THE SWOT-TOWS ANALYSIS AS A TOOL FOR QUALITY MANAGEMENT FOR AN ENTERPRISE WITH PKD 85.59B – EXTRACURRICULAR FORMS OF EDUCATION

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Purpose: The aim of the article is to present the practical application of the SWOT-TOWS analysis in assessing the prospects of starting a business in the field of extracurricular forms of education.

Design/methodology/approach: The research includes the identification of factors of the internal and external environment for a company operating on the market for a year in the field of extracurricular forms of education in accordance with the classification of the selected research method and based on observation, calculation of standard and additional links and, based on the resulting strategy, making decisions on quality management.

Findings: The analysis of the links between the factors of the internal and external environment indicated that in the case of an enterprise in the education industry, a competitive strategy should be adopted in terms of quality management, which means currently favorable external conditions for this type of activity, the use of which will enable the reduction of weaknesses. The focus should be on a high level of quality at the core of the service - in the learning process.

Research limitations/implications: The presented research results may be the basis for further research in the field of quality management in enterprises from the analyzed sector.

Practical implications: The presented analysis can be successfully used by entrepreneurs conducting a similar type of business activity and by people analyzing the education market both in terms of business and science.

Originality/value: Simultaneous use of the SWOT-TOWS analysis with other analytical tools may allow for effective market analysis by economists and may facilitate quality management for business practitioners.

Keywords: market analysis, SWOT-TOWS analysis, quality management.

Category of the paper: research paper, case study.

1. Introduction

Recent years have been a challenge for people running their own business. The COVID-19 pandemic, the war in Ukraine, the rapid increase in inflation, the legal changes directly or indirectly related to these events and the increase in business costs caused significant changes in the structure of the domestic market. A situation worthy of scientific attention concerns the sector of educational services. As PKD 85.59B there are registered enterprises providing "other extracurricular forms of education, not classified elsewhere". This part of the list includes enterprises providing services supporting education, mainly additional classes and tutoring. Online platforms have been informing about the growing potential of this type of business (mainly due to the low quality of home education, changes in the core curriculum and the busy lifestyle of modern parents), which means a growing supply. A multitude of advertisements has been identified on the Internet, and individual offers differ in many features that make it difficult to compare them. Referring the theory of management and economics to this sector, the issues of quality management are worth considering as one of the important factors supporting the success of enterprises (Chen et al., 2022; Chudziński et al., 2022).

Quality management is a concept currently treated as interdisciplinary. Its individual issues are an area of interest and require knowledge from various fields of science. For example, quality planning is an area of management, marketing and sociology, which is also an element of motivation and communication. The contribution of economics (resources), statistics (assessment), accounting (costs), law (standards) and many others is also distinguished, which contributes to the various definitions of the indicated concept (Mantura, 2012; Sridevi, 2021).

The technical definition contained in the ISO standard defines quality management as coordinated activities in the field of managing an organization in terms of quality. They can be characterized in a slightly broader way as managerial activities undertaken in relation to quality issues, consisting in setting objectives in its scope and through the use of management functions, achieving them in an efficient manner. The managerial activity in this area is derived from a planned and organized management system, the purpose of which is to meet specific quality requirements. It is the performance of specific management functions in a purposeful manner, taking into account the optimization of the use of the organization's resources, focused on obtaining high-quality goods that will be subject to continuous improvement (Bieńkowska, Zabłocka-Kluczka, 2005; Rogala, 2014).

Quality management functions also include improvement as the last, constantly iterative step. Continuous improvement is an inseparable element of quality management, which has been emphasized by authorities dealing with this issue for many years, according to the assumption that higher quality can always be achieved, and perfection does not exist (Maldonado et al., 2020; Schiavone et al., 2023).

The research gap made it possible to indicate an area worth attention. The study presents the use of the SWOT-TOWS analysis for quality management in the enterprise from the education sector.

