

## AN INTEGRATED MODEL OF CORPORATE ENVIRONMENT, INCLUDING VALUE CHAIN, AS A COMPETITIVENESS TOOL FOR SMALL AND MEDIUM ENTERPRISES

Straková J., Talíř M., Kollmann J., Pártlová P., Váchal J.\*

**Abstract:** This contribution presents a new approach to corporate environment which uses an integrated model as a tool to achieve competitiveness of enterprises with a focus on small and medium enterprises. According to our search in local and international literature, corporate environment defined in this manner, including an analysis of value chain, in order to formulate a business strategy, has not been yet investigated in any study. Our testing group consisted of 373 small and medium enterprises. Our solution utilized methods of dimensional reduction and gradual regression analysis. The objective of our research was to analyze significance of components of the corporate environment (micro environment, mezzo environment and macro environment) and of the value chain from the viewpoint of their effects on profitability of enterprises. We have demonstrated an irreplaceable role of internal sources depending on the mezzo environment.

**Key words:** integrated model, corporate environment, value chain, competitiveness, business strategy

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### Introduction

One of the cornerstones of corporate architecture is the corporate environment. It is the very corporate environment which, as a result of changes that occur in it, creates a true basis for creation and continuation of the management paradigm and it also brings up questions associated with management of enterprises in periods of chaos or in periods of previously unspecified phenomena and events. Regardless of the size and sector differentiation of companies, in each business entity it is possible to define its three basic components, specifically its micro environment, mezzo environment and its general macro environment. The scientific community generally recognizes importance of the corporate environment for development and stability of the enterprise, strategic management and decision making. However, there is a substantial lack of agreement when it comes to how the corporate environment and its components should be analyzed and how the outputs should be used in corporate practice. The opinion prevailing in the past century was that the

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\* **doc. Ing. Jarmila Straková, Ph.D., Bc. Milan Talíř, Bc. Jaroslav Kollmann, Ing. Petra Pártlová, Ph.D., prof. Ing. Jan Váchal, CSc.**, Institute of Technology and Business in České Budějovice, Department of Management.

✉ corresponding author: strakova@mail.vstecb.cz;

✉ talir@mail.vstecb.cz; kollmann@mail.vstecb.cz; partlova@mail.vstecb.cz;  
vachal@mail.vstecb.cz

analysis of the corporate environment should use the method of strategic situation analysis. An extensive survey conducted by the authors of this article among more than 600 enterprises from all over the Czech Republic in 2016-2019 has proved that the corporate sphere has been abandoning the method. This finding was the main motivation which accelerated preparation of this article and definition of our research objectives. Based on the current state of knowledge we have defined the following areas to be addressed: We want to propose a model of corporate environment, including value chain, in a form allowing its analysis as a system made up of three relatively independent components. With regard to the identified situation in utilization of methods of strategic situation analysis, our next objective was to identify a suitable analytical tool which would make it possible to define and to analyze individual components of corporate environment in its integrity and, at the same time, to analyze both the current status and to predict the future one. One can expect that if we can predict future development of the corporate environment and significance of individual activities in the value chain we will be able to formulate a realistic business strategy which will ensure stability, development, competitiveness and sustainability of the enterprise (Szczepańska-Woszczyzna and Kurowska-Pysz, 2016). Our research was conducted on a group of small and medium enterprises (SME), as defined by the Directive of the European Parliament and of the Council 2013/34/EU. The limiting values were the balance sheet total, net sales and the average number of employees, respectively (small enterprises: 4 mil. EUR, 8 mil. EUR and up to 50 employees, medium enterprise: 20 mil. EUR, 40 mil. EUR and up to 250 employees).

### Literature review

There are many different approaches when it comes to interpretation and categorization of corporate environment. Most foreign authors (Frynas and Mellahi, 2011; Gomes, 2011; Ginter, Duncan and Swayne, 2013; Kovács et al., 2007; Glodowska et al., 2016) describe corporate environment with two basic components, specifically internal and external, while the external environment is further structured into the so-called micro environment (specific or industrial environment) and macro environment. Saragih et al. (2017), as well as the authors of this article (Straková et al., 2018) speak of three basic components – micro environment, mezzo environment and macro environment. Other authors describe corporate environment from the national and international (or global) viewpoints (Malach et al., 2005; Cselényi et al. 2005; Wetherly and Otter, 2018; Chen, Kan, Wu, Zheng, 2020). Methods for evaluation of macro environment and mezzo environment were studied by Worthington and Britton (2010), Murray-Webster and Williams (2010). Internal environment was also analyzed by Capon (2009), Jain, Trehan and Trehan (2014). Caiazza et al. (2015) and Wessels et al. (2007) believe that knowledge of internal sources is the biggest source of a sustainable competitive advantage which strengthens position of a company among its competitors. The importance of the internal analysis has been also emphasized by

Hiriyappa (2008), Evans, Campbell and Stonehouse (2011) as it enables to outline a realistic organizational framework for the enterprise.

