

BUSINESS MODEL CONVERSION IN THE CHANGING CONDITIONS OF BUILDING THE MARKET POSITION OF ENTERPRISES

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Purpose: The aim of the study is to understand the business model conversion in enterprises cooperating with market partners by examining the relationship between the implementation of innovative organizational solutions and enhancement of customer and market knowledge.

Design/methodology/approach: The empirical research was carried out on the basis of subject literature studies and statistical analysis using Kendall's rank correlation and Kruskal-Wallis test. The relationship between the implementation of innovative organizational solutions and enhancement of customer and market knowledge in order to understand the business model conversion in enterprises cooperating with market partners was taken into consideration.

Findings: The research results suggest that cooperation with market partners is conducive to the business model conversion, which is accompanied by the implementation of innovative organizational solutions and enhancement of customer and market knowledge.

Research limitations/implications: The presented research provides reliable information only with certain assumptions and has some limitations that affect the possibility of their empirical application. The limitation of the results obtained is the fact that the research does not take into account macroeconomic, legal, demographic and social factors that may affect the business model conversion in enterprises cooperating with market partners.

Practical implications: Strong positive relationships between the implementation of innovative organizational solutions and enhancement of customer and market knowledge is important for the business model conversion and management of enterprises cooperating with market partners.

Social implications: The results of the conducted research can have a positive impact on society, because better understanding of customers leads to the creation of products and services better adjusted to real social needs, which can improve the quality of life of consumers and support the development of more inclusive labor markets.

Originality/value: The conducted research sheds new light on the perception and understanding of the business model conversion in micro and small enterprises. Thanks to the business model conversion carried out based on innovative operation and customer and market knowledge, micro and small enterprises can respond more effectively to market trends.

Keywords: enterprise management, business model, innovation, customer and market knowledge.

Category of the paper: Research paper.

1. Introduction

In a dynamic market environment, innovation and knowledge have become the conditions for survival and development of modern enterprises. Building partnership ecosystems, through strategic alliances, suppliers' networks, cooperation with market partners, allows for responding faster to changes in customer preferences or technological progress. Moreover, interorganizational cooperation becomes a response to competitive pressure. Therefore, enterprises that combine organizational forces may adapt their business models faster to new conditions and create innovative solutions in the conducted business activities. It is worth noting that the market environment of the business model affects both exogenous and endogenous variables, making the business model convert under the influence of changes in customer needs and preferences in terms of value proposition. (Gebauer et al., 2020) This means that, in the era of the knowledge-based economy, innovative solutions and customer and market knowledge become the main factors of enterprise development.

It is important to distinguish between two distinct concepts: the innovative business model and business-model conversion. An innovative business model involves creating an entirely new logic of operation to generate above-standard value, whereas business-model conversion consists of modifying the existing logic to remain aligned with a dynamic environment (Chesbrough, 2010). The key differences lie in the impulse behind the change, the level of novelty, the scope of the transformation, and the roles of partnerships and knowledge. Understanding these dimensions enables researchers and practitioners to select more appropriate tools and success metrics, depending on whether a firm faces the challenge of innovation or of business-model conversion (Saebi et al., 2017).

The particular importance of the factors is noticed in the activities of micro and small enterprises. Micro and small enterprises, operating in cooperation with market partners, more and more frequently notice that the manner of organizing business activities, taking into account the implementation of innovative organizational solutions, has a key impact on their ability to learn about customers and the market and, consequently, on the conversion of their business model. In this approach, the key research question is: "How do the relationships between the implementation of innovative organizational solutions and enhancement of customer and market knowledge shape business model conversions in enterprises collaborating with market partners?" As a consequence of this question, the objective of the study was to understand the conversion of the business model in enterprises cooperating with market partners by examining the relationships between the implementation of innovative organizational solutions and enhancement of customer and market knowledge. This research objective corresponds with the H1 hypothesis that: in enterprises, cooperation with market partners is conducive to the conversion of the company's business model, which is accompanied by the implementation of innovative organizational solutions (A1) and enhancement of customer and market knowledge

(A2). The research methods used to accomplish the objective are critical analysis of literature and statistical analysis using Kendall's rank correlation and Kruskal-Wallis test.

The problem of the business model conversion in changing business conditions, presented in foreign and domestic literature on the subject, is fragmentary and dispersed. Therefore, the considerations discussed are relevant and up-to-date due to the possibility of capturing the dynamics of changes in the business model in the process of gaining and maintaining a competitive advantage.

