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THE USE OF QUALITY TOOLS FOR THE DETERMINATION OF MANAGEMENT STRATEGY FOR MICRO-ENTERPRISE

Summary. In the article the problems of micro-enterprises (1-5 persons) and small companies, which deal with selling retail and they must adapt to changes in the environment, which are caused by the large number of newly created large-format stores are presented. The paper shows how to use selected quality tools to define new business strategy for micro-enterprise and reorganization of the company.

Keywords: organization management, small business, quality tools.

ZASTOSOWANIE NARZĘDZI JAKOŚCI DLA OKREŚLANIA STRATEGII ZARZĄDZANIA DLA MIKROPRZEDSIĘBIORSTWA

Streszczenie. W artykule przedstawiono problemy mikroprzedsiębiorstw (1-5 osób) i małych przedsiębiorstw, które zajmują się sprzedażą detaliczną i muszą dostosować się do zmian w środowisku, spowodowanych przez dużą liczbę nowo powstałych sklepów wielkopowierzchniowych. W artykule przedstawiono sposób użycia wybranych narzędzi jakości w celu określenia nowej strategii biznesowej dla mikroprzedsiębiorstw i reorganizacji firmy.

Słowa kluczowe: zarządzanie organizacją, mikroprzedsiębiorstwa, narzędzia jakości.

1. Introduction

Micro-enterprises (1-5 persons) and small companies, which deal with selling retail, they must adapt to changes in the environment, which are caused by the large number of newly created large-format stores, which often offer products at promotional prices. Keeping up the market for small businesses are related to their continuous development and finding the so-

called “niche” areas in which they could gain a competitive advantage. To achieve goal it is necessary to develop a proper strategy. The first step is to identify the customer, the second step is to determine where and to whom the company will sell goods (products/services).

Subsequently the company must specify: the domain, the areas where the company wants to become a more attractive partner and an action plan, or strategic goals. The final step is to determine the functional action programs, designation of the times, methods, and persons responsible for the implementation of chosen strategy. In each area the company must specify the period of evaluation, evaluation criteria and budget of the project [1-3].

The aim of this paper is to show how to use selected quality tools to define new business strategy for “Vivo-Mark” company and reorganization of the company in order to survive on the market of growing competition.

2. Area and research methods

The study involved a one-man company Vivo-Mark conducting business activity, which specializes in retail and wholesale of fruit and vegetables. The company exists on the Polish market since 1994. The company sells mainly foreign fruits and seasonally national fruits. The condition of the company depends on the wholesale trade sector represented by micro-enterprises. After the great expansion of large-format stores, especially in the years 2000 - 2010 the company lost a large part of the customers who gave up a trade or changed the industry and suppliers. Customers who managed to survive in the market, they had significantly reduced trade turnover. In consequence the number of wholesale purchases at Vivo-Mark has been reduced. It was assumed that the reorganization of the Vivo-Mark company, its management system, extension of the selling offer an increase of the trade turnover, will help the company to survive on the market. To indicate the areas and directions of changes in company management Authors will define the strengths and weaknesses of micro-enterprise [4].

Analysis and evaluation of the company was based on methods [1-5]:

- PEST
- Porter's Five Forces Analysis
- SWOT analysis
- PARETO - LORENZO analysis - in order to “give validity” identified problems and their causes.

Results of research were the basis for the preparation for the restructuring plan of the company. Making changes, according to the plan will be based on Kaizen method [1, 5].

The final stage of the research was evaluation of changes. For this purpose compared the company's turnover for the respective periods before and after the changes.

3. Results

PEST analysis and the Porter's Five Forces analysis allowed to identify the impact of the environment on the company, and above all - let to identify competitiveness the company in the areas of - buyers, suppliers, competing organizations, new organizations and substitutes.

The Authors determined the risk unpredictable changes in legislation (unfavorable for micro enterprises), the collapse of smaller stores (potential customers), an increase in sales of substitutes, growing unemployment, crisis, impoverishment of society.

It was found that competition is not only stores and large-format wholesalers but also small housing estate stores. Some environmental solutions were considered as potential opportunities for the development of micro enterprises, including the possibility of micro-enterprises integration and franchises [2-3].

Authors noted the possibility of entering into other markets, particularly increasing of retail sales - delicatessen shops. The extension of the conducted analysis based on the SWOT method allowed on grouping all the defined areas into four categories. In this way was determined the strengths and weaknesses of the company, its opportunities and threats.

The results of the SWOT analysis also allowed to identify potential areas in which the company can gain a strategic advantage. Selected results are shown in table 1.

