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Sources and factors for building competitive advantages in an extended firm

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Abstract: **The development of any company today, based only on its own internal resources, is inefficient, due to limited resources and the danger of duplication of solutions, in which significant costs have been invested. This imposes the objective need for coordination, integration with other interconnected companies or the creation of an expanded company. These processes allow managers to use existing material, intangible, human and organizational resources more effectively and to implement strategic changes that are the basis for creating, offering and realizing higher added value or building competitive advantages. The purpose of the study is: 1) To analyze the characteristics of the expanded firm. 2) To define the sources and factors for building competitive advantages in the expanded firm.**

keywords: competitive advantages, evaluation, extended firm, factors, sources.

1. INTRODUCTION

The final products that consumers are looking for are usually a complex system of different elements, components, details with strong functional dependence, which are produced by different companies, often territorially distant from each other. At each stage of the production process, they use, combine in a certain way (depending on the chosen technology), different materials, labor, equipment and incur costs for their purchase from the relevant suppliers. Each company searches, collects, analyzes different offers from different companies and chooses one to work with, concludes a contract and exercises control over its activities. This costs significant transaction (external) costs, which affects the formation of the final price of the product.

The practice clearly proves the need to improve the level of communication between the participating companies, partnership, which means a joint approach of investors, customers, participating companies, suppliers, distributors, working from start to finish. This would allow the implementation and development of best practices in the field of design, implementation, deliveries, control, quality assurance, compliance with environmental norms and standards, as well as protection of the social interests of the participants.

Achieving this goal is not easy at all, especially when there is a lack of trust between the participants, effective cooperation relationships (training, education, innovation, joint initiatives to improve the organization and management of the activity, working conditions and environmental protection). Very often, joint work is accompanied by a number of problems that are created by different participants, at different stages of the common activity, which affects the behavior of other companies and the final result. Since there is usually a cause-and-effect relationship between problems, solving a problem means recognizing the dependency and wanting long-term cooperation. This also determines the purpose of the study: 1) To analyze the characteristics of the extended firm. 2) To define the sources and factors for building competitive advantages in the extended firm.

2. RESEARCH

The development of any company today, based only on its own, internal resources, is ineffective due to limited resources, the danger of duplication of solutions in the development of which significant costs have been invested. In the conditions of dynamic cooperation, the objective need to create formal or informal associations, strategic alliances, integrated vertical chain, coordination, integration with other interconnected companies (extended company) is imposed. Any such form of cooperation can ensure more efficient allocation and use of scarce resources and the realization of a synergistic effect, as well as successful adaptation to external changes, integration of external resources through know-how, exchange of knowledge, information, technologies and products, which increases overall productivity. These processes allow managers to use more effectively existing physical, human (experience, knowledge) and organizational (managerial knowledge, vertical connections, etc.) resources, which are the basis for creating higher added value. The combination of assets of different companies allows for the creation of a strategic resource with higher value and difficult to imitate by competitors. Establishing specific, unique connections and relationships between participating companies facilitates the development of their own resources, access to new markets, including territorial ones, and the creation of new business models for management, which is a factor for competitive advantages, higher reputation, and stabilization and/or expansion of market positions. The policy of such alliances limits the access of new firms to information, resources and markets and their development opportunities, which stabilizes the realized advantages. Along with these advantages, which are common to all forms of corporate cooperation, there are also a number of differences and specificities:

• **A strategic alliance** is “a voluntary association (with a specific purpose and limited scope) between
companies based on contractual relations that allow for development and change, through cooperation in production and development of the final product created, based on the transfer of technology, knowledge and services” [1]. The participating companies (equal small and medium-sized companies, or small companies and a leading company in the given market) usually have a long history before the creation of the alliance and retain their relative independence during its existence. Mergers and acquisitions are practically excluded. The goal is primarily the exchange of resources, specialization, cooperation for market access, technologies, knowledge, training, etc.

• **An integrated vertical chain of management** is aimed at managing material, information and capital flows, building cooperation between participating companies, which allows the realization of economic, environmental and social goals, a function of the requirements of customers and stakeholders [2]. It includes all entities, organizations and activities that participate from the beginning to the end of a given process by building connections - up and down and creating value in the form of products and services for the end user. The scope of management of the integrated vertical chain covers the production and supply of materials, the production of the next product, the creation of the final product, its realization to the end user and the recovery of used products. Each participant in this chain depends on the other participant and active cooperation is necessary, which is achieved through long-term contracts, relationships, connections, continuity of joint work and exchange of information. The leading company owns some of the suppliers/distributors and often exercises centralized and direct control.