1.1. The company's business model and its conversion

The business model is a strategic management tool, which was created as a result of permanent changes occurring in the endogenous and exogenous environment of enterprises. In this context, the task of the business model becomes to explain a specific field of reality that helps to realize that reality by providing specific applications (Dubosson-Torbay et al., 2002) and achieving the intended business objectives of enterprises. The effect of implementing the business model should be knowledge built on the observation of socio-economic phenomena (Tong et al., 2022), which is reflected in the effectiveness of intellectual capital use, which is the company's root system (Gebauer et al., 2020). Combining core components and key abilities with the proper configuration of the company's resources in the business model allows for creating a unique offer considering innovative product, process and management solutions. However, providing the framework for the implementation of new, innovative solutions in the business model and its conversion requires possessing up-to-date information (Prusak, Davenport, 2013), particularly in the field of virtualization of economic reality (Łęgowik-Świącik, 2023). This means that the business model should take into account the scope of the company's activities and the specificity of the sector in which the company operates, and to direct processes and activities in such a way as to enable the enterprise to maintain and increase its competitive advantage on the market.

In this context, the business model becomes a value accelerator that accelerates value creation processes, enabling the generation of revenue stream considering the cost structure and price policy adopted (Abolfathi et al., 2022). This means that the business model should implement value accelerators of an active nature. Thus, formulating the directions of operation for the business model conversion should be accelerated by those value accelerators (Sobko, 2015) which hold the potential to achieve a competitive advantage. The key value accelerators in the business model are innovation and intellectual capital (Davenport et al., 2009), which take into account the scope of activities and key abilities as well as configuration of resources, (Lange, Johnston, 2020) which allow the creation of a unique offer, assuming an effective price policy.

Enterprises in the early stages of development should convert the business model to create a new value. This means that these enterprises, when entering cooperation with market partners, should implement innovation that influences attitudes of innovative stakeholders (Galvão et al.,

2023). Therefore, the business model conversion includes, not only assessing the options of using the individual components of this model to create value in terms of *ex post*, but also conducting cognitive activities, which enable indicating the relationships between individual components of the business model in terms of *ex modernum* and *ex ante*.

In the case of enterprises characterized by a state of relative balance in terms of their competitive position, the business model conversion should be complemented by interactive value accelerators which lead to achieving an increase in the market share in the long-term perspective (Kovacs, 2023). However, in the short-term perspective, the company's value fluctuates, which is why the business model should also particularly take into account value accelerators such as: core components (Mohammadi, Sakhteh, 2023), revenue streams, cost structure, activities, processes, the specificity of the sector, and extend cooperation with market partners based on network principles.

In the case of enterprises characterized by a decrease in the company's competitive position (Jung, Kim, 2022), and thus the outflow of customers and a decrease in profitability, the business model conversion should be complemented by reactive value accelerators which will allow the scope of activities to be adapted to the changing environment. This will enable, on the one hand, acquiring new revenue streams by implementing innovative solutions (Slywotzky et al., 2007), and on the other, allow for using selected information and knowledge (Slywotzky, Drzik, 2005) as well as cooperation based on network principles, including virtual markets.

To sum up, it is worth emphasizing that value accelerators in the business model conversion penetrate individual stages of value migration, complement them, but they are not identical. The presented value accelerators do not constitute a closed list. However, considering the fact that each enterprise may be in one of the three stages of value migration (Noviaristanti et al., 2024), it should individually select accelerators that will allow the acceleration of the value creation process. The choice depends on the manager's decision, however, the functioning of the company in changing conditions for building the market position of enterprises, determines the need for flexible configuration of value accelerators, which in turn results in business model conversions.

2. Methods

To understand the business model conversion in enterprises cooperating with market partners and to examine the relationships between the implementation of innovative organizational solutions and enhancement of customer and market knowledge, the empirical research was carried out based on the data obtained with the survey questionnaire using the CATI method. The questionnaire was validated through a pilot test conducted on a sample of

20 Polish enterprises. This pilot made it possible to carry out a preliminary assessment of the questionnaire under conditions comparable to the main study. Its principal advantage lies in the early identification of potential issues and their correction before the full-scale research is launched (Willis, 2016). The statements in the survey questionnaire were evaluated by the respondents on a five-point Likert scale (from 1 – "totally disagree" to 5 – "totally agree"). The respondents were the senior management staff of the surveyed enterprises. Of the 349 enterprises included in the research sample, the dominant activity profile was service activities - 72.8% (followed by production 21.2%, and trade 6%). Most, since 68.5% of the surveyed enterprises, are micro enterprises (followed by small - 12.0%, large - 10.9%, and medium - 8.6%). Considering the territorial scope of the conducted business, the activities with a national scope dominated - 45.8% (followed by global - 14.1%, European - 10.3%, and local - 29.8%). The research sample included enterprises operating in the private sector.

