B**, 638-655, (2017)
- L. Domaracká, M. Taušová, M.S. Muchová, I. Janočková, L. Bednárová, Acta Motanistica, 23:4, 390-401 (2018)
- M. Taušová, K. Čulková, L. Domaracká, C. Drebenstedt, M. S. Muchová, J. Koščo, A. Behúnová, M. Drevková, B. Benčöová, Acta Montanistica, 22:4, 359-367 (2017)