- **The extended firm** is a network of independent actors that act as a single entity through strategic collaboration without being legally united. It is a complex of connections, relationships between internal strategic business units and their value delivery systems (supply chains, related industries, partners, customers, stakeholders and other participants), which are created by management teams at different levels [3]. The extended firm integrates and coordinates its activities with external partners (suppliers, distributors, subcontractors, strategic allies). The focus is on creating additional value not only through internal resources, but also through external relationships based on mutual benefit and synergy [4]. Strategic management and leadership integrates people, capabilities, resources, synchronizes relationships throughout the firm and all related stakeholders and activities, focusing on the market, the competitive environment and specific business/product portfolios.

To understand the effectiveness of all these forms of cooperation, the economic system must be viewed as a biological ecosystem, in which different but related entities participate with different fates, some better, some worse, but each is better together than separately [5]. Knowledge about the natural system, about the complex relationships between interdependent players, can help any business and its management. External shocks and problems in the system are absorbed by the participants, they are a source of opportunities, not an external threat. This is a condition for the development of new thinking, behavior and the creation of a heterogeneous structure – an eco-business system, with different firms taking on different roles and influencing different aspects of the stability and productivity of the network. In these structures, a collective organization develops, a collective strategy is implemented, the choice of which depends on the type of participating firms, the complexity of the connections and relationships with others in the system, but also on the general level of turbulence in the external environment. The realization of the common goal requires maintaining formal and informal relationships between individual companies and individuals based on the created common resource through the acquisition of various assets. A key factor for success is access to information, experience and their exchange in order to solve current problems. Building effective relationships at all levels, formal and informal, of trust between all entities is critical for any association. Each alliance means dependence, but also provides an opportunity for development, discovery of new opportunities, easier overcoming and elimination of threats. The choice and decision for participation of each individual company in a business system is the result of an assessment of the opportunities, the availability of resources, the goals it sets for itself, as well as the dynamics of the market in which it operates and the relationships with other participating companies.

From such a perspective, in the proposed study, the author focuses on the analysis of the strategic behavior of the expanded firm and the factors and sources for building inter-firm competitive advantages.

Competitive advantage (by definition) means the ability of a firm to create and offer higher value to its customers with a strategy that is not implemented by current competitors [6]. Therefore, competitive advantage cannot be simply associated with operational efficiency and organizational success, but is the result of the firm's strategic behavior [7]. Researchers agree that a company can achieve competitive advantages in the following two areas: cost differentiation (process efficiency - lower costs, production time, resulting from economies of scale and, accordingly, a lower price of the product offered) and product differentiation (product efficiency - quality, innovation) [8].

The expanded firm develops and implements strategy, policies, and practices that facilitate the creation of competitive advantages, both through product differentiation and cost reduction. Product differentiation advantages result from the firm's ability to create a product with distinctive features, image, quality, and added value for customers, which also makes the firm distinguishable in the marketplace. In modern conditions, the development of a strategy oriented towards sustainable development is a strong factor for the development of innovations. They are physically embodied in the product as new and improved environmental characteristics, proven by relevant eco-labels, certificates (e.g. ISO14001), which satisfy the desires of more consumers sensitive to environmental protection issues. The company improves its reputation, its image as an innovator who takes on all environmental and social responsibility. This increases sales, expands the market and market share of the company, through more repeat purchases and attracting customers from new market segments. The increased demand for the company's output at a later stage will be a factor in the expansion of production, which allows to reduce costs per unit of output and realize economies of scale (other things being equal). In other words, the development of the expanded firm first of all creates conditions for building competitive advantages in the direction of product differentiation, which in turn, at a later stage, also contributes to the realization of price advantages [9].

The other approach is also possible. The development and orientation towards sustainable development of the expanded company will initially be linked to the introduction of new technologies that allow for improved production, reduced pollution and the realization of advantages based on lower costs. The realized larger volume of production increases revenues, which satisfies the interests of shareholders, investors. This allows the company to focus on the wishes of stakeholders and create the desired product, the result of innovations, at the next stage. The shared vision, the satisfaction of stakeholders create conditions for the long-term development of the company. In other words, competitive advantages in the direction of product differentiation create a feeling of higher quality, higher reliability, better service, customer satisfaction and generally higher added value of the product, which increases its efficiency. Therefore, the building of competitive advantages through cost differentiation or product differentiation are interconnected. The connection is knowledge and innovation. In order to create a sustainable product desired by customers, significant scientific research and changes in the technology used must be made (process innovation). And in order to reduce company costs and the negative impact on the environment, it is necessary to make a new design of the product (product innovation).