The definition of competitiveness is not unambiguous and there is no clear agreement about this concept (Balkyte and Tvaronavičiene 2010, Adamik, Nowicki, Szymańska, 2018; Ignasiak-Szulc, Juscius, Jelena, 2018). The definition of competitiveness requires an adequate interpretation and quantitative assessment (Rutkauskas, 2008). Michael Porter has formulated a revolutionary definition and understanding of the competitiveness concept in an enterprise, and particularly of competitive advantage and approaches to competition, when he stated that the essence of competition was not to beat competitors but to offer a unique value to the customer (Magretta, 2012). Competitiveness can be described as the ability to compete on markets of goods or services, i.e. with a combination of price and quality (Spirig, 2006; Balkyte and Tvaronavičiene 2010; Kot, 2018).

In the last third of the past century corporate environment was classified as discontinuous, turbulent or even chaotic. A truly scientific basis to deal with the situation is a new scientific theory for definition of competitiveness of an enterprise (Porter, 2012, 2015). The author uses the assumption that strategy and competitiveness of an enterprise does not depend on the ability to predict changes but rather on knowledge of customers' needs. The authors of this article agree with this opinion. Similarly as Porter, the authors of this article believe that the theoretical basis for achievement of competitiveness in an enterprise is the value chain in close integration with other components of the corporate environment, particularly the mezzo environment and internal corporate resources (the micro environment). An analysis of value chain is a tool to understand activities that create the value of the enterprise. The analysis helps the companies to identify their position and to analyze activities in the value chain, as well as to eliminate activities which do not bring added value to a product or service (Feller et al., 2006; Zokaei a Simons; 2006; Hill & Jones, 2009; Putri and Harsanto, 2016; Duric, Todorovic, Dordevic, Tisma, 2019). With regard to its nature the tool for the analysis of value chain is used particularly to analyze sources of competitive advantage. In specialized literature more and more different opinions can be found about the definition of value chain, its structure and framework, as well as its analysis. Value chains include all production factors, such as soil, labor, capital, technologies and inputs, as well as all economic activities, such as material purchasing, manufacturing, transformation, handling, transport, marketing and distribution (Mango et al., 2015, 2018; Ferdous and Ikeda, 2018). Mere availability of such sources, however, does not guarantee development of a competitive advantage or creation of value (Sirmon et al, 2007; Adner and Zemsky, 2006). Stabel and Fjeldstad (1998) define the analysis of value chain as a method of decomposition of an enterprise, an industry or a commodity sector into strategically important activities (Zhou, Brown and Dev, 2009; Sahi, Gupta and Lonial, 2018; Chen, Kan, Wu, Zheng, 2020). Kaplan and Norton (2007) describe that development of a business entity has been increasingly determined by conformity

of its value creation processes with the value as it is perceived or required by customers. More and more authors dealing with this issue agree with this concept (Young and O'Byrne, 2001; Feller et al., 2006). There are different approaches also when it comes to the content and categorization of value creation processes when they are analyzed in a specific enterprise. De Vries and Van Rensburg (2007) propose to categorize value chain activities as strategic, tactical, operating and supporting. Feller et al. (2007) prefer that the analysis should include activities required by stakeholders of a specific enterprise, unlike Pall (2000), who classifies the processes in an enterprise as management processes, business processes and supporting processes.

The authors of this contribution see the analysis of value chain in the context of analysis of the corporate environment as a new direction in dealing with business corporate strategy and an effective tool to ensure long term competitiveness of the enterprise. The analysis is a means to identify and to specify reserves and limits in the company performance and, at the same time, and it also serves as an input for identification of process changes as a result of unsteady conditions in the corporate environment. On the grounds of the performed search the following two hypotheses have been devised:

H1.: The micro environment has a decisive influence on profitability of enterprises.

H2.: There is a strong dependence between micro environment and mezzo environment from the viewpoint of their effect on profitability of enterprises.

