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THE ANALYSIS OF STRUCTURAL CONFIGURATIONS FOR IMPLEMENTING COMPETITIVE STRATEGIES

Among the directions of increasing the competitiveness of enterprises, the development of an adequate organizational structure is of primary importance. This structure will ensure the efficient and coordinated interaction of all business units of the enterprise for implementing competitive strategies. The article analyzes the choice of the organizational configuration of the enterprise structure for the three M. Porter's competitive strategies, they are cost leadership strategy on the basis of the reduction in costs (prices); the differentiation and focus strategies. To analyze the organizational and structural component of the implementation of competitive strategies, the situational approach is suggested. The first stage of this approach is the empirical analysis of the parameters of impact on the choice of the organizational structure. At the second stage, the analysis is formalized in the form of the table of rules table, which enables further developing the knowledge base of the expert system. At the third stage, experts, management consultants, provide each rule with a certain weight that reflects the expert's opinion about the impact of each particular factor of the internal and external environment on the parameters of the management structure. The strategic set should involve the structural strategy that should include an analysis of the existing structure, the possibility of its adjustment and changes in accordance with the company's competitive strategy, the analysis of external and internal factors that can affect the organizational structure. The **results** of the study are the expert tables of values of organizational and structural parameters obtained experimentally that are used for developing and introducing the organizational structure of the enterprise in the process of implementing the chosen competitive strategy. The software implementation of the expert system by using modern information technologies will provide an opportunity to use the developed system for creating the project of a management structure for a particular enterprise that supports its competitive strategies.

Keywords: enterprise competitiveness, organizational structure, competition strategy, organizational configuration, situational approach.

Introduction

Among the areas of increasing the competitiveness of enterprises, special attention is paid to the development of an adequate organizational structure, which will ensure efficient and coordinated interaction of all business units of an enterprise for implementing competitive strategies. From all mechanisms of strategy implementation, the structure is the most inert and can contribute to strategic development or slow down it, therefore, the development and reform of the structure should be based on the scientific and practical principles of the economy and based on the fundamental principles of the theory of management.

The analysis of literary sources

The dependencies among the individual factors of the external and internal environment of the enterprise and the type of its organizational structure were investigated in the works of O.E. Kuzmin, O.G. Melnik [2], Yu.B. Ivanov [1], A.S. Afonin, V.P. Nesterchuk [3], M.M. Martynenko [4], R. Duff [5], G. Mintzberg [6], G. Nazarova, O. Ivanisov, O. Dorovsky, and others. However, the problem of the structural configuration which contributes to the adopted competitive strategy in the best way has not been solved and substantiated yet and still requires an individual scientific and practical study.

The goal and objectives of the study

The goal of the study is to analyze the choice of the organizational structure of the enterprise for the three basic M. Porter's competitive strategies: cost leadership strategy on the basis of cost reduction (prices); differentiation and focus strategies.

The methods of the study

To analyze the organizational and structural component of the implementation of competitive strategies, the use of the situational approach is suggested applying expert methods and taking into account such parameters as management style, enterprise size, technology, the state of the environment, the level of centralization, formalization, complexity, information needs. The first stage of this approach is the empirical analysis of the parameters of impact on the organizational structure choice. At the second stage, the analysis is formalized in the form of the table of rules, which enables further developing the knowledge base of the expert system. At the third stage, experts, management consultants, provide each rule with a certain weight reflecting the expert's opinion about the impact of each particular factor of the internal and external environment on the parameters of the management structure. The software implementation of the expert system by means of present information technologies will enable using the developed system to create the project management structure of a particular enterprise that supports its competitive strategies.

The results of the study

Let us consider the results of the analysis of the choice of organizational configuration for the three basic M. Porter's competitive strategies: cost leadership strategy based on cost reduction (prices); differentiation and focus strategies. In order to implement competitive strategies, the main types of structures that are most widespread or promising for industrial enterprises in the present economic conditions of Ukraine should be chosen from linear functional, divisional, matrix, project, program-oriented and networked ones.

The strategy of cost leadership on the basis of cost (prices) reduction is implemented in the best way by hierarchical organizational structures in which the minimization of costs is achieved due to central planning and resource use, economies of scale, accumulation of experience [7].

Organizational structures of the hierarchical configuration have many levels of management and significant horizontal specialization. Such organizational structures have a certain functional specialization and are divided into departments, which helps medium and large enterprises work successfully [2]. The use of such organizational structures is reasonable under the external

environment with a low level of inconsistency. At a high level of inconsistency, such structures can be used only in the case of low uncertainty and complexity of the external environment. Competitive advantages are achieved due to the standardized technology with well-defined tasks and a small amount of information necessary for management. The cost leadership strategy that is implemented by linear functional structures involves manufacturing large amounts of inexpensive standardized products for already available identified markets. The meanings of organizational and structural parameters for implementing the strategy of cost leadership are given in table 1.

