

The impact of strategic orientation on the business model innovativeness in the food industry

Abstract

Business models change depending on the intensity of environmental turbulence, technological and industrial changes, radical shifts in consumption habits, and a whole range of other factors. The innovativeness of a business model demonstrates the adaptive ability of the company, i.e., its potential in seeking and creating new sources of competitive advantage. Strategic orientation is the way in which a company directs the implementation of processes and behaviors through which it can achieve superior performance in its industry. It manifests in four forms: market orientation, technological orientation, learning orientation, and entrepreneurial orientation, while the innovativeness of the business model consists of three dimensions: value creation innovativeness, new proposition innovativeness, and value capture innovativeness. This paper explores the impact of strategic orientation on the innovativeness of the business model using a sample of Croatian food companies. The results of the empirical research did not support the hypothesis that market orientation positively affects the business model innovativeness, while for the other three forms of strategic orientation, a positive impact on the innovativeness of the business model was confirmed. In a mature industry such as the Croatian food industry, such conclusions indicate the need to focus, first, on technological and entrepreneurial forms of strategic orientation, and second, even more importantly, on learning orientation as a prerequisite for increasing competitiveness in domestic and international markets.

Keywords: *business model innovations, learning orientation, food industry, entrepreneurial orientation, strategic orientations, technological orientation, market orientation*

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1. INTRODUCTION

The concept of a business model originates from corporate practice, strategic management, and industrial economics and is not synonymous with the concept of corporate strategy. A business model represents the essence and driver of strategy, as well as the key to decoding, understanding, and effectively communicating strategy both within the organization and within the business system (Carayannis, Sindakis, & Walter, 2015). Every company, in implementing its strategy, faces a wide range of decisions, and the business model executes these decisions and bears the consequences, undergoing analysis and assessment of the causes and effects that may result from the chosen strategic decisions. This process repeats with every establishment of a new business model or improvement of an existing one (Shafer, Smith, & Linder, 2005). Business models are not static but change depending on the intensity of environmental turbulence, technological and industrial changes, radical shifts in consumer habits, and a whole host of other factors. Every innovation can contribute to strengthening existing competitive advantages or finding new sources for creating and maintaining a competitive edge, as they develop solutions to business challenges that are the foundation of market success (Šlogar & Andrijanić, 2023). Innovation of the business process can be depicted as an idiosyncratic organizational process through which companies find new ways to define value propositions and create and capture value for business partners in the overall value chain (Wahyono, 2018).

In order for a company to survive and thrive in today's turbulent business conditions, one of the key activities that it must undertake is the innovation of its business model (Nugroho & Fontana, 2023). Business model innovation is the activity of creating, implementing, and testing a new *sui generis* business model (Masa & Tucci, 2013). It is a continuous process for which understanding what kind of business model needs innovation, how to create, change, exploit, and improve it is essential, ultimately representing the key to the company's success (Haftor & Costa, 2023). Often, the development of a first-class business model is more important than the development or adoption of more

advanced technology or better business ideas (Chesbrough, 2007). Business model innovation, besides being an organizational innovation through which a company explores new ways of creating and capturing value for business partners, also represents a source of competitive advantage in many newly established companies seeking to be future leaders in their industries (Chesbrough & Rosenbloom, 2002). Ultimately, the goal of business model innovation is to provide means for collaboration to address internal or external challenges, meet customer needs, create market value, and then achieve business growth (Su, Zhang, & Ma, 2020).

On the other hand, the concept of strategic orientation has emerged as a component of defining corporate strategy over time, i.e., as its relationship with the future environment (Tipurčić, 2022). While it can be generally emphasized that strategy is the source of achieving and maintaining competitive advantage, strategic orientation is the way in which an organization directs its processes and behaviors to achieve top performance (Porter, 1985), or to gain a superior advantage over direct and potential rivals. In other words, strategic orientation is the direction of a company in creating an appropriate pattern of strategic behavior on how to conduct business that will result in achieving top results (Gotteland, Shock, & Sarin, 2020).

Depending on the chosen strategy, a company may choose to primarily rely on technology, learning, innovation, and other factors to create and maintain its competitive advantage and to operate effectively and efficiently, or to innovate its existing business model in accordance with changes in the environment. The most commonly used types of strategic orientations are: market orientation, technological orientation, entrepreneurial orientation, and learning orientation. Market and technological orientations cover processes of adapting products and services or technology to market needs, while entrepreneurial and learning orientations relate to aligning resources with the environment (Hakala, 2011).