### Material and methods

The tested group consisted of 373 small a medium enterprises (SME) from all over the Czech Republic (109 microenterprises, 140 small enterprises, 124 medium enterprises). The enterprises were categorized based on their size and also based two sectors (the manufacturing and industrial sector and the services sector). The orientation on small and medium enterprises reflects the real structure of business entities in the Czech Republic as their representation in the total number of enterprises is over 90 %. Our extensive research survey was in the form of contact questionnaires given to top managers of small and medium enterprises in the Czech Republic. The research started in 2016 and the group of enterprises has been gradually expanded and more specifically targeted in the individual industrial branches.

The significance of value chain and partial components of corporate environment was tested with a newly designed integrated model of corporate environment which has been experimentally tested by research analyses. The model of corporate environment included also the value chain as a separately evaluated process element in an enterprise, which is seen as an indispensable generator of competitiveness in business entities.

Integrated model of corporate environment

$Zisk \sim HRZ + VZZ + MZZ + VNZ + Zamerenipodniku + Velikostpodniku$

Source: Own

Explanation: *Zisk* – Profit, *HRZ* – value chain, *VZZ* – internal corporate sources, *MZZ* – mezzo environment, *VNZ* – external corporate sources, *Zamerenipodniku* – Enterprise sector, *Velikostpodniku* – Enterprise size

In order to test significance of value chain and partial components of corporate environment with the integrated model of corporate environment for profitability of the tested enterprises we have used the methods of dimensional reduction (DR), (Cook, 1998; Cook & Lee, 1999; Chiaromonte, Cook and Li, 2002) and regression analysis (general linear model), (McCullagh, Nelder, 1989). The dimensional reduction was performed first in order to reduce dimensions of all the variables (internal sources, mezzo environment factors, macro environment factors and value chain activities) into one artificial variable. The dimensional reduction decreased dimension of the variables with regard to the explained variable represented by an economic result of the enterprise. The newly created artificial variable was further used as the explaining variable along with the other factors/sources (internal corporate sources, mezzo environment and macro environment factors and value chain activities) in a generalized linear model for explanation of profitability of enterprises. Since profitability was monitored only as a categorical variable, the generalized model used a multinomial distribution as a distribution of the explained variable, together with a logit link function. As some of the tested variables in the overall model were insignificant but still correlating with the others, we also used the stepwise selection method. Pearson's correlation coefficient was used as a complementary test to determine dependence of partial components of the corporate environment and of the value chain.

The tested internal sources were: management level, employees level, organizational structure of the enterprise, strategy of the enterprise, technical equipment, production/service technologies, portfolio of products/services, financial sources, wages level, marketing level, brand and name of the enterprise, research and development level, social environment of the enterprise, training of employees, information and communication systems, internal company standards and regulations and corporate culture.

The following mezzo environment factors were tested: competitors, suppliers, customers, distributors, business partners, financial institutions, universities, research institutions, local administration and self-government, political parties, government, media and ecological associations.

The following macro environment factors were tested: demographic development, income distribution, lifestyle of the population, level of education in the population, mobility of the population, approaches to free time, governmental expenses on research and development, new patents, transfer of technologies, level of obsolescence of production means, development of GDP, interest rates, inflation, life cycle of an enterprise, unemployment, government stability, foreign trade regulation, taxation policy and legislation.

For the value chain the following primary (value creating) activities were tested: input logistics, manufacturing/provision of services, output logistics, marketing and

sales, servicing and other accompanying services, as well as secondary (supporting) activities: material management, scientific and technical development, management of human resources and corporate infrastructure.

## Results

### *A – Size categories of microenterprises*

**Table 1. Overall model of the corporate environment without interactions in the tested group of microenterprises**

	Estimate	Std. Error	Z value	Pr(> z )
<b>(Intercept)</b>	7.3849	2.1181	-3.486	0.000489 ***
<b>HRZ (value chain)</b>	0.1623	1.5639	-0.104	0.917369
<b>VZZ (internal corporate sources)</b>	4.8522	1.3860	-3.501	<b>0.000464</b> ***
<b>MZZ (mezzo environment)</b>	4.0387	1.2691	-3.182	<b>0.001462</b> **
<b>VNZ (macro environment)</b>	2.8104	1.3388	-2.099	<b>0.035804</b> *

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

**Note:** With regard to the lower representation of microenterprises from the manufacturing sector the inter-sector interactions were not tested.