2. Methodology of research

The SWOT-TOWS analysis is perceived as one of the most basic and prevaled method with a fairly undocumented history that is used in diffetent areas of management. Its name is an acronym of internal (strengths and weaknesses) and external (opportunities and threats) factors of enterprise's environment that are analyzed (Nasreen, Afzal, 2020; Puyt et al., 2023). The objective of this method is to choose the most matching strategy which enables enterprises to function and develop in the currently difficult market conditions (Büyüközkan, Ilıcak, 2019; Harris, 2018).

In accordance with the theoretical assumptions of the chosen research method, the first step is to identify the factors and classify them to the listed dimensions. Then, the researcher assigns a weight to each factor based on his knowledge, and the sum of the weights in each dimension is 1 (Kowalik, 2020; Panteleiev, 2023).

The next step is to identify, usually in a tabular form, the links between the individual factors listed in the four presented areas. In this part of study, the classic form of identifying dependencies (1) or no dependencies (0) was chosen. Each table contains the calculated number of interactions and the weighted value of interactions between individual factors as well as the total number and weighted value of interactions for a given association. In each table there is also a rank, where 1 is the most important, and 5 - the least significant factor (Brycht, Ulewicz, 2023).

The results from all tables, summed up in the appropriate dependency areas, by identifying the highest number of interactions and the highest weighted value, indicate one of four strategies: aggressive (recommends taking advantage of opportunities using strong points - means a favorable internal and external environment, enables expansion and development), conservative strategy (means that the company has many advantages and using them it can reduce the risk resulting from many threats in the environment), competitive strategy (overcomes weaknesses by using the opportunities) and defensive strategy (means an unfavorable situation of the company and the environment, requiring further analyzes and actions for minimizing weaknesses and avoiding the threats) (Gurel, Tat, 2017; King et al., 2023).

The SWOT factors with their weights are presented in Table 1.

Table 1.

SWOT factors with the weights

S	Strengths	Weight	W	Weaknesses	Weight
S1	competences- knowledge of fields (Maths and English), pedagogical training, studies in the field of management	0,25	W1	a multitude of advertisements for tutoring- competition, lack of recognition	0,25
S2	knowledge transfer skills, good approach to students	0,2	W2	lack of possibility to work full-time (8 hours a day) - provision of services only in the afternoons	0,15
S3	knowgledge of the core curriculum and current requirements of CKE for primary school final exam and matura exam	0,15	W3	seasonal demand for tutoring - limited earning opportunities during the holiday months	0,2
S4	classroom in the city center, stationary classes, good access from every district	0,2	W4	little experience in registered business activity - 1 year	0,15
S5	base of current students, good references from graduates, good opinions among parents	0,2	W5	relatively high prices of lessons	0,25
O	Opportunities	Weight	T	Threats	Weight
O1	growing student base through advertising and experience	0,3	T1	increase in competition and saturation of the local market with tutors	0,2
O2	introduction of new social benefits for students for education	0,2	T2	increase in business fees	0,25
O3	more and more busy parents and lack of time - growing popularity of tutoring	0,2	T3	increase in advantage of the advantages of working full-time in another place over the difficulties of running your own business	0,15
O4	increase in requirements for teachers in schools - overloading with material resulting in limited time for processing a given material	0,15	T4	declining financial status preventing parents from paying for private lessons	0,2
O5	new skills - expanding competences and business development with new teaching subjects as part of self-improvement	0,15	T5	decreasing profitability – lack of possibility to raise prices to compensate for inflation and increase in costs	0,2

Source: own study.

3. Results and discussion

The results of the SWOT analysis are presented in Tables 2-5. In the first part of the study, analyzed links answer the following questions: whether a specific strength allows the use of a given opportunity (Table 2), whether a specific strength limits the threat (Table 3), whether a specific weakness limits the possibility of taking advantage of an opportunity (Table 4) and whether a specific weakness magnifies the threat (Table 5).