The thesis of this paper lies in the direct connection between business model innovation and the form of strategic orientation. We believe

that the form of strategic orientation influences the innovativeness of the business model. In an attempt to explore this thesis, research was conducted on a sample of Croatian food companies, considering the specificities of the industry regarding the increasing need for business model innovation. Namely, simple product and/or process innovations, new marketing and production techniques are no longer sufficient for long-term success due to increasing competition and changed user habits. The strengthening of global competition and environmental turbulence lead to the fact that competitive advantage in this industry can be achieved by a significant deviation from usual industrial practices and existing business patterns through activities manifested through business model innovations.

2. BUSINESS MODEL INOVATIVENESS AND TYPES OF STRATEGIC ORIENTATION

Measuring the innovativeness of a business model isn't simple. It's a complex construct that can't be described or explored easily. In this work, we employ Clauss's (2017) elaboration, according to which the innovativeness of a business model consists of three dimensions: innovativeness of value creation, innovativeness of new propositions, and innovativeness of value capture.

Innovativeness of value creation can be recognized in the creation of new capabilities, new technologies and equipment, new business partnerships, and new processes. New capabilities are necessary for innovating business models, new technology/equipment emphasizes technological resources and equipment necessary for implementing business model innovations, new partnerships (with customers, suppliers, or competitors) represent external resources for innovating the business model, new processes demonstrate how certain activities within the business model are interconnected and can serve as the basis for innovating the business model. *Innovativeness of new propositions* can be conceived in four dimensions: new product or service offerings, new clients and markets, new channels, and new ways of customer rela-

tionship management. New offerings represent new ways of satisfying the desires and needs of customers and also constitute one of the most visible changes in the business model. Business model innovation also involves redefining existing markets or entering new markets, new channels deal with delivering value to customers and can be innovated in various ways, new customer relationships are a source of business model innovation through the improvement of existing relationships or the building of new relationships with customers. *Innovativeness of value capture* is divided into two components: new revenue models and new cost structures. New revenue models are a source of innovation through new sales concepts and encouraging customers to pay additional value, new cost structures assume that the cost structure needs to be changed through the business model to align with the business strategy.

Furthermore, it's possible to identify four basic strategic orientations: (1) market orientation, (2) technological orientation, (3) learning orientation, and (4) entrepreneurial orientation.

Market orientation of a company is a hybrid of elements of corporate strategy and its culture used to explore the market and thus exploit its opportunities (Hussian, Azhar, & Shahid, 2013). Typurić and Barun (2020) consider companies with high market share to act very aggressively in the market. Moreover, research has shown a positive relationship between market orientation and company performance, or market orientation and entrepreneurial investments in high-tech industries (Cano, Carrillat, & Jaramillo, 2004; Kirca, Jayachandran, & Bearden, 2005; Zahra, 2008). Hult, Hurley, and Knight (2005) conclude that the harmony of market culture, market information processing, and organizational responsiveness affect the success of a company's business. Although product innovations are considered a tool for expanding companies and achieving better performance, conflicting research and opinions can be found in the literature. While some research has shown a positive relationship between innovative products and market orientation (Kohli & Jaworski, 1990; Slater & Narver, 1994; Atuahene-Gima, 1996), other studies prove that market orientation hinders innovation development and

encourages imitation (Bennett & Cooper, 1979; Lawton & Parasuraman, 1980).