The goal of every company should be to create, offer and realize higher value (in all three aspects) for customers and society, compared to the next strongest competitor over a long period of time, which guarantees stable market positions, stable market share and higher profits. Developing a strategy oriented towards sustainable development, implementing new sustainable practices in the form of new ventures, partnerships and open innovations allow the expanded company not only to successfully enter a new market, but also to preserve supply chains, which are highly threatened by environmental and social problems in different countries around the world and are among the greatest risks to the existence of the business in general. Effective change is needed, the search for new solutions, joint work from start to finish with stakeholders, other companies, suppliers, contractors, subcontractors, which means the need to develop new company capabilities, the basis of which are its own resources and competencies. The implementation of the strategy and the defined goals allows for adaptation of the expanded company to new dynamic changes in the external and internal environment, which maintains compliance between the goals, resources, competencies of the company, through a constant process of improving the organization, implementing new management practices, etc. [10]. This is the basis for building (and maintaining) competitive advantages (and performance in three aspects - economic, social and environmental) and a way to satisfy both one's own interests and the interests of customers and society as a whole. Therefore, on the one hand, the building of competitive advantages is a function of strategic behavior (policies, decisions, actions formed under the influence of external factors), which determines the current and future positions and new directions for the company's development, determined by history, experience, knowledge and managerial decisions. On the other hand, competitive advantages are the result of the company's ability to create its own distinctive competencies (strategic, unique resource - VRIO) and an effective company structure. In other words, the relationship between internal resources, competencies and the dynamics of the external environment determines the company's strategic choice, the building of competitive advantages and the realization of the ultimate goals (Fig. 1.).

The strategy of the expanded company is not simply adding new units to the organization, but building a purposeful, focused system of partnerships with a clear definition of the external conditions (market, technological, etc.) in which they will develop and on this basis defining the tasks and competencies of each participant. This means building an effective internal structure and system of knowledge transfer, information from one company to another, and successful business behavior, which develops the adaptive capacity of each individual company and the alliance as a whole.

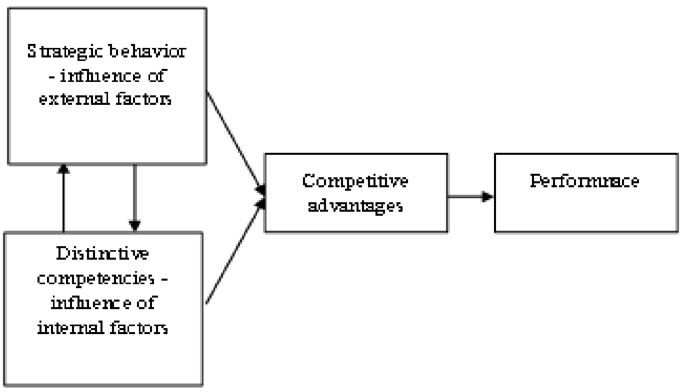

Fig. 1 Competitive advantages - the relationship between strategic behavior, distinctive company competencies and performance

The proper integration of external and internal resources ensures the development of effective collective strategies in conditions of sustained competition between the participating companies, expansion of company capabilities through external assets that work in sync with the internal ones, flexible reconfiguration of resources in response to the dynamics in the external environment, which ensures the desired end result and, above all, the creation of a unique, difficult-to-imitate form of cooperation and coordination that creates a strategic advantage. From such a perspective, the sources of competitive advantages can be determined:

1) External (strategic) sources of competitive advantages. The external environment as a source of competitive advantages depends on the company's ability to observe changes in it, to assess opportunities and use opportunities and neutralize threats to its advantage.

2) Internal sources, a result of the company's development (history, experience, reputation, knowledge, routine, etc.), its own resources, organizational skills and innovative activity, which form its distinctive competencies and opportunities for creating a strategic resource.

The relationship between external and internal resources for the purpose of building competitive advantages is carried out by three main factors, defined as adaptive, absorptive and innovative ability of the company and managers [11] (Fig. 2):