The empirical part of the research was divided into two fundamental parts. In the first part, the survey frequency analysis was conducted. This analysis allows the examination of the distribution of responses received and an orderly statement of observations in each category of responses (Corder, Foreman, 2009). Frequency analysis is a one-dimensional analysis describing the distribution of a single variable (Vogel et al., 2020). It is a tool for quantitative data analysis in survey studies and is a starting point for further statistical analyzes.

In the second part of the empirical research, an in-depth analysis was carried out using Kendall's rank correlation coefficient and Kruskal-Wallis test. Kendall's rank correlation is calculated based on comparing observation ranks for both variables. On this basis, the tau (τ) value is determined, which is a relative difference between the percentage of concordant and discordant pairs. This coefficient takes values from -1 to 1, where $\tau = 1$ indicates perfect concordance of ranks, $\tau = -1$ denotes a perfectly reversed order, and $\tau = 0$ suggests no significant monotonic relationship between the variables. The correlation analysis was to make it possible to achieve the intended objective — understanding the business model conversion in enterprises cooperating with market partners by examining the relationship between the implementation of innovative organizational solutions and enhancement of customer and market knowledge.

3. Results

In the first part of the empirical research, it was analyzed what proportion of the respondents agreed (responses on a five-point Likert scale) with the statements concerning collaboration with market partners, which is conducive to the business model conversion, thus enabling the implementation of innovative organizational solutions.

Based on the data presented in Table 1, it can be noted that almost 82% of the respondents agree, or totally agree with the statement that cooperation with market partners is conducive to the business model conversion and allows the implementation of innovative organizational solutions. This means that, according to this group of respondents, the design of new solutions together with market partners (e.g. within working groups, consortia, clusters) promotes creativity and groundbreaking innovation. According to the respondents, the active participation of partners in the process of innovation improves generating and implementing new organizational concepts. Cooperation with market partners, due to the effect of synergy, is conducive to the business model conversion by introducing new distribution channels, customer segments, or manufacturing methods elaborated along with a partner. Figure 1 shows the frequency of the respondents' answers to the question.

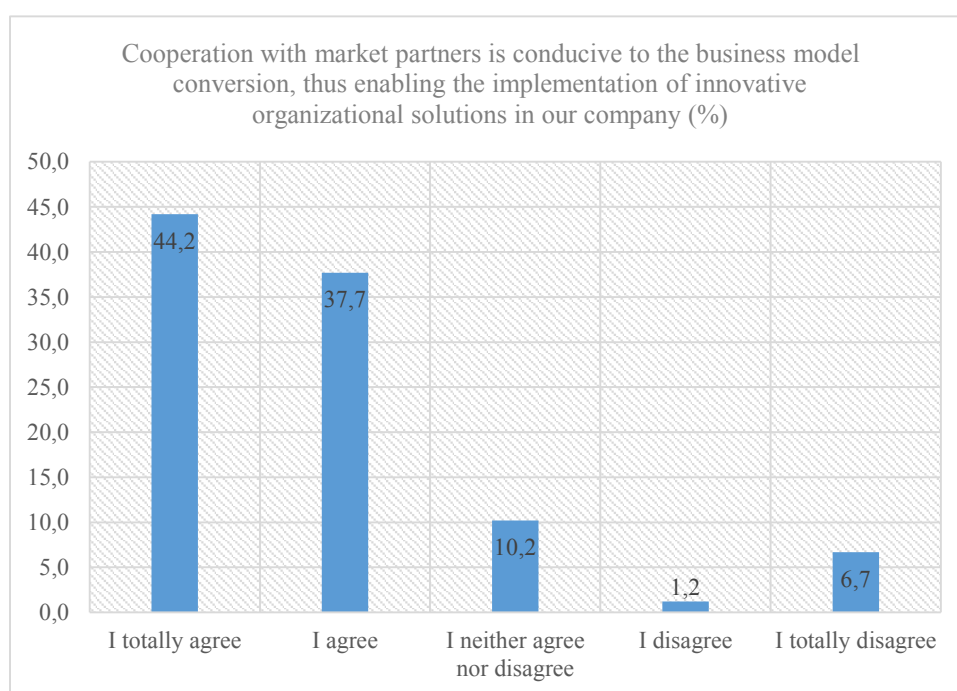


Figure 1. In enterprises, cooperation with market partners is conducive to the business model conversion, which is accompanied by the implementation of innovative organizational solutions.