Entrepreneurial orientation refers to management's inclination toward innovative, proactive, and risk-taking behavior (Miller, 1983; Covin & Slevin, 1989). It illustrates strategic predispositions that encompass entrepreneurial processes and behavior (Lumpkin & Dess, 2001). Entrepreneurial orientation can be viewed as an incremental process within a company through which innovation is achieved (Hult, Hurley, & Knight, 2004). Additionally, entrepreneurial orientation can become a solution for the public sector to cope with the lack of public funding and the expensive demands for additional public services (Širola, Mihanović, & Raspor Janković, 2022). According to Miller (1983), innovativeness, proactiveness, and risk-taking form the basis of entrepreneurial orientation and are often combined to create a higher-order indicator for the level of entrepreneurship (Rauch, Wiklund, Lumpkin, & Frese, 2009; Covin & Wales, 2012). An important premise of entrepreneurial orientation is that organizations need to adapt their operations in a competitive and dynamic environment, meaning that such organizations need to leverage their resources in line with the uncertain environment by exploring new market opportunities that will be leveraged to meet future challenges. Entrepreneurially oriented companies are often a reflection of the efforts of individuals in managerial or leadership positions to create innovative ideas that will yield profitable results in future operations. However, there are other perspectives. For example, Stevenson and Jarillo (2007) argue that entrepreneurial orientation is the attitude of all levels of management in a company and that senior management cannot dictate it so easily. Research available in the literature proves a positive relationship between entrepreneurial orientation and company success (Covin & Wales, 2012); such companies achieve positive results in all aspects of business.

Technological orientation is intertwined with innovations and the use of new technologies in product manufacturing or service provision. It represents the desire of companies to introduce new ideas, products, or processes (Gatignon & Xuereb, 1997; Hult & Ketchen, 2001). Prahalad

(1991) emphasizes the limitations of market orientation and suggests that customers may not be able to articulate their latent needs. New technologies significantly diminish the value of existing technologies, affect changes in market structure, and create entirely new markets, while simultaneously eliminating existing markets (Tipurić, 2022). Technological orientation is often identified with the innovation orientations of companies due to their focus on new processes and products. It is believed that technological orientation is positively associated with long-term company success due to the flexibility that the company gains in responding to changes in the environment (Hult, Ketchen, & Slater, 2005). Technologically oriented companies attach great importance to research and development and are considered proactive in terms of acquiring and merging complex technologies in the process of developing new products (Zhou, Yim, & Tse, 2005; Slater, Hult, & Olson, 2007). Jeong, Pae, and Zhou (2006) argue that technologically oriented companies seek to develop capabilities that facilitate the creation of competitive advantage through the development and use of new technologies that competitors find difficult to imitate. Galičić and Ivanović (2008) state that, although changes often do not have to be innovative, technological changes in a company are different and more radical because they often affect changes in the vision, mission, and goals of the company, business systems and processes, and managerial structure and organizational model. Therefore, this type of orientation initiates that the creation of value for the consumer and the long-term success of the company are most effectively created through innovations in products, services, or production processes, but mostly through superior technological solutions. Since customers will not desire products that are not available, it is necessary to outpace the competition and create a new product by developing new technologies or adapting existing ones.

Finally, a company can strategically orient itself towards *learning*, seeking to develop the ability to produce results through new and expansive patterns of behavior via its employees as the most important organizational resource. Learning orientation primarily occurs at the level of company culture and is a common factor

directly influencing the business performance of the company (Hult, Hurley, & Knight, 2004). Hussian, Azhar, and Shahid (2013) believe that organizational learning involves managing and exchanging knowledge, but the most important aspect is creating knowledge through which the company seeks to change fundamental organizational norms, beliefs, and values. They also cite the positive impact of learning on the innovation of the company, which ultimately means significantly improved company performance. Liu, Roth, and Rabinovich (2002) state that knowledge creation within a company enhances their readiness to respond to the environment and leads to better company performance. Slater and Narver (1995) believe that a focus on learning is crucial for the success of a new product in the market. Learning orientation positively affects organizational innovation and employee commitment to the tasks they perform (Farrell, 1999), which overall affects the company's ability to analyze established market attitudes and define new ones. Companies where all levels of management communicate freely, exchange information, and collaborate daily will be more prepared to orient themselves towards learning (Srhoj, Batarelo Kokić, & Krišto, 2017). Introducing and maintaining a culture of learning in a company lays the foundation for maintaining its competitive advantage (Sinkula, Baker, & Noor-dewier, 1997). Such companies are better able to monitor the competition and compare and track strengths and weaknesses to ultimately leverage them for better market positioning (Calantone, Cavusgil, & Zhao, 2002). Thanks to the exchange of ideas and opinions, employees in such an oriented organization will be motivated and encouraged to create new solutions or utilize knowledge. Learning orientation, innovation, and company success are directly related (Srhoj et al., 2017). In other words, learning orientation, due to its easier achievement and maintenance of competitive advantages, positively affects business success. On the other hand, innovation achieved through knowledge within the organization further enhances company performance. Therefore, learning orientation has a positive impact on both the innovation of the company and its financial success.