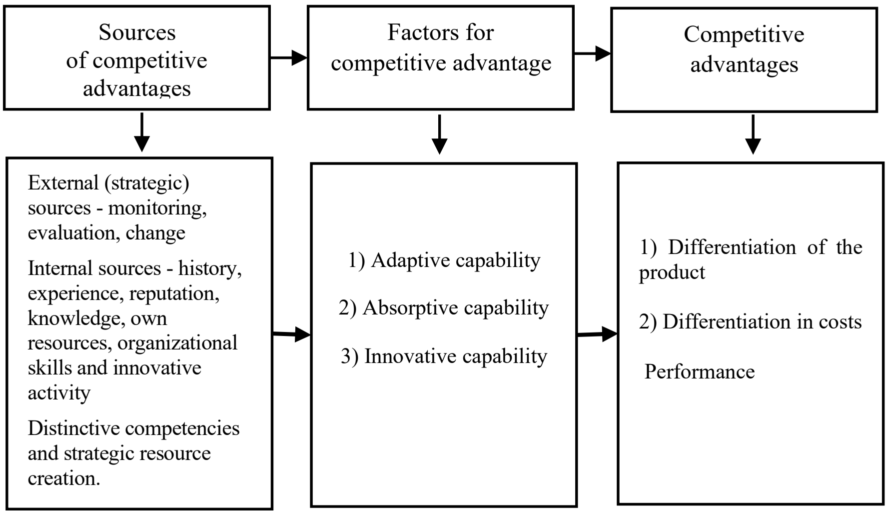

Fig. 2 Sources and factors of competitive advantages

• **Adaptive capability** is defined as the ability of a firm to identify and exploit new market opportunities. This is its ability to focus on changes and develop flexible strategies for effective location, use of resources, changes in the organization and resource base, which will make possible the necessary changes in the product being created, in accordance with changes in demand. Adaptive capability means the process of constantly scanning market changes, monitoring the behavior of customers, competitors, segmenting the market and selecting a target market. These capabilities can be developed in any firm if it manages to create the necessary incentives and motivation that encourage people to question traditional decisions, actions, behavior and desire, insist on change:

Hypothesis 1: The development of adaptive capability in the extended firm has a positive impact on the building of inter-firm competitive advantages and performance.

• **Absorptive capability** is the ability of the company to recognize and evaluate external information, to assimilate the new, the different and to apply it in practice. Knowledge is the main factor for the integration of external information and its transformation into new knowledge. The ability not only to discover, but also to assimilate the new, is, first of all, a factor for creating a long-term vision for development (versus the short-term one), secondly, for the exchange of knowledge, information from partners, training, which are the basis for the development of its own scientific research, the application of new technologies and the creation of a unique product (versus the strategy of imitation). The exchange of ideas from different fields, the transfer of knowledge and free communication encourages everyone to participate in the search for new, better solutions. The combination of the internal learning mechanism of the company and access to external sources of knowledge is a factor in achieving the goals. The end results are improved customer service, reduced inventories, optimization of technologies, closing the cycle, offering a better product and realizing higher profits throughout the product's life cycle, reducing harmful environmental impacts, improving social relations, and ultimately building competitive advantages for the participating companies:

Hypothesis 2: The development of absorptive capability in the expanded company has a positive impact on the building of inter-firm competitive advantages and performance.

• **Innovative capability** is the ability of a company to develop and implement a new product/process, new strategies or a combination thereof, a function of the adaptive and absorptive capacity. The creation of new products and the implementation of new technologies in modern conditions requires the creation of multidisciplinary teams (rather than functional ones), as well as the development and use of complementary innovations, technologies and components for the final product. The basis for the development of innovative capability is the property to risk of managers and their desire to search for and develop new solutions and new, different combinations.

Every successful product innovation and its implementation in practice (in conditions of limited resources) is the result of the best combination of opportunities and constant, active communication between all researchers, designers, performers with complete freedom for creativity and improvisation within the framework of the given project. Every such successful innovation and successfully implemented project facilitates the future activity of the company and reduces its costs of experimentation, prototyping and testing of the new product. All this organizational activity makes a connection between today's and tomorrow's development of the expanded company. Small changes in the organization, managerial perceptions and decisions create great opportunities for development and increasing efficiency in general. However, the creation of a specific, differentiated product, intended for a precisely defined circle of users from the selected market niche, is the basis for achieving positive results from the activity and stable market positions compared to current and potential competitors, i.e. realizing advantages.

The accelerated process of digitalization in all aspects of business activities requires not only management of today's product portfolio, but also timely decisions for its change, renewal, in order to adapt to the dynamics of the digital market. They reveal new organizational capabilities for joint design, structuring, management and additional opportunities for building inter-firm competitive advantages. Therefore, the general organization of the inter-firm process in the extended firm can ensure the desired success by best combining changes in production with changes in the external environment and with managerial experience [12]:

Hypothesis 3: The development of innovation capability in the extended firm has a positive impact on building inter-firm competitive advantages and performance.