Source: Own study.

It is worth noting that about 8% of managers do not agree with the statement in question, and 10% are neutral. This may result from a lack of direct experience in terms of cooperation with market partners, which is favorable for changes in the business model, which means that this group of respondents does not see the value of cooperation. Another reason for this may be a low level of trust or fear that cooperation may pose a risk associated with the disclosure of trade secrets, which translates into the skepticism of this group of respondents. In addition, it is worth noting that managers may not notice the need to convert the business model as a result of cooperation with market partners. These factors can explain why these respondents are not in favor of the approach of most respondents.

In the subsequent part of the empirical research, the frequency analysis was carried out concerning the respondents' answers to the statement relating to cooperation with market partners, which promotes the business model conversion, thus enabling enhancement of customer and market knowledge. Figure 2 shows the frequency of the respondents' answers to the second question.

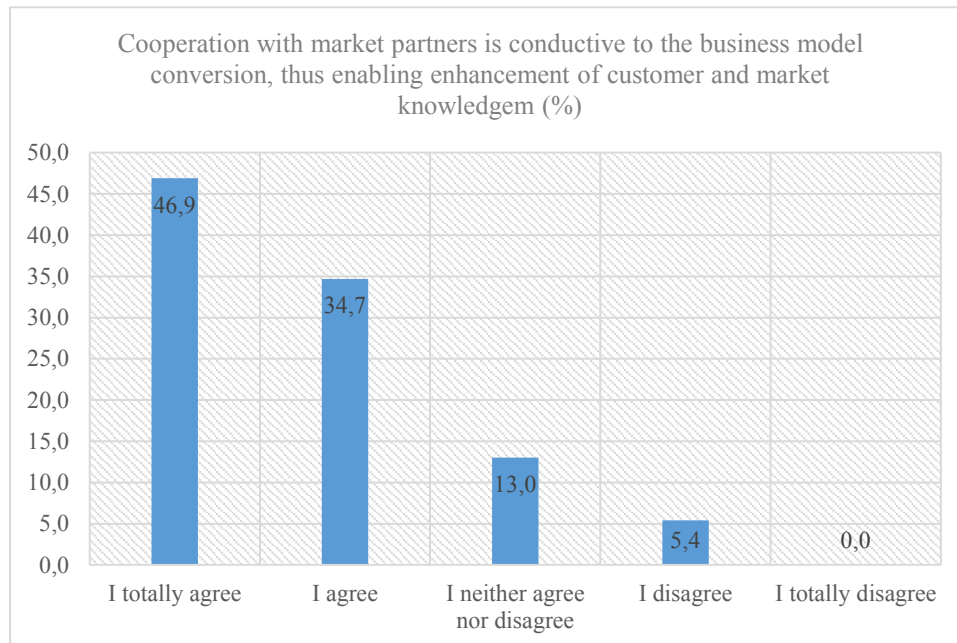


Figure 2. In enterprises, cooperation with market partners is conducive to the business model conversion, thus enabling enhancement of customer and market knowledge.

Source: Own study.

Based on the research results presented in Figure 2, it can be noted that almost 82% of the respondents agree or totally agree with the statement that cooperation with market partners is conducive to changes in the company's business model, which contribute to enhancement of customer and market knowledge. Such a significant advantage of positive answers may indicate a strong conviction of the respondents that through interactions with partners the company may create and offer value, since market partners can bring additional competences, technologies or information, which prompts the business model conversion to generate added value. The obtained research results may mean that the enterprises examined, thanks to partnerships, expand the resources of market and customer knowledge. They may realize this in joint development projects, in which partners share knowledge of customer preferences or effectiveness of market service methods, which allows their adaptation. Exchange of knowledge promotes organizational learning and can lead to improvements in the business model in line with customer expectations.