Escriba-Esteve, Sánchez-Peinado, & Sánchez-Peinado (2008) state that there is a posi-

tive relationship between strategic orientations and company performance. However, research has shown that this relationship is not simple, but there is a need to consider the importance of the complex relationship between strategic orientations and business success (Grinstein, 2008). For a company to be successful, it must balance between strategic orientations related to technology, learning, market, customers and competitors, innovation, entrepreneurship, intellectual capital, and similar aspects because they have a significant impact on the company's operations (Shin & Aiken, 2012). In order to test the connection between the construct in the sample of the Croatian food industry, four hypotheses were proposed:

- H₁. Market orientation of the company positively influences the business model innovativeness.
- H₂. Technological orientation of the company positively influences the business model innovativeness.
- H₃. Entrepreneurial orientation of the company positively influences the business model innovativeness.
- H₄. Learning orientation of the company positively influences the business model innovativeness.

3. METHODOLOGICAL FRAMEWORK

As previously emphasized, the problem of this research concerns verifying whether company strategic orientations are key to the business model innovativeness. To examine the propositions mentioned, the food industry, specifically companies in the food industry in the Republic of Croatia, was selected. The research was conducted over a period of four months. Sending questionnaire surveys to executives and managers responsible for strategy and/or marketing was repeated three times. Questions about respondents' attitudes and company operations pertained not only to current operations but also to operations over the past five years.

The research was conducted using a questionnaire developed for all theoretical constructs used in the conceptual model of this study. To

minimize the time required for questionnaire completion, closed-ended questions were used in electronic format. To improve the validity of the measurement instrument, a preliminary test was conducted with ten respondents before distributing the questionnaire. Pilot questionnaires were created to identify questions that were potentially unclear or difficult to answer. This was done to ensure the correct interpretation of the questions asked and to estimate the time required to complete the questionnaire.

For creating the model of the impact of company strategic orientations on the innovativeness of the business model, modeling methods were used. The SmartPLS program was used for data processing, while partial least squares structural equation modeling (PLS-SEM) based on covariance was used for structural equation modeling.

2.1. Sample

The sample included companies in the food industry of the Republic of Croatia, which has the largest share in the gross domestic product (GDP) and total employment. Food production in the EU (including beverage production) represents the largest manufacturing sector in terms of generated profit, number of employees, and added value. Compared to other industrial sectors, the food industry has the third largest multiplier effect on the output generated by the Croatian economy, further confirming the strategic nature of this activity (Buturac & Vizek, 2015). However, despite the importance of the food industry for the Croatian economy, the competitiveness of the food industry in the global market is not satisfactory (Palić & Rašić Bakarić, 2016).

The initial set consisted of 2,283 companies. By applying additional criteria in the Croatian Chamber of Economy Business Register in November 2017, 324 companies were identified. By applying additional criteria, the initial set was significantly reduced, comprising only 14% of the companies (324 companies out of 2,283 companies). However, not all companies in an industry are equally important, especially in terms of the revenue they generate and the number of employees they hire. According to FINA

(Financial Agency) data on total revenues for the year 2017, these 324 companies accounted for as much as 93% of the total revenues of the Croatian food industry. Looking at the number of employees in hours worked for the year 2017, these 324 companies employed 36,159 out of a total of 45,316 employees, accounting for 80% of the total number of employees.

The research was conducted on a sample of 82 companies in the Croatian food industry. Given that there were 324 companies in the population, a response rate of 25% was achieved. Considering that not all companies in the industry are equally large and significant, the return rate was weighted according to the total revenue and the number of employees in the companies that completed the questionnaire. The representativeness of the sample in this manner showed that the participating companies accounted for 59% of the total revenue and 48% of the employees in the Croatian food industry.

The companies that participated in the research were also categorized based on their age, number of employees, and size (according to the Accounting Act). Specifically, the sample included 3.66% of companies ($n=3$) with fewer than 10 employees, 28.5% of companies ($n=23$) with 10 to 50 employees, 37.80% of companies ($n=31$) with 51 to 250 employees, and 30.49% of companies ($n=25$) with 251 employees or more. Regarding the age of the companies, four age groups were assigned. The first age group included companies younger than 10 years, of which there were 6, or 7.32%, in the sample. The second age group encompassed companies aged between 10 and 20 years, with 14 companies, or 17.07%, in the sample. The number of companies aged between 20 and 50 years was 34, or 41.46%, and the number of companies older than 50 years was 28, or 34.15%. As for the classification by size, the sample included 28 small companies (34.15%), 32 medium-sized companies (39.02%), and 22 large companies (26.83%).