The empirical study was conducted using a developed and applied methodology to evaluate the defined hypotheses and is part of a larger study of the strategic management of the construction company. The study includes 15 companies, randomly selected, which have been operating for more than 5 years in different segments of the construction market and have different specializations, different histories, different territorial localizations, different business models, which allows generalizations to be made with the necessary objectivity. An equal number of small, medium and large companies were studied, which have different resources and competencies related to production, organization and management, have different market positioning and different opportunities for digitalization of processes and operations.

The choice of the construction market is not accidental. It is often defined as inefficient, since participants tend to work in the short term, have difficulty accepting innovations and are limitedly rational in using the accumulated knowledge and experience in their practice. In addition, the construction market is characterized by a low level of inter-firm connections, inefficiently built vertical connections and relationships, which leads to fragmentation of responsibility and in practice complicates and hinders the implementation of projects and sites that meet the requirements of sustainable construction. The creation of an expanded company would solve a large number of the above problems.

The information was collected through an online survey based on the principle - one respondent (senior manager) - one company, assuming that he has complete information and knowledge about the company he leads.

The questionnaire includes a total of 18 questions, structured as statements to which respondents refer, marking their answers from 1 to 5 on the Likert scale (where 1 means "I completely disagree" and 5 means "I completely agree"). Since the aim is to determine the correlation and assess the capabilities of the expanded firm to build inter-firm competitive advantages in the construction market, the questions are divided into three parts that follow the formulated hypotheses. In this way, the influence of the independent variable in the expanded firm (adaptive, absorptive and innovative capabilities) on the dependent one (inter-firm competitive advantages and performance) can be determined. The questions are formulated in an understandable way, the necessary explanations for certain terms have been added, but they do not exclude the influence of the subjective factor when assessing the achieved results (compared to competitors) as a function of the specific practices applied. Cronbach’s Alpha coefficient was employed to evaluate the internal consistency of the questionnaire. Its high value (significantly higher than the accepted base 0.7) proves the internal correlation and consistency of the questionnaire and the representativeness of the final results.

The assessment of the adaptive capability of the expanded firm as a factor for building inter-firm competitive advantages and performance includes the following aspects:

1) Creating formal and informal channels for communication with external stakeholders.

2) Explaining the strategic plans for sustainable development of the firm and requiring objective feedback from external stakeholders.

3) Developing new development strategies through a process of public consultations and exchange of opinions and experiences.

4) Constantly updating the information and knowledge base from external sources related to environmental news.

5) Developing a strategy for green markets and green products based on information about new customer preferences, guided by the idea of sustainable development.

6) Creating an effective organizational and management structure for researching and implementing new, good sustainable practices, taking into account the specifics of the company and the market where it operates.

The assessment of the absorptive capability of the expanded firm as a factor in building inter-firm competitive advantages and and performance includes the following aspects: [13]:

1) The process of learning and knowledge transfer are key to the development of the expanded firm and the realization of strategic goals.

2) The ability to absorb, generate, integrate and create new knowledge brings additional benefits, which are a factor in building competitive advantages and realizing company goals.

3) Training in the company is carried out through:

• Developing effective procedures for identifying, evaluating and transferring new information and knowledge.

• Applying adequate, routine practices for absorbing new information and knowledge.

• Transforming existing information into new knowledge.

• Developing new knowledge that has the potential to stimulate innovation.

• Using new knowledge to create new products and processes.

4) Knowledge transfer and the integration of external and internal knowledge allows for the development of a new vision and development strategy that takes into account the interests of the three parties – customers, company and society.

5) A key factor for the success of the learning and knowledge transfer process in the company is the ability to absorb and assimilate innovations, which affects the current activity and future development of the company.

6) Creating a mechanism for integrating individual knowledge into a collective system provides new configurations of resources and opportunities.

The assessment of the innovative capability of the expanded company as a factor for building inter-company competitive advantages and performance includes the following aspects:

1) Adaptive and absorptive capability allow the company to evaluate resources, competencies in a new way and find a way to use it in a new, more effective way, which is the result of the following actions:

• Global understanding of the tasks and responsibilities of the team.

• Integration of specialized skills and knowledge into the general company activity.

• Change and reconfigure knowledge, decisions, actions in order to adapt to the dynamics in the external environment.

• Synchronization of company activity with the activities of stakeholders.

• Effective allocation of resources (information, time, tasks, reports) in the company as a whole and in individual units, which is a function of the individual assessment of knowledge, skills, competencies of each, which increases efficiency.

• Assessment of the individual contribution of each to the general activity.