Table 2.
Dependence strengths/opportunities

S/O	O1	O2	O3	O4	O5	Weight	Number of interactions	Interaction weighted value	Rank
S1	1	1	1	1	1	0,25	5	1,25	1
S2	1	1	1	1	1	0,2	5	1	2
S3	1	0	1	1	0	0,15	3	0,45	5
S4	1	0	1	1	0	0,2	3	0,6	4
S5	1	1	1	1	0	0,2	4	0,8	3
Weight	0,3	0,2	0,2	0,15	0,15				
Number of interactions	5	3	5	5	2		**40**		
Interaction weighted value	1,5	0,6	1	0,75	0,3			**8,25**	
Rank	1	4	2	3	5				

Source: own study.

Table 3.
Dependence strengths/threats

S/T	T1	T2	T3	T4	T5	Weight	Number of interactions	Interaction weighted value	Rank
S1	1	0	0	0	1	0,25	2	0,5	1
S2	1	0	0	0	0	0,2	1	0,2	3
S3	1	0	0	0	0	0,15	1	0,15	5
S4	1	0	0	0	0	0,2	1	0,2	3
S5	1	0	0	1	0	0,2	2	0,4	2
Weight	0,2	0,25	0,15	0,2	0,2				
Number of interactions	5	0	0	1	1		**14**		
Interaction weighted value	1	0	0	0,2	0,2			**2,85**	
Rank	1	4	4	2	2				

Source: own study.

Table 4.
Dependence weaknesses/opportunities

W/O	O1	O2	O3	O4	O5	Weight	Number of interactions	Interaction weighted value	Rank
W1	1	1	1	1	1	0,25	5	1,25	1
W2	1	1	1	1	1	0,15	5	0,75	3
W3	0	0	0	0	0	0,2	0	0	5
W4	1	0	0	0	0	0,15	1	0,15	4
W5	1	1	1	1	1	0,25	5	1,25	1
Weight	0,3	0,2	0,2	0,15	0,15				
Number of interactions	4	3	3	3	3		**32**		
Interaction weighted value	1,2	0,6	0,6	0,45	0,45			**6,7**	
Rank	1	2	2	4	4				

Source: own study.

Table 5.

Dependence weaknesses/threats

W/T	T1	T2	T3	T4	T5	Weight	Number of interactions	Interaction weighted value	Rank
W1	1	0	0	0	0	0,25	1	0,25	5
W2	1	0	1	0	1	0,15	3	0,45	3
W3	1	0	1	0	1	0,2	3	0,6	2
W4	1	1	0	0	1	0,15	3	0,45	3
W5	1	1	0	0	1	0,25	3	0,75	1
Weight	0,2	0,25	0,15	0,2	0,2				
Number of interactions	5	2	2	0	4		**26**		
Interaction weighted value	1	0,5	0,3	0	0,8			**5,1**	
Rank	1	3	4	5	2				

Source: own study.

The table presenting dependence between strengths and opportunities shows worth noticing results. According to the number of interaction, the most important strengths are comptences and knowledge transfer skills, the most important opportunities: growing students base, growing popularity of tutoring and overloading with school material. It should also be mentioned that there are as many as five maximum number of connections between factors that resulting in high total number of interaction (40), and high interaction weighted value (8,25).

These results indicate that the strengths will allow the use of opportunities emerging in the external environment on many levels.

The table containing the analysis of links between strengths and threats shows a low number of interactions (14) and interaction weighed value (2.85). The maximum number of links in one line is 2, also lines without the possibility of linking have been identified. This is due to the fact that most of the company's strengths relate to the person of the tutor, and the threats to the economic, mainly financial aspects of running a business. The T1 threat should be distinguished - increase in competition and saturation of the local market with tutors, which can be largely mitigated because each strength weakens it.

This means that threats from the external environment are located in other areas of activity and the strengths within companies allow them to be minimized to a very small extent.