Interestingly, only 5.4% of the respondents do not agree with the statement in question (0% total lack of consent), and the remaining 13.0% retained a neutral attitude. Such a distribution may suggest that a small group of managers does not see the benefits of cooperation or encountered problems associated with it. Such a situation may occur if a market

partnership lacks trust or knowledge sharing mechanisms. Moreover, in the case of micro-enterprises, partnership may be imposed (e.g. by a stronger partner) and perceived as a limitation of decision-making freedom, which may result in skepticism in the field of actual expansion of market knowledge. Another reason for disagreement may be the conviction that it is mainly own business activities and unique vision of the company that shape its business model, and the partners play a secondary role. However, the fact that no respondent chose the extreme negative answer suggests that even skeptics admit that the arguments for cooperation have the merits, although they can assess them as less important in their context.

The neutrality of the respondents (13%) in relation to the statement that cooperation with market partners is conducive to changes in the company's business model, which enhances customer and market knowledge, may result from caution or lack of unambiguous experience. Some respondents may not know if their company's cooperation with market partners translates into better customer and market knowledge. They may operate in industries where internal knowledge (e.g. own research or direct market research) is valued more than information from partners, hence their hesitation may also result from this fact.

The last part of the empirical research consists in conducting an in-depth analysis, based on the studies of Kendall's rank correlation and Kruskal-Wallis test. Correlation analysis allows for looking at the relationships between the implementation of innovative organizational solutions and enhancement of customer and market knowledge, which will enable understanding the business model conversion in enterprises cooperating with market partners. The relationships under research were verified at the significance level of 0.05. The results are presented in Table 1.

Table 1.

Kendall's rank correlation coefficient between the respondents' answers to the questions about the assessment of benefits of cooperation with market partners, which promotes changes in the company's business model thus enabling the implementation of innovative organizational solutions (A1) and which is accompanied by enhancement of customer and market knowledge (A2)

In enterprises, cooperation with market partners is conducive to the business model conversion, which is accompanied by:		Implementation of innovative organizational solutions (A1)
1	enhancement of customer and market knowledge (A2)	0.81***

Notice: *** statistically significant result at $\alpha = 0.01$; ** – at $\alpha = 0.05$.

Own study based on the conducted research.

The $\tau = 0.8$ coefficient in Kendall's rank correlation indicates a very strong positive relationship (Table 1). This means that the higher the response scale in one question the higher it is in the other. The relationship is systematic, which suggests that the respondents evaluate the impact of cooperation with market partners on organizational innovation and enhancement of customer and market knowledge in a relatively consistent manner. The result of Kruskal-Wallis test of $H \approx 0.03$ (with 1 degree of freedom) is very low, which indicates no statistically significant differences between the response distributions for the two questions. This means that the response distributions for both questions are very similar.

4. Discussion

Considering the results of the conducted research, it is worth noting that such a high level of agreement indicates that the surveyed enterprises, regardless of the size (large, medium, small and micro), undertake pro-innovative activities in terms of organizational activities that emphasize openness to external knowledge and cooperation. A contemporary approach to innovation assumes (Amit, Zott, 2012) that enterprises achieve better innovative results when they open their borders and cooperate with partners from the environment: suppliers, customers, other entities. The conducted research shows that managers share this approach. The research results indicate the conviction that cooperation with market partners becomes a lever of changes and improvements in the business model of the surveyed enterprises. This attitude is characteristic of a pro-innovative organizational culture, where the management staff actively looks for new solutions and encourages learning from other entities, instead of relying only on internal ideas.

The research conducted using Kendall's rank correlation coefficient shows a strong positive correlation ($\tau = 0.8$), which indicates that the respondents assess the aspect of cooperation with market partners, both due to the possibility of implementing innovative organizational solutions as well as in terms of enhancement of customer and market knowledge in a similar manner. The Kruskal-Wallis test result ($H \approx 0.03$) confirms that the response structure is similar for both questions, therefore, it can be assumed that the results of the analysis confirm the consistency and systematicity of assessing the impact of cooperation with market partners on both assessed aspects of the company's functioning.

In the literature on the subject, it is emphasized that external relations are conducive to generating new ideas, improving innovation processes and generating new knowledge (Chan Kim, Mauborgne, 2005). This means that cooperation within inter-organizational networks facilitates the development of new products, co-creating innovation and may enhance customer and market knowledge, which translates into increased business performance. Knowledge of the customer and the market and innovation acquired in this way translate into the ability to convert the business model. Companies can use this knowledge to identify new customer segments, access channels or ways of generating revenue and redesign their business model accordingly. The conducted research sheds new light on the perception and understanding of the business model conversion in micro and small enterprises. The conversion of the business model based on innovation and knowledge of the customer and the market enables micro and small enterprises to respond more effectively to market trends and needs, thereby increasing their competitiveness.