2) Within the extended firm, companies exchange information and coordinate, which

stimulates innovation and ensures maximum benefit for all participants in it.

3) Partners participating in the extended firm are a valuable source of knowledge for sustainable development, applying the principles of the circular economy, which is a factor in building collective competitive advantages (rather than company-specific), a function of strategic cooperation.

4) The greater number of participants with different functions and expertise, increases knowledge capacity, facilitates the integration of external and internal knowledge and the creation of new ones, and efficiency is achieved through long-term contracts, long-term relationships, connections, continuity of joint work and information exchange.

5) The creation of the extended firm increases competences because it has access to the specific knowledge and resources that other actors possess and this is an important factor in stimulating innovation, especially open, complementary innovation.

6) The ability of managers to identify, develop and use their specific assets in combination with other specific assets of other firms participating in the extended firm is unique and often very difficult for competitors to realize.

3. RESULTS AND DISCUSSIONS

When processing the data obtained from the online survey, the average values were first calculated and on this basis the Pearson coefficient (R) for the entire sample was calculated. This allows us to determine the influence of the adaptive, absorptive and innovative capabilities of the expanded firm as factors for building inter-firm competitive advantages (Table 1).

Table 1 Correlation analysis between adaptive, absorptive and innovative capability and the building of inter-firm competitive advantages and performance in the extended firm

The expanded firm develops:		Building inter-firm competitive advantages and performance in the expanded firm
Adaptive capability - identifying, changing and adapting to new market opportunities.	Pearson Correlation – R Coefficient of Determination (%) - R^2 N=15	0.684 46.78
Absorptive capability - evaluating external information, assimilating the new, different and applying it in practice.	Pearson Correlation – R Coefficient of Determination (%) - R^2 N=15	0.765 58.52
Innovative capability - developing and implementing a new product/process, new development strategies or a combination of them.	Pearson Correlation – R Coefficient of Determination (%) - R^2 N=15	0.812 65.93

Correlation is significant at the 0.01 level (1-tailed). Source: Own calculations

To add more explanatory power to the empirical results, the coefficient of determination (in %) - R^2 was also used in the analysis, which provides a more accurate estimate and shows what percentage of changes in the independent variable will lead to changes in the dependent variable (the remaining percentages up to 100 are defined by the coefficient of uncertainty - K^2).

The calculated Pearson correlation coefficient in Table 1 is statistically significant, indicating that there is a relationship between the variables under study. Since the correlation coefficient is significantly greater than zero, this allows the rejection of the null hypothesis of independence.

The results obtained prove the existence of a significant positive correlation between the adaptive, absorptive and innovative capability in the extended firm and the building inter-firm competitive advantages and performance, which allows us to draw the following conclusions:

Adaptive, absorptive and innovative capability are the main factors that provide a constant opportunity for the extended firm to integrate, reconfigure, renew, develop and change its resources in accordance with changes in the external environment [14]. Although common to all firms, these three factors develop differently, uniquely in each firm, which makes them a source of long-term competitive advantages.

The developed strategy of the expanded company, oriented towards sustainable development, stimulates scientific research activity, innovations, both in the product and in the production process, organizational changes, skills and perceptions of managers about the market situation and the positions of the company. Their decisions, the result of the adaptive and absorptive capability to monitor, evaluate alternatives and strategic changes, training and knowledge transfer are the main factors that change the resource base and operational competencies, and ensure the maintenance of competitive advantages (H1, H2). The creation of long-term advantages, their preservation, stabilization is the result of the skills of managers to develop them, enrich them and at the same time not give competitors the opportunity to duplicate, imitate the advantages, or more precisely the resources that underlie them. And such resources that preserve the advantages are reputation, knowledge, skills, experience, effective vertical relationships, or in a word, the development of intangible resources.

Building competitive advantages is a complex process that involves additional skills of the expanded firm to create, offer and realize higher economic, environmental and social value for customers, society as a whole and for itself. This includes developing additional product features, additional service, company reputation, etc., or anything that creates convenience for the customer . In addition, a fundamental rethinking of the role and function of resources, the way and possibilities for their multiple use is necessary, which in practice means forming a new mindset (H3).