The number of interactions between weaknesses and opportunities is relatively high (32), as is the weighted value (6.7) - slightly lower than in Table 2. This table is distinguished by extremes in interactions - a specific weakness either reduces the possibility of using all opportunities simultaneously, or does not affect any of them or one of them. Weaknesses that should be removed in the first place are: lack of recognition due to high competition, limited hours of service provision and price of services because most opportunities are related to customer growth, and these factors indicate why a potential customer may choose a competitive offer.

The table showing the relation between weaknesses and threats (Table 5) ranks third among the number (26) and the weighted value (5.1) of dependencies. This means that the weaknesses of the analyzed enterprise slightly increase the risk of potential threats to the company. Almost every weakness (except the first one - W1) affects the three identified threats. The weighted values also do not differ significantly from each other. This is not a table that contains critical information in the SWOT analysis.

Supplementary SWOT analysis - part of TOWS is included in Tables 6-9. They present an analysis of associations as part of the answers to the questions: does a given opportunity emphasize a strength (Table 6), does a threat weaken a strength (Table 7), does an opportunity reduce a weakness (Table 8) and does a threat develop a weakness (Table 9).

Table 6.
Dependence opportunities/strengths

O/S	S1	S2	S3	S4	S5	Weight	Number of interactions	Interaction weighted value	Rank
O1	0	1	1	0	1	0,3	3	0,9	1
O2	0	0	0	0	1	0,2	1	0,2	5
O3	0	1	1	0	1	0,2	3	0,6	2
O4	0	1	1	0	1	0,15	3	0,45	4
O5	1	1	1	0	1	0,15	4	0,6	2
Weight	0,25	0,2	0,15	0,2	0,2				
Number of interactions	1	4	4	0	5		26		
Interaction weighted value	0,25	0,8	0,6	0	1			5,4	
Rank	4	2	3	5	1				

Source: own study.

Table 7.
Dependence threats/strengths

T/S	S1	S2	S3	S4	S5	Weight	Number of interactions	Interaction weighted value	Rank
T1	0	1	1	0	1	0,2	3	0,6	2
T2	0	0	0	0	1	0,25	1	0,25	4
T3	0	0	0	0	1	0,15	1	0,15	5
T4	0	1	1	1	1	0,2	4	0,8	1
T5	0	0	0	1	1	0,2	2	0,4	3
Weight	0,25	0,2	0,15	0,2	0,2				
Number of interactions	0	2	2	2	5		22		
Interaction weighted value	0	0,4	0,3	0,4	1			4,3	
Rank	5	2	4	2	1				

Source: own study.

Table 8.
Dependence opportunities/weaknesses

O/W	W1	W2	W3	W4	W5	Weight	Number of interactions	Interaction weighted value	Rank
O1	1	0	1	1	1	0,3	4	1,2	1
O2	1	1	1	1	1	0,2	5	1	2
O3	1	1	1	1	1	0,2	5	1	2
O4	1	1	1	1	1	0,15	5	0,75	4
O5	1	1	1	0	1	0,15	4	0,6	5
Weight	0,25	0,15	0,2	0,15	0,25				
Number of interactions	5	4	5	4	5		46		
Interaction weighted value	1,25	0,6	1	0,6	1,25			9,25	
Rank	1	4	3	4	1				

Source: own study.

Table 9.
Dependence threats/weaknesses

T/W	W1	W2	W3	W4	W5	Weight	Number of interactions	Interaction weighted value	Rank
T1	1	1	1	0	0	0,2	3	0,6	1
T2	1	0	0	0	1	0,25	2	0,5	2
T3	1	0	1	1	0	0,15	3	0,45	3
T4	0	0	0	0	1	0,2	1	0,2	5
T5	1	0	0	0	1	0,2	2	0,4	4
Weight	0,25	0,15	0,2	0,15	0,25				
Number of interactions	4	1	2	1	3		22		
Interaction weighted value	1	0,15	0,4	0,15	0,75			4,6	
Rank	1	4	3	4	2				

Source: own study.