Pearson's product-moment correlation

cor. est(VZZ,HRZ)

t = 5.9998, df = 107, p-value = 2.733e-08

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval: 0.6303426; 0.3463122

sample estimates: 0.5017303

The analysis of the overall model of the corporate environment (tab. 1) did not prove statistical significance of value chain in the size category of microenterprises. The highest significance was found for internal sources, while significance of mezzo environment and macro environment was lower. The results may be discussed in connection with the character of the tested size category; the decisive component of the corporate environment are internal sources which are selected and regulated by owners of the microenterprises to suit the needs of the market environment in which the enterprises operate. The importance of mezzo environment suggests its increasing role in generation of added value of the products. A new finding is the growing importance of macro environment, particularly in this size category; this can be associated with higher sensitivity and higher response of microenterprises to the growing tension in the current market environment, both at the local and regional levels. Despite the fact that value chain was not found significant in microenterprises, the Pearson's correlation coefficient has demonstrated an average dependence between internal enterprise sources and value chain. In this size category it suggests that value chain is modified into a

targeted and individual projection of value creation process at the level of strategic thinking of the microenterprise owner, based on his permanent operative management and decision making.

*B – Size category of small enterprises*

**Table 2. Overall model of the corporate environment with interactions in the tested group of small enterprises**

	Estimate	Std. Error	Z value	Pr(> z )
(Intercept)	8.0270	2.3156	3.467	0.000527 ***
HRZ (value chain)	3.7001	1.5760	2.348	<b>0.018889</b> *
ZaměřeníVP	-12.0106	3.6748	-3.268	<b>0.001082</b> **
VZZ (internal corporate sources)	4.7120	1.5901	-2.963	<b>0.003043</b> **
MZZ (mezzo environment)	2.8255	0.9814	-2.879	<b>0.003988</b> **
VNZ (macro environment)	2.4845	1.1167	2.225	<b>0.026093</b> *
HRZ: ZamereniVP	6.7737	8.1067	0.836	0.403397
ZamereniVP:VZZ	-0.4996	2.8162	0.177	0.859200
ZamereniVP:MZZ	7.5826	5.9680	-1.271	0.203891
ZamereniVP:VNZ	14.1714	10.1030	1.403	0.160711

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

ZamereniVP = Focus manufacturing enterprises

**Table 3. Overall model of the corporate environment tested on a group of small enterprises after elimination of insignificant variables**

	Estimate	Std. Error	Z value	Pr(> z )
(Intercept)	8.8453	2.2440	3.942	8.09e-05 ***
HRZ (value chain)	4.2620	1.4183	3.005	<b>0.002655</b> **
VZZ (internal corporate sources)	4.4457	1.2897	-3.447	<b>0.000567</b> ***
MZZ (mezzo environment)	3.2285	0.9558	-3.378	<b>0.000730</b> ***
VNZ (macro environment)	2.6847	1.1238	2.389	<b>0.016891</b> *
ZaměřeníVP	-14.2375	3.2198	-4.422	<b>9.78e-06</b> ***
VNZ:ZaměřeníVP	7.5927	4.0258	1.886	0.059292 .

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

ZamereniVP = Focus manufacturing enterprises

Pearson's product-moment correlation

cor.test(VZZ,HRZ)

t = 9.252, df = 138, p-value = 3.741e-16

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval: 0.5046245; 0.7115880

sample estimates: cor 0.6187286



The outputs from an analysis of the corporate environment of small enterprises (Tables 2, 3) show significance of its partial components and of the value chain in their integrated form. Table 2 shows the highest statistical significance for internal sources and for mezzo environment, i.e. similar results as for the microenterprises; a lower significance has been found for macro environment and, in comparison with microenterprises, the statistical significance of value chain is higher. In the category of small enterprises negative significance has been found for enterprises in the manufacturing sector, which suggests dominant importance of the size categorization over the sector categorization. The stepwise selection method was used for more accurate results, where insignificant values in the integrated model of the corporate environment (Table 2) were not taken into account (see also the outputs in Table 3). The results in Table 3 are similar from the viewpoint of significance, only the statistical significance was higher (for internal sources, mezzo environment and value chain). One new finding is a lower level of significance of macro environment for the manufacturing enterprises in comparison with the services sector. In the services sector no statistical significance was proved. We have also found a growing dependence between internal sources of the enterprise and its value chain.