Table 1

SWOT analysis

Strengths	Weakness
<ul style="list-style-type: none"> - Company image - High level of service - Quick response to new trends - Strong group of regular customers 	<ul style="list-style-type: none"> - Small range of activities - Lack of brand promotion - Low price elasticity - Low flexibility of opening hours - Low investment funds
Opportunities	Threats
<ul style="list-style-type: none"> - Higher quality of goods - The strategy of diversification and rotation of goods - The focus strategy - Pricing - Integration, mergers, franchises - Access to new markets - delicatessen shops 	<ul style="list-style-type: none"> - Increasing competition in local stores - Rising unemployment - impoverishment of the company - Adverse legislative and system solutions - Convenience shopping in large format stores (parking, wide assortment and services at one point)

Source: M. Popławski: Wpływ rosnącej ilości sklepów wielkopowierzchniowych na funkcjonowanie małych firm, na przykładzie firmy Vivo-Mark; promotor pracy: B. Szczucka-Lasota, Katowice, WSZOP, 2011.

Analysis of strengths and weaknesses, opportunities and threats, allowed developing a restructuring plan for the company. The plan includes the extension of working hours, expanding the assortment of offered goods, new investments, as well as an increase in

employment. Additionally, the company has decided to promote the brand - via web site and Internet advertisements and an agreement with a specialist in this field. For all the changes, timeliness of execution is responsible the business owner.

Changes required the development of appropriate methods and financial expenditure, related to e.g. with the purchase of a van, employment and training of new employees, increase of warehouse space. The restructuring also included inventory management.

Part of the responsibility for maintenance of inventory was transferred to their own suppliers, which minimized cost of their maintenance. Own stocks were limited to a minimum. The restructuring plan is shown in table 2.

Implementation of all of the changes was scheduled for two years (February 2009-February 2011). For introduction of each change was foreseen 3 months period.

In table 2 is presented the order of introduced changes. It was assumed that any change requires adequate time for reorganization of working time, elimination of unforeseen problems and barriers and comparison of turnover from the previous year.

It was assumed that the company should not apply BPR strategy (re-engineering) and the changes should occur slowly, one after another. BPR strategy was considered as "safer". This strategy makes it easier to identify problems and possible irregularities or "find" the wrong decisions.

Table 2

Restructuring plan for micro-enterprise

No. of change	Change	Implementation period [in month]	Method	Responsible person
1	Changing working hours (time extension)	1-3	Organization of working time	Owner
2	New range of products	4-6	Selection of assortment, price negotiations	Owner
3	New offer - "product creation"	7-9	Price regulation of selected products	Owner - supervision Employee - execution
4	Goods in lower prices	10-13	Selection of assortment, price negotiations	Owner - supervision Employee - execution
5	Changing purchasing strategy	14-16	Selection of assortment, price negotiations	Owner
6	Sale of exotic fruits	17-18	Selection of assortment, price negotiations getting a loan and construction of additional warehouse	Owner

cont. table 2

7	Delivering the goods to customer's selling point	19-21	Buying a car, obtaining grants, employment sales representative as a driver	Owner - supervision New employee - development
8	Internet sales	22-24	Development of a web page. Preparation of offers	Owner - supervision Specialist Website
9	Offering seasonal products	25-28	Selection of assortment, price negotiations	Owner

Source: M. Popławski: Wpływ rosnącej ilości sklepów wielkopowierzchniowych na funkcjonowanie małych firm na przykładzie firmy Vivo-Mark; promotor pracy: B. Szczucka-Lasota, Katowice, WSZOP, 2011.

4. Evaluation of introduced change and their analysis

An evaluation of the impact of introduced changes on the company activities. In the article was estimated the impact of changes on the company activities. Authors calculated the approximate value of growth in turnover after "change". This value was compared with the company's turnover in the corresponding period of time before "change". In calculations for each month were taken into account the number of days off during the period.

Formula used for the calculations:

$$C = B - A - (C_1 + C_{2...} + C_n) \quad (1)$$

where:

C - reached an increase in turnover in the three-month study period [PLN]

A - turnover before "change" [PLN]

B - turnover after "change" [PLN]

The results presented in Table 3 show an increase or decrease in company's turnover. The calculations were made on the basis of microenterprise accounting data [4].

Table 3

Estimated turnover for next restructuring periods

No. of change (according to table 2)	A Turnover before "change"	B Turnover after "change" -in the corresponding period	C Estimated growth in turnover
1	10000	110000	10000
2	108000	140000	22000
3	110000	148000	6000
4	115000	155000	2000
5	115000	161000	6000
6	120000	190000	24000
7	125000	227000	32000
8	130000	240000	8000
9	140000	265000	15000
Total:			125000

Source: M. Popławski: Wpływ rosnącej ilości sklepów wielkopowierzchniowych na funkcjonowanie małych firm na przykładzie firmy Vivo-Mark; promotor pracy: B. Szczucka-Lasota, Katowice, WSZOP, 2011.

The results presented in table 3 clearly indicate that the introduced changes have contributed to the growth in company's turnover. The percentage share of individual changes in the growth of turnover is shown in diagram (Fig. 1).

The share of introduced changes in company's turnover is shown in chart (Fig. 2).