The analysis of the impact of opportunities to highlight strengths (Table 6) indicated a fairly high number of interactions (26) and a relatively high weighted value (5.4). It is worth noting that these figures are lower than in the case of the reverse analysis of the links between these two areas and lower than the relation between weaknesses and opportunities. Three strengths (S2, S3, S5 - knowledge transfer skills, knowledge of the core curriculum, base of current students and good opinions among parents) are relatively susceptible to the influence of opportunities, unlike the other two (S1, S4 - tutor competences and place and nature of activities), which cannot be strengthened with the use of potential opportunities.

The table showing the impact of threats on the weakening of strengths contains relatively lower numbers than the previous table. The number of identified interactions is 22, and the weighted value is 4.3. It is worth noting that the strong point S5 - the base of current students and good opinions among parents - is very susceptible to both opportunities and threats in the environment. This means that this strength is not stable in terms of the impact of the external environment, and as it relates directly to customers, it requires special attention.

The most interesting results are included in the table showing the relationship between opportunities and weaknesses. The highest number of interactions (46) and the highest weighted value (9.25) are presented there. This means that weaknesses are strongly susceptible to reduction by taking advantage of the opportunities that appear in the environment. The external environment is conducive to improving the internal conditions of the company.

Table 10 summarizes the SWOT-TOWS analysis is presented below.

Table 10.
Dependence threats/weaknesses

	Opportunities	Threats
Strengths	*Aggressive strategy*	*Conservative strategy*
	Number of interactions 66	Number of interactions 36
	Interaction weighed value 13,65	Interaction weighed value 7,15
Weaknesses	*Competitive strategy*	*Defensive strategy*
	Number of interactions 78	Number of interactions 48
	Interaction weighed value 15,95	Interaction weighed value 9,4

Source: own study.

The table shows that the analyzed company should follow the recommendations of the competitive strategy. The highest number of interactions (78) and the highest interaction weighed value (15,95) occur between opportunities and weaknesses, which definitely points to this strategy. According to the assumptions of the strategy, weaknesses should be reduced and opportunities should be exploited. This means that the internal environment of the company requires analysis and improvement, and the external environment is favorable for this business. The most important weaknesses are a multitude of advertisements for tutoring-competition, lack of recognition and relatively high prices of lessons which are at the same time the most susceptible to the influence of opportunities. The most important opportunity is growing student base through advertising and experience, the most ranked: growing student base through advertising and experience, introduction of new social benefits for students for education and growing popularity of tutoring. All opportunities are related to acquiring new customers.

4. Conclusions

The presented article analyzes the issue of quality management in a selected service company from the education industry using the SWOT-TOWS analysis. This analysis made it possible to indicate the general strategy of action - directions and main areas in which it is worth taking action in the field of quality management based on the conditions of the external and internal environment.

The SWOT analysis of the selected company indicated that activities in the field of GDP 85.59B - extracullicular form of education, including tutoring, in the current market conditions are in a favorable external environment. In this environment, significant and exploitable opportunities as well as relatively harmless threats have been identified. Due to the fact that the analyzed enterprise has been run for a short time, the internal aspects point to the advantage of weaknesses over strengths. Competences, knowledge and features of a tutor as the main core of strengths, thanks to the use of opportunities related to the acquisition and retention of new students, can reduce the strength of the price of classes and the disadvantages resulting from this type of activity, such as seasonality and time-limited opportunities to provide services.

To sum up, the analyzed company should focus in the near future on maintaining the highest possible level of quality of services provided - tutoring, which will allow to maintain prices considered relatively high without customer resignation and to regulate quite high fees related to running a business and thanks to recommendations, loyalty and good opinion among parents and students will help attract new customers. This confirms the theoretical assumptions of quality management, according to which in service enterprises quality is shaped mainly in the process of providing the service through the interaction of the client-employee-enterprise, and technical conditions are its additional factors. This article can be the basis for further research in the field of quality management in enterprises from the educational services industry and the basis for a more thorough quality analysis using the methods and tools in question for a deeper study of quality in a chosen enterprise.

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