The expanded firm, oriented towards sustainable development, can achieve good results, both in the short and long term, based on product differentiation, and cost differentiation gives positive results in the long term. The reasons are mainly related to the characteristics of consumers and their perception of the new, the level of education and income is an important factor in the choice of products for consumption. Such consumers take into account the positions, the place of the company in terms of ecology, pollution, environmental protection, social conflicts, attitude, incentives for employees, image in society. Competitive advantages in costs imply a reduction in price, which is a stimulating factor for increasing purchases. In the long term, the company's ability to inform, persuade, change attitudes and train, educate customers are the factors that can reverse this trend and provide a positive financial and strategic result. Stabilizing a company's positions is a factor in increasing market share and market power (a condition for charging a higher price), which increases its revenues. The increased revenues and profits can be directed to various social activities - better training, education, health, transport services, improvement of the urban environment and the region where the company operates. In other words, the realization of economic, environmental and social goals allows for the construction of inter-firm competitive advantages, which brings significant potential and real long-term benefits that can compensate for the increased short-term financial costs.

An extremely important question is how to make a comprehensive assessment of the built competitive advantages (in the three aspects - economic, social and environmental). The realized profit and other financial indicators, although easy to use and analyze, are characteristics of operational efficiency, which, however, do not make the company the best. Building and realizing competitive advantages is a factor in realizing higher profits, but not always the realized higher profit is an indicator of the realization of competitive advantages. For the reasons stated, their assessment must necessarily include two different characteristics: 1) Assessment of market positions, a result of expanding and changing the resource base and competencies, the company's ability to monitor and adapt its activities and structure to changes in the dynamic environment, i.e. the influence of external factors, 2) Assessment of the effectiveness of the company's activities, expressed in financial data and results, which is also an assessment of the realization of company goals [15].

The assessment of competitive advantages in the direction of product differentiation (market positions) may include the following main aspects of the company's activities - reputation as a sustainable company (social, environmental, economic characteristics), innovation, environmental characteristics of the product, convenience for customers, which are fundamentally subjective. Competitive advantages in the direction of cost differentiation (market positions) are objective and may include an assessment of the degree of reduction of harmful emissions, amount of resources used, reuse, recycling, all aimed at minimizing company costs.

The realization of competitive advantages is an indicator of the degree of realization of the company's goals in the short and long term (but not vice versa). This assessment of the effectiveness of the company's activities can include more aspects (such as product, production, financial and strategic efficiency), which can be measured with specific indicators [16]. It can be made on the basis of comparing the indicators of the company's activities with the average indicators for the market in which it operates, or by comparing its own indicators with the same indicators of key competitors, where, however, the temptation of inflating one's own assessment and subjectivity is great, which is why the use of external, independent persons is desirable (Table 2).

Table 2 Assessment of the built competitive advantages and performance

Competitive advantages and performance	Assessment of the competitive advantages and performance
I.Competitive advantages.	Reputation of a sustainable company (social, environmental, economic aspects). Innovation. Environmental characteristics of the product. Customer convenience. Customer problem solving
1. Differentiation of the product (these assessments are subjective).	Reducing harmful emissions. Quantity of used resources. Reuse.

	Recycling. Minimizing company costs.
2.Differentiation in costs (objective criteria).	Assessing the achievement of company goals
II. Performance	Quality. Reliability. Durability. Additional services. Flexibility (reusability, shared consumption, recycling). Acceptable, attractive price.
1. Product efficiency.	Use of information models. Time to develop and implement innovation. Product life cycle management.
2. Production efficiency.	Long-term assessment of: Product characteristics. Company reputation. Level of satisfaction. Customer loyalty. Added value provided to stakeholders, consumers, suppliers, competitors, etc. Reduced costs. Increased social responsibility. Positive impact on the environment.
3. Strategic efficiency.	Reputation of a sustainable company (social, environmental, economic aspects). Innovation. Environmental characteristics of the product. Customer convenience. Customer problem solving.
4. Financial efficiency. (objective indicators)	Sales revenue. Profit. Return on assets. Company growth. Growing market share. Employment growth. Profitability dynamics.

4. CONCLUSIONS

In the proposed study, the author analyzes the strategic behavior of the expanded firm and the factors and sources for building inter-firm competitive advantages. In modern conditions, customer satisfaction and enhancing reputation continue to be the main goal of company managers and are crucial for achieving positive results. However, this is only part of the overall goal - satisfaction of the expectations and interests of stakeholders and society. Competitive advantages today are built on the basis of strong leadership, development and implementation of a sustainable strategy that allows for the creation, offering and realization of higher added value for everyone (company, stakeholders and society) and solutions that include balanced social, economic and environmental considerations.