Table 1. Organizational and structural parameters of implementing the strategy of cost leadership

Parameters	The range of meaning
External environment state	1. Low degree of complexity, inconsistency, uncertainty 2. High degree of complexity, low degree of uncertainty and inconsistency 3. High degree of complexity and uncertainty, low degree of inconsistency 4. High degree of controversy, low degree of complexity, uncertainty
Technologies	Standardized, more routine
Size	Medium and big
Structure	Linear functional

The main strategy of differentiation is a variety of products, choice of models, batches of goods, services, and so on. The aim to meet the needs of consumers in a certain aspect of market activity leads to high costs, which creates a risk of loss of competitiveness. The difference between leadership in prices and differentiation lies in the fact that the first can be achieved only in one way, that is by establishing the effective cost structure, while differentiation can be achieved in different ways [8]. One of them is the creation of divisional structures that are differentiated by product or region. Their application is objectively caused by the attempts of large diversified corporations to improve adaptation to changes in the external environment by dividing it into production units (divisions) which will later be given a particular level of independence for implementing operational and production management and will become responsible for the profit.

The transformation of available linear functional structures into the division ones solved the problem of

implementing the strategy of diversification only partially because the “crisis of bureaucracy” caused by the over-organization of structure and opposition of the administrative apparatus to the new forms and methods of management did not enable quick solving new strategic problems under the conditions of market changes. The creation of matrix structures was an attempt to overcome this crisis. When the main functional units are preserved, the matrix structures create two control loops – vertical and horizontal which operate simultaneously. The specific areas of the organization such as production, marketing, financing, legal support, research, development are managed vertically. Individual projects, regional and product ones are managed horizontally. The matrix configuration can be used in the environment with a high degree of inconsistency and uncertainty. The meanings of organizational and structural parameters for implementing the strategy of differentiation are presented in table 2.

Table 2. Organizational and structural parameters of implementing the strategy of differentiation

Parameters	The range of meaning
External environment state	1. High degree of complexity, low degree of uncertainty and controversy
	2. Low degree of complexity, controversy and high degree of uncertainty,
	3. High degree of complexity and uncertainty
Technologies	Different for various departments (products)
Size	Medium and big
Structure	Divisional (product, regional)
	Matrix (program target, project target)

The content of the focus strategy is to achieve competitive advantages in a rather narrow segment of the market with its specific requirements. Focusing on a deeper differentiation of needs force the enterprise to an almost individual approach for manufacturing products

and applying new production and service technologies. Such strategy is better implemented by organic structures such as program target and design target, team, and business ones. They are characterized by hierarchy smearing, indefinite levels of management, weak

formalization of rules and procedures, high level of horizontal integration, developed links between cooperation and coordination, by specialization, temporary assignment of functions to groups, by decentralization of management decisions. The size of the organization does not have a decisive impact on the choice

of this configuration, however, the most favourable conditions using this structure are enterprises of a medium and small size. The meanings of organizational and structural parameters of implementing the strategy of differentiation are presented in table 3.

Table 3. Organizational and structural parameters of implementing the strategy of differentiation

Parameters	The range of meaning
External environment state	1. High degree of complexity, low degree of uncertainty and controversy.
	2. Low degree of complexity and uncertainty, high degree of controversy.
Technologies	More individual, low degree of standardization
Size	Medium, small
Structure	Matrix (project)
	Entrepreneurial, team

The choice of organizational configuration is only a general description and the first step in designing the organizational structure. For a more detailed description of the organizational structure, such parameter as the complexity of the organization is used. The complexity of the organization is the degree of horizontal (a number of divisions and specialized units), vertical (a number of levels of management), spatial (a number of branches and the distance among them) differentiations.

Horizontal differentiation increases with an increase in the degree of specialization in the organization, that is, with the increase in a number of departments and employees performing unique tasks that are different from the tasks of other employees and departments. The level of vertical differentiation is assessed by a number of levels of management in the organization. To measure spatial differentiation, such indicators as a number of subdivisions and subsidiaries in the organization, the average distance among them and the proportion of staff working in the units separated from the head office are used.

Directly proportional dependencies exist between the size of the organization and the level of organizational complexity: when the size of the organization increases, the number of levels of management and the number of units are also increased [9]. There are certain patterns in the impact of the environment on the level of

organizational complexity. First, the greater the degree of the environment inconsistency, the less the degree of organizational complexity. Secondly, the higher the environment uncertainty, the higher the level of organizational complexity. This is due to the fact that in the case of high uncertainty of the external environment, the organization needs a large number of specialists for the adequate response to changes in the external environment, that is, the level of specialization increases. However, if the external environment becomes hostile, threatening to the enterprise survivability, the complexity of the organization should be low to ensure a quick response to change.