In addition, Authors carried Pareto-Lorenzo analysis to determine which changes have brought the greatest benefits for the company (Fig. 2). Almost 80% growth in turnover the company was achieved as result of four changes:

- Extending the offer of seasonal products (growth in turnover by 26%)
- Internet sales (growth in turnover by 19%)
- Delivering the goods to customer's selling point (growth in turnover by 18%)
- Sales of exotic fruits (growth in turnover by 12%)

It should be underlined that the profit for the company should be considered in years and it is not equal to the increase of sales. Extending the assortment, delivering the goods to customer's selling point require investment, such as: enlargement of warehouse space, buying a car and driver's employment. Almost all company profits were used on repayments of loans, operating costs and salaries. Only Internet sale allowed to find new customers and profits exceeded the costs of advertising, shipment and website design.

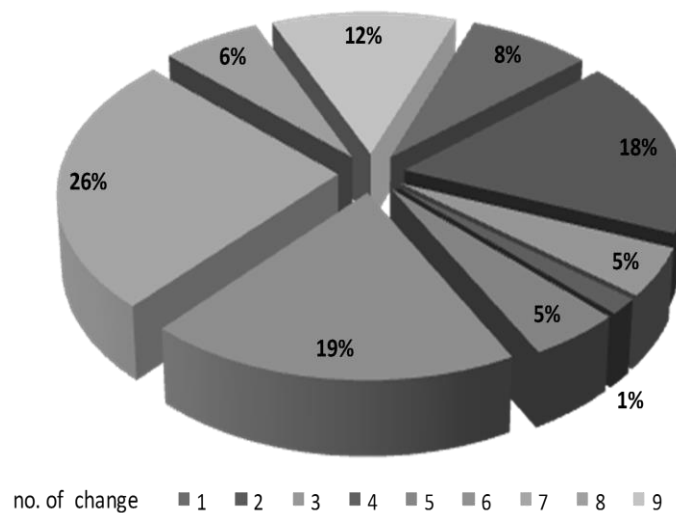


Fig. 1. The percentage share of individual changes in the growth in company's turnover (no. of change according to table 2)

Rys. 1. Procentowy udział poszczególnych zmian wzrostu obrotów firmy (numer zmiany zgodny z tablicą 2)

Source: Author's own work.

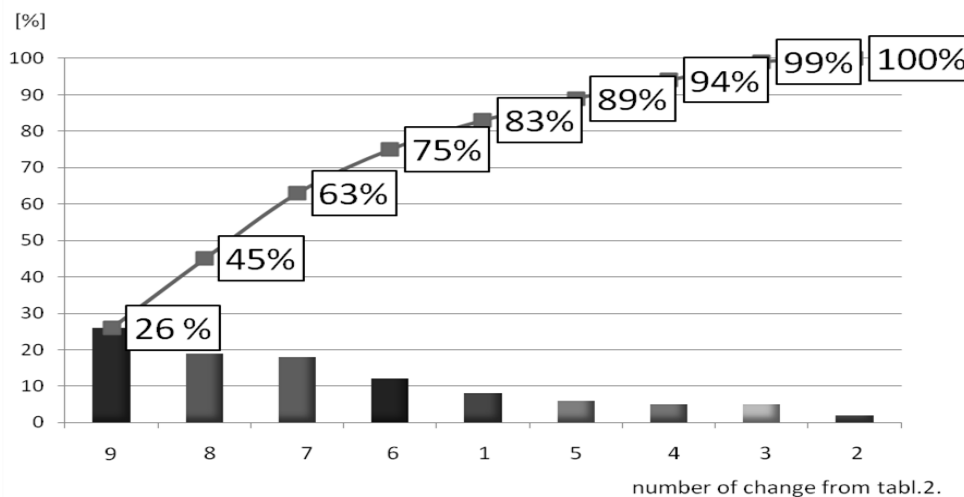


Fig. 2. Pareto-Lorenzo chart

Rys. 2. Wykres Pareto-Lorenza

Source: Author's own work.

5. Summary

Well-chosen and applied quality tools can be used to determine the management strategy for micro-enterprise. Applied quality tools made it possible to develop an effective plan for the restructuring of micro-enterprises.

The company's sales increased, there was no chaos in the company. Effects of activity can be easily evaluated, choosing those, which contributed the most to the increase in turnover.

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Omówienie

W artykule przedstawiono problemy mikroprzedsiębiorstw (1-5 osób) i małych przedsiębiorstw, które zajmują się sprzedażą detaliczną i muszą dostosować się do zmian w środowisku, spowodowanych przez dużą liczbę nowo powstałych sklepów wielkopowierzchniowych. W artykule przedstawiono sposób użycia wybranych narzędzi jakości w celu określenia nowej strategii biznesowej dla mikroprzedsiębiorstw i reorganizacji firmy. Przeprowadzone badania dotyczyły firmy „Vivo-Mark”. Część wyników uzyskano w ramach pracy badawczej dyplomowej pt.: „Wpływ rosnącej ilości sklepów wielkopowierzchniowych na funkcjonowanie małych firm na przykładzie firmy Vivo-Mark”, realizowanej w Wyższej Szkole Zarządzania Ochrona Pracy.