The extended firm is an organization that integrates and coordinates its activities with internal and external partners (suppliers, distributors, subcontractors, strategic allies). The end result is the creation of new knowledge, which allows the creation of a package of complementary products (goods and/or services) that increase the satisfaction of the end customer and stakeholders. The creation of the extended firm is a strong factor in building not company-specific, but inter-company competitive advantages. They are the result of using the specific resources and competencies of the individual participating firms and their mutual complementarity or are generated by the interaction between the partners (training and knowledge transfer programs, effective management) and the transfer of knowledge and experience. The specificity of the assets and the product created with them, as well as the ability of managers to identify, develop and use their specific assets in combination with other specific assets of other participating firms, is unique and often very difficult for competitors to realize.

At the same time, it should be emphasized that all of the above can only happen in the presence of complete trust between the partner companies. Trust means, first of all, the conviction that the transfer and use of ideas, experience, knowledge will be in mutual common interest and aimed at realizing common goals. Secondly, the problems and their successful solution, as a result of joint work, based on the integration of knowledge, the search for new better configurations of resources, strengthens trust and the tendency to take on new joint commitments.

Finally, confidence is needed that true, accurate information is exchanged between the participants in the interest of all. Deepening and expanding relationships to jointly solve common problems means shared responsibility for making common decisions to change and adapt to the dynamics of the external environment. The presence of long-term formal and informal relationships built on trust allows all participants in the extended firm to offer higher additional environmental, social and economic value to stakeholders, which means stabilizing inter-firm competitive advantages. However, in a dynamic environment, they are short-lived due to the fact that consumer demand, tastes and preferences, competitive actions and positions of other companies, standards, regulations are constantly changing. This requires the expanded firm to constantly invest in development, modernize its own resources, create new strategies and implement new practices for growth.

5. References

[1] Gulati R., *Alliances and networks*, Strategic Management Journal, 1998, 19, 293–331
[2] Seuring S., Müller M., Fro*m a literature review to a conceptual framework for sustainable supply chain management*, Journal of Cleaner Production, 2008, 16(15), 1699-1710
[3] Rainey D., *Sustainable Business Development, Inventing the Future Through Strategy, Innovation, and Leadership*, Cambridge University Press, 2009, https://doi.org/10.1017/CBO9780511617607
[4] Rumelt R., *Good strategy/bad strategy: The difference and why it matters*, New York: Crown Business, 2011, ISBN 9780307886231 0307886239
[5] Iansiti M., Levien R., *The Keystone Advantage: What the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability*, Harvard Business Press, 2004, 255
[6] Porter M., Competitive *Advantage: Creating and Sustaining Superior Performance*, Free Press, New York,1985, (new 2008.Simon and Schuster, ISBN1416595848, 9781416595847).

[7] Henderson B., *The Origin of Strategy*, Harvard Business Reyiew, 1989, 67(6), 139-143.
[8] Porter M., *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press, New York,1985, (new 2008.Simon and Schuster, ISBN1416595848, 9781416595847).
[9] Do B., Nguyen N., *The Links between Proactive Environmental Strategy, Competitive Advantages and Firm Performance: An Empirical Study in Vietnam*, Sustainability, 2020, 12 (12), 4962, https://doi.org/10.3390/su12124962
[10] Cyfert S., Chwiłkowska-Kubala A., Szumowski W., Miśkiewicz R., *The process of developing dynamic capabilities: The conceptualization attempt and the results of empirical studies,* PLoS ONE, 2021,16(4): e0249724, https://doi.org/10.1371/journal.pone.0249724
[11] Wang C., Ahmed P., *Dynamic capabilities: A review and research agenda*, International Journal of Management Reviews, 2007, 9(1), 31-51
[12] Brown Sh., Kathleen M., *The Art of Continuous Change: Linking Complexity Theory and Time-Paced Evolution in Relentlessly Shifting Organizations*, Source: Administrative Science Quarterly, 1997, 42. (1), 1-34, http://www.jstor.org/stable/13/08/2010
[13] Pavlou A., El Sawy O., Omar A., *Searching for a Simple Model of Dynamic Capabilities*, 2013, Dec. 18, Available at SSRN: http://ssrn.com/abstract or http://dx.doi.org/
[14] Wang C., Ahmed P., *Dynamic capabilities: A review and research agenda*, International Journal of Management Reviews, 2007, 9(1), 31-51, (44).
[15] Helfat C., Finkelstein S., Mitchell W., Peteraf M., Singh H., Teece D., Winter S., *Dynamic capabilities: Understanding strategic change in organizations*, London: Blackwell, 2007, ISBN: 978-1-405-13575-7
[16] Do B., Nguyen N., *The Links between Proactive Environmental Strategy, Competitive Advantages and Firm Performance: An Empirical Study in Vietnam*, Sustainability, 2020, 12 (12), 4962, https://doi.org/10.3390/su12124962