The technology used in the enterprise also has an impact on the level of organizational complexity: the higher the degree of technology routinization, the greater the degree of specialization; the lower the degree of technology routinization, the greater the level of vertical differentiation (a number of levels of management).

A high and medium degree of organizational complexity is recommended for large enterprises with the strategy of cost leadership based on cost reduction or differentiation. A low degree of organizational complexity is recommended for companies with the focus strategy that works in the market differentiating the groups of customers with specific needs. The following conclusions are grouped in table 4.

Table 4. Recommendations on the level of organizational complexity

Factors	Factor meaning
1	2
High level of complexity	
Size	Big
External environment state	Low degree of complexity and inconsistency, high degree of uncertainty. Low degree of controversy, high degree of complexity and uncertainty.
Technologies	Standardized
Strategy	Cost leadership on the basis of cost reduction
Medium level of complexity	
Size	Big, medium

The end of the **Table 4**

1	2
External environment state	Low degree of complexity, controversy and uncertainty. Low degree of controversy, high degree of complexity and low degree of uncertainty. High degree of controversy, low degree of complexity and uncertainty. High degree of controversy and complexity, low degree of uncertainty
Technologies	Medium degree of standardization
Strategy	Differentiation
Low level of complexity	
Size	Medium, low
External environment state	High degree of controversy, low degree of complexity and uncertainty. High degree of complexity, low degree of controversy and uncertainty.
Technologies	Innovative, weakly standardized
Strategy	Focus

The level of formalization of the organization reflects the degree of using the pre-set rules and procedures [4]. Establishing detailed rules and procedures that specify the most effective methods of making managerial decisions is advantageous for any organization.

The high level of formalization is typical of large organizations that use the strategy of cost leadership in a well-defined and stable environment as well as the

strategy of diversification in a controversial and complex environment. The low level of formalization is reasonable for using by enterprises that implement the focus strategy and non-routine technologies under the conditions of a complex but well-defined environment. The recommendations on the level of the formalization of managerial decisions making in the organization are presented in table 5.

Table 5. Recommendations on the level of formalization of making managerial decisions

Factors	Factor meaning
High level of formalization	
External environment state	Low degree of complexity, controversy and uncertainty. Low degree of controversy, high degree of complexity and low degree of uncertainty
Technologies	High degree of technology routinization High degree of application of information technologies.
Size	Big
Strategy	Cost leadership on the basis of cost reduction
Medium level of formalization	
External environment state	High degree of complexity and controversy, low degree of uncertainty. Low degree of controversy, high degree of complexity and uncertainty. High degree of controversy, low degree of complexity and uncertainty. High degree of controversy and complexity, low degree of uncertainty.
Size	Medium
Strategy	Differentiation
Low level of formalization	
External environment state	High degree of controversy, low degree of complexity and uncertainty High degree of controversy, complexity and uncertainty
Technologies	Low degree of routinization
Size	Medium. small
Strategy	Focus

The level of the centralization of making managerial decisions is the degree of the concentration of making decisions by a person, which is related to the formal rights a specific person has in the organization. The level of centralization is determined by the degree of the participation of the authorities in obtaining and processing information necessary for making managerial decisions, and by the amount of control in the context of the implementation of these decisions.

The high level of centralization is typical for enterprises that use the strategy of cost leadership on the basis of costs (prices) reduction and routine technologies under the conditions of external environment with a small number of factors important for survival. The low level of centralization (decentralization) is typical for enterprises that use the strategy of diversification and non-routine technologies under the conditions of the indefinite and controversial environment with a large number of factors

important for survival. The recommendations on the level of centralization of making managerial decisions are given in table 6.

Table 6. Recommendations on the level of centralization of making managerial decisions

Factors	Factor meaning
High level of centralization	
External environment state	Low degree of complexity, controversy and uncertainty. High degree of controversy, low degree of complexity and high degree of uncertainty. High degree of controversy, low degree of complexity and uncertainty.
Technologies	High degree of technology routinization
Size	Big, medium
Strategy	Cost leadership on the basis of cost (prices) reduction
Medium level of centralization	
External environment state	Low degree of controversy, high degree of complexity and low degree of uncertainty Low degree of complexity and inconsistency, high degree of uncertainty
Technologies	High degree of technology routinization
Size	Big, medium
Strategy	Differentiation
Low level of centralization	
External environment state	Low degree of controversy and uncertainty, high degree of complexity.
Size	Medium, small
Strategy	Focus

The implementation of the adopted competitive strategy is supported by a complex strategic set, that is the system of strategies of different types within a certain period of time that reflects the specifics of the enterprise operation and development as well as its position in the external environment [10]. Any strategy is implemented within the organizational structure which, in turn, is a tool for implementing the strategy. Therefore, strategic planning should be also involved in the structural strategy which should include the analysis of the available structure, the possibility of its adjustment and changes in accordance with the competitive strategy of the company, the analysis of the factors of the external and internal environment that can affect the organizational structure.