*C – Size category of medium enterprises*

**Table 4. Overall model of the corporate environment with interaction in the tested group of medium enterprises**

	Estimate	Std. Error	Z value	Pr(> z )
(Intercept)	-0.6233	1.9262	-0.324	0.74624
HRZ (value chain)	1.5708	1.4536	-1.081	0.27986
Zaměření VP	0.1497	2.0214	0.074	0.94098
VZZ (internal corporate sources)	5.0989	1.7823	-2.861	<b>0.00423 **</b>
MZZ (mezzo environment)	1.9320	1.1681	1.654	0.09813 .
VNZ (macro environment)	1.1186	1.7323	-0.646	0.51845
HRZ:ZamereniVP	-0.1315	1.7962	0.073	0.94163
ZamereniVP:VZZ	-1.6435	2.0786	0.791	0.42913
ZamereniVP:MZZ	6.8788	2.7260	2.523	<b>0.01162 *</b>
ZamereniVP:VNZ	2.8641	2.1681	-1.321	0.18650

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

ZamereniVP = Focus manufacturing enterprises

**Table 5. Overall model of the corporate environment tested on a group of medium enterprises after elimination of insignificant variables**

	Estimate	Std. Error	Z value	Pr(> z )
(Intercept)	-0.1984	1.5985	-0.124	0.90122
HRZ (value chain)	1.4587	0.8395	-1.738	0.08229 .
VZZ (internal corporate)	4.0004	0.9176	-4.360	<b>1.3e-05</b>



sources)				***
MZZ (mezzo environment)	1.5940	0.9972	1.598	0.10994
ZaměřeníVP	-0.3376	1.7239	-0.196	0.84475
VNZ (macro environment)	1.0810	1.5426	-0.701	0.48345
MZZ:ZaměřeníVP	7.8093	2.5639	3.046	<b>0.00232</b> **
ZaměřeníVP:VNZ	3.2287	2.0427	-1.581	0.11396

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

ZamereniVP = Focus manufacturing enterprises

Pearson's product-moment correlation

cor.test(VZZ,HRZ)

t = 7.5047, df = 122, p-value = 1.111e-11

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval: 0.4280985; 0.6717488

sample estimates: cor 0.5619952

Results in the size category of medium enterprises are shown in Tables 4 and 5. Generally, we can state that medium enterprises, which in most European countries represent a stabilization factor in national economies, are the most differentiated business category, both in terms of their profiles and corporate processes. This can be documented with the outputs in Table 4 showing a medium level of significance only for internal sources, while significance of mezzo environment was found lower for manufacturing enterprises and in case of macro environment the significance was found low for both the tested sectors. Table 5 shows results of the stepwise selection method: significance of the value chain is visible even though it is fairly low, the medium significance has been found for mezzo environment, again specifically for the manufacturing enterprises, and the highest level of dependence was found for internal corporate sources, which is in agreement with results of the previously investigated size categories. An average level of dependence has been found between internal corporate sources and value chain, which is more similar to micro enterprises than to small enterprises. These results again suggests how ambiguous and, at the same time, specific this size category is.

### Discussion of results

The testing of the individual components of the corporate environment in small and medium enterprises has fully confirmed significance of internal sources and mezzo environment, while significance of the value chain has been also found in small and medium enterprises. In case of microenterprises significance was found for internal corporate sources and also for mezzo environment and macro environment, while significance of the value chain was not demonstrated. A new finding was the increasing role of mezzo environment which suggests increasing competitiveness on the market on which this size category operates. The increasing role of macro environment can be explained by the upcoming glocalization and regionalization. A relation has been demonstrated between internal corporate sources and value

chain. A trend has been found of value chain modification into targeted management of profit creation by means of a value creation production process at the level of strategic thinking and decision making by owners of microenterprises. Small enterprises in general have demonstrated significance of all partial components and of the value chain in their mutual relations and conditionality. The highest significance was found for internal corporate sources and mezzo environment, similarly as with the microenterprises; lower significance was found for macro environment and also significance of the value chain has been also confirmed. The stepwise selection method, i.e. removal of insignificant components in the integrated model, has confirmed those results and it has accentuated the growing role of all the three components of the corporate environment, including the value chain, in the process of profit generation. Also the fundamental importance of size categories of enterprises over the sector differentiation has been demonstrated. One finding which needs to be analyzed further is the lower level of significance of macro environment in case of small manufacturing enterprises in comparison with enterprises from the services sector. Results in the category of medium enterprises again indicate the highest significance of internal sources, medium significance of mezzo environment, specifically in case of manufacturing enterprises. The medium level of dependence has been found between internal sources and value chain which is similar to the values found for the microenterprises, although it was expected that they would be closer to the small enterprises.