The clear implication of the research is that cooperation with market partners promotes the business model conversion, which is accompanied by the implementation of innovative organizational solutions and enhanced customer and market knowledge. The above results are

statistically significant, which supports the H1 hypothesis. Establishing collaboration, whether in the form of a strategic alliance, a technology partnership or a joint project with a customer, can force a transformation in the way the company creates and offers value. Therefore, management oriented towards innovation and acquiring customer and market knowledge should be considered as an opportunity for development and competitiveness.

5. Conclusions and summary

Summing up the conducted research, it is worth noting that the business model conversion requires coordination and precision in defining all factors shaping both the proposition of a new value for the customer and the company's future development based on innovation. Therefore, the comprehensive identification, analysis and diagnosis of factors shaping the business model conversion is necessary due to the need to obtain selected information about external and internal conditions of this conversion.

The result of Kendall rank correlation coefficient is ($\tau = 0.8$), which indicates a very strong positive relationship between the responses to both statements. This means that the implementation of innovative organizational solutions (A1) is generally accompanied by enhancement of customer and market knowledge (A2), which allows the understanding of the business model conversion in enterprises cooperating with market partners. Considering the synergy between the examined statements, it should be noted that factors such as innovative organizational solutions and enhancement of customer and market knowledge contribute to the business model conversion, which is a theoretical contribution, that extends the learning of the concept of business models. The connection between organizational innovation, market knowledge and business model conversion is important for modern enterprise management processes, because until recently these aspects were considered separately. Traditionally, product or technological innovation was the focus of attention, whereas the role of organizational changes and learning from customers in shaping the business model was ignored. Currently, however, the latest research emphasizes that orientation towards customer knowledge is a key factor that drives the business model conversion (Fidel et al., 2018; Bocquet et al., 2020).

The results of the conducted research shed new light on the perception and understanding of the business model conversion in micro and small enterprises (over 80% of the respondents surveyed). Understanding the examined relationships allows micro and small enterprises to consciously shape their development by improving internal management methods and simultaneously building market knowledge, which enable effective business model conversion, adapting to a dynamic environment. Studies suggest that managers of micro and small enterprises ought to treat organizational innovation, not only as internal improvements, but also

as a key tool for acquiring customer and market knowledge. By promoting innovative and more flexible business models among micro and small enterprises, the conducted research, on the one hand, contributes to increasing their resistance to crises and, on the other, improves the competitiveness of local entrepreneurs.

The obtained data provide the basis for concluding that understanding the business model conversion in enterprises cooperating with market partners by examining the relationships between the implementation of innovative organizational solutions and enhancement of customer and market knowledge, in practice may imply the need to invest more in knowledge management tools, digitization of processes and development of employee competence in terms of cooperation with the environment. Moreover, the results of the conducted research can have a positive impact on society, since better understanding of customers leads to the creation of products and services more adapted to real social needs, which may improve the quality of life of consumers and support the development of more inclusive labor markets. Understanding the relationships examined enables managers to consciously shape business model conversion processes and to better adapt the offer to changing customer needs as well as to respond faster to market changes.

It should also be noted that the conducted research provides reliable information, only with certain assumptions and has some limitations that affect the possibility of their empirical application. The limitation of the results obtained is the fact that research does not take into account macroeconomic, legal, demographic and social factors that may affect the business model conversion in enterprises cooperating with market partners. Collaboration with market partners proved to be the foundation of business model conversion in all the firms examined, yet the dominant mechanisms differ in scale. Micro enterprises, which account for more than 97 percent of business entities in the Polish economy, rely on such collaboration mainly to close resource gaps, whereas large enterprises treat it as a lever for expansion and radical innovation. Understanding these differences is essential for selecting suitable management tools, one set for micro enterprises and another for large firms.

The recommendation for the surveyed enterprises is the accurate recognition of the key conditions of the business model conversion, based on innovation and knowledge management. The fact of the occurrence of a significant relationship between the studied relationships determines the business model conversion and an increase in management efficiency and confirms the importance of these relationships. Another significant area of future research, in this respect, should be to examine changes in strategic assumptions of enterprises, enabling long-term development and competing on the market.

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