Conclusions

The choice of an adequate organizational structure is the basis for managerial, informational, and communicative processes that take place at the enterprise and ensure the implementation of the chosen strategy and a quick response to changes in the market environment. The conducted study enabled generalizing the experience in assessing the impact of factors of the internal and external environment on the choice and operation of management organizational structures on the basis of the situational approach. The further areas of study are the implementation of the technique for applying update software and information technologies, which enables using the technique at the enterprise in an automated mode.

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АНАЛІЗ СТРУКТУРНИХ КОНФІГУРАЦІЙ ДЛЯ РЕАЛІЗАЦІЇ КОНКУРЕНТНИХ СТРАТЕГІЙ

Серед напрямів, підвищення конкурентоспроможності підприємств особливе місце займає розробка адекватної організаційної структури, яка дозволить забезпечити ефективну та скоординовану взаємодію усіх структурних підрозділів підприємства по реалізації конкурентних стратегій. У статті проведено аналіз вибору організаційної конфігурації структури підприємства для трьох базових конкурентних стратегій М. Портера: лідирування на основі зниження витрат (цін); диференціації; фокусування. Для аналізу організаційно-структурної складової реалізації конкурентних стратегій пропонується використання ситуаційного підходу. Першим етапом такого підходу є емпіричний аналіз параметрів впливу на вибір організаційної структури. На другому етапі проведений аналіз формалізується у вигляді таблиці правил, що дозволяє надалі сформувати базу знань експертної системи. На третьому етапі експерти, консультанти по управлінню, надають кожному правилу визначену вагу, що відбиває думку експерта про силу впливу кожного конкретного фактору внутрішнього і зовнішнього середовища на параметри структури управління. У стратегічному наборі необхідно передбачити структурну стратегію, яка повинна включати аналіз існуючої структури, можливість її корегування і зміни згідно конкурентної стратегії підприємства, аналіз факторів зовнішнього і внутрішнього середовища, що можуть вплинути на організаційну структуру. **Результатами** дослідження є отримання експертним шляхом таблиць значень організаційно-структурних параметрів для формування та впровадження організаційної структури підприємства в процесі реалізації обраної конкурентної стратегії. Програмна реалізація експертної системи засобами сучасних інформаційних технологій дасть можливість використання розробленої системи для створення проекту структури управління конкретного підприємства, що підтримує його конкурентні стратегії.

Ключові слова: конкурентоспроможність підприємства, організаційна структура, конкурентна стратегія, організаційна конфігурація, ситуаційний підхід.

АНАЛИЗ СТРУКТУРНЫХ КОНФИГУРАЦИЙ ДЛЯ РЕАЛИЗАЦИИ КОНКУРЕНТНЫХ СТРАТЕГИЙ

Среди направлений повышения конкурентоспособности предприятий, особенное место занимает разработка адекватной организационной структуры, которая позволит обеспечить эффективное и скоординированное взаимодействие всех структурных подразделений предприятия по реализации конкурентных стратегий. В статье проведен анализ выбора организационной конфигурации структуры предприятия для трех базовых конкурентных стратегий М. Портера: лидерство на основе снижения расходов (цен); дифференциации; фокусирования. Для анализа организационно-структурной составляющей реализации конкурентных стратегий предлагается использование ситуационного подхода. Первым этапом такого подхода является эмпирический анализ параметров влияния на выбор организационной структуры. На втором этапе проведенный анализ формализуется в виде таблицы правил, что позволяет в дальнейшем сформировать базу знаний экспертной системы. На третьем этапе эксперты, консультанты по управлению, предоставляют каждому правилу определенный вес, который отражает мнение эксперта о силе влияния каждого конкретного фактора внутренней и внешней среды на параметры структуры управления. В стратегическом наборе необходимо предусмотреть структурную стратегию, которая должна включать анализ существующей структуры, возможность ее корректировки и изменения согласно конкурентной стратегии предприятия, анализ факторов внешней и внутренней среды, которые могут повлиять на организационную структуру. **Результатами** исследования является получение экспертным путем таблиц значений организационно-структурных параметров для формирования и внедрения организационной структуры предприятия в процессе реализации избранной конкурентной стратегии. Программная реализация экспертной системы средствами современных информационных технологий предоставит возможность использования разработанной системы для создания проекта структуры управления конкретного предприятия, которое поддерживает его конкурентные стратегии.

Ключевые слова: конкурентоспособность предприятия, организационная структура, конкурентная стратегия, организационная конфигурация, ситуационный подход.