With regard to the presented results we can state that micro environment has the decisive influence on profitability of the enterprises which means that the first research hypothesis has been confirmed. The second hypothesis can be confirmed only partly because the dependence between micro environment and mezzo environment for the tested size categories of micro, small and medium enterprises was rather average. The research has proved both links between those of components of the corporate environment and a growing trend of those links, particularly in case of microenterprises and small enterprises.

When it comes to comparison of the results presented in this article with results of other foreign authors, it is very difficult because workplaces that deal with these topics in a similar manner are only a few and they are mostly in the United States. The authors are communicating with one of the leading workplaces (Institute for Strategy and Competitiveness) but the direct cooperation is only at the very beginning. We can identify the existing solutions and also new directions they propose. However, there are no integrated models of corporate environment designed by foreign authors. From the viewpoint of value chain, the prevailing concept is the original one defined by M. Porter and its modifications with different value chain structures (Mango et al., 2015, 2018; Ferdous and Ikeda, 2018), Sirmon et al. (2007), Adner and Zemsky (2006), stress the importance of suppliers and competitors, while Norton and Kaplan (2007) and Norton, Kaplan and

Rugelsjoen (2010) emphasize the relation between the value creation processes and the value required by customers.

### Conclusion

The authors of this article recognize, respect and continue the works of M.E. Porter and his colleagues and, at the same time, they are aware that more scientific research is needed in order to build competitive advantage in enterprises. The authors believe that it is essential to take into account the obvious ongoing changes in the world's and European economies, in the corporate environment and, last but not least, in the global and European competition. The key limitation of the outputs from the completed research is the fact that it was conducted in a period of strong economic growth, which means that most of the tested business entities were profitable. One can expect that when the stage of the economic cycle changes, which is actually happening as a result of the Covid pandemic, the results will be structured differently. Therefore the research is still going on. The authors of this article do not overrate the achieved results, however, they see them as a contribution to the solution of the investigated topics. They believe that it is necessary to address those issues and to conduct a scientific discussion about them so that the developed methods for creation of business strategy can be utilized in corporate practice.

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## ZINTEGROWANY MODEL ŚRODOWISKA KORPORACYJNEGO, W TYM ŁAŃCUCH WARTOŚCI, JAKO NARZĘDZIE KONKURENCYJNE DLA MAŁYCH I ŚREDNICH PRZEDSIĘBIORSTW

**Streszczenie:** W artykule przedstawiono nowe podejście do otoczenia korporacyjnego, które wykorzystuje model zintegrowany jako narzędzie do osiągnięcia konkurencyjności przedsiębiorstw ze szczególnym uwzględnieniem małych i średnich przedsiębiorstw. Z naszych poszukiwań w literaturze lokalnej i międzynarodowej wynika, że tak zdefiniowane otoczenie korporacyjne, w tym analiza łańcucha wartości w celu sformułowania strategii biznesowej, nie zostało dotychczas zbadane w żadnym opracowaniu. Nasza grupa testowa składała się z 373 małych i średnich przedsiębiorstw. W naszym rozwiązaniu wykorzystano metody redukcji wymiarów i stopniową analizę regresji. Celem naszych badań była analiza znaczenia komponentów otoczenia korporacyjnego (mikrośrodowiska, mezzotoczenia i makrootoczenia) oraz łańcucha wartości z punktu widzenia ich wpływu na rentowność przedsiębiorstw. Pokazaliśmy niezastąpioną rolę źródeł wewnętrznych w zależności od środowiska mezzoo.

**Słowa kluczowe:** model zintegrowany, otoczenie korporacyjne, łańcuch wartości, konkurencyjność, strategia biznesowa

## 包含价值链的企业环境集成模型，作为中小型企业竞争工具

**摘要:** 此贡献提出了一种新的公司环境方法，该方法使用集成模型作为工具来提高企业的竞争力，重点是中小型企业。根据我们在本地和国际文献中的搜索，尚未对以这种方式定义的公司环境(包括对价值链进行分析以制定业务策略)进行研究。我们的测试小组由373家中小企业组成。我们的解决方案利用了降维和逐步回归分析的方法。我们研究的目的是从公司环境的各个组成部分(微观环境，中间环境和宏观环境)和价值链的组成对它们对企业盈利能力的影响的角度分析其重要性。我们已经证明了内部资源具有不可替代的作用，具体取决于中间环境。

**关键词:** 集成模型 企业环境 价值链 竞争力 经营策略