2.2. Operationalizing Variables and Measurement Scales

Variables were operationalized by having respondents express their degree of agreement/

Table 1 Representativeness of the basic set compared to the entire food industry

Criterion of representativeness	Industry data	Basic set data	Percentage of basic set in the industry %
Number of companies	2.283	324	14,19
Total revenue (000 kn)	34.350.620	31.795.439	92,56
Number of employees	45.316	36.159	79,79

Source: authors

disagreement with the provided statements using a numerical Likert scale. In this research, a five-point intensity scale was applied as it was considered that participants could best evaluate their views within this range, which also best suited the research requirements. The study was based on subjective assessments by respondents, considering the fact that managerial assessments and expert judgments do not significantly deviate from objective values obtained from external sources, as noted in studies by Dess et al. (1984). Various aspects of the model (business model innovation, market orientation, learning orientation, technological orientation, entrepreneurial orientation) were measured using instruments developed by various authors as part of their research on strategic orientations and business model innovations. A detailed list of the indicators used and their respective sources is provided below.

Market Orientation

To form the construct of market orientation, seven indicators were used. The indicators are based on the proposal by Narver and Slater (1990), according to which market orientation consists of three components: orientation toward competition, which involves understanding the short-term strengths and weaknesses as well as the long-term capabilities and strategies of existing and potential competitors; orientation toward customers, which involves understanding the desires and needs of customers to create greater value for them; and coordination among business functions, which involves the coordinated use of company resources to create greater value for customers.

Technological Orientation

To measure the construct of technological orientation, initially, five indicators were used, composed according to the proposal and description by Hakala and Kohtamäki (2011). Indicators of technological orientation relate to active development and implementation of new technologies in products, building stronger technological capabilities compared to competitors, and finding customers who appreciate the offered solutions.

Entrepreneurial Orientation

To measure entrepreneurial orientation, the scale developed by Covin and Slevin (1989) was used, based on the work of Miller (1983), which suggests that entrepreneurial orientation consists of three components: innovativeness, proactiveness, and risk-taking (E07, E08, and E09). Considering more recent research, the scale was analyzed and described by Covin and Wales (2012), who concluded that its usability has been proven many times in various variants, and other scholars have not felt a significant need to explore alternative measures for entrepreneurial orientation. Furthermore, Wales et al. (2013) found that 98 out of 123 empirical studies combine innovativeness, proactiveness, and risk-taking to form a one-dimensional conceptualization of entrepreneurial orientation.

Learning Orientation

Indicators of the learning orientation construct were composed according to the proposal and description by Sinkula, Baker, and Noordewier (1997). To measure learning orientation, initial-

ly eleven indicators were used, where the first four relate to commitment to learning, the next four relate to shared vision/purpose, and the last three relate to openness of mind. Commitment to learning measures the value that organizations place on learning and the extent to which organizations see learning as an investment, competitive advantage, key to progress, and survival in the market. Unlike commitment to learning, which influences the intensity of learning, shared vision/purpose affects shared goals and provides a common direction for learning. Openness of mind examines the extent to which employees question their own common prejudices and assumptions, thereby enabling new learning. From more recent research, the scale was tested by Hakala (2013) with minimal modifications for IT companies.

Business Model Innovation

To measure business model innovation, a scale developed and tested by Clauss (2017) was used. According to Clauss, business model innovation consists of three dimensions: value creation innovation, new value proposition innovation, and value capture innovation. For the first latent sub-construct of business model innovation, thirteen indicators of value creation innovation were used, divided into four components: new capabilities, new technology/equipment, new partnerships, and new processes. For the second latent sub-construct, twelve indicators of new value proposition innovation were used, divided into four components: new offerings, new clients and markets, new channels, and new customer relationships. The third latent sub-construct, composed of eight indicators, measured value capture innovation divided into two components: new revenue models and new cost structures.

The construct of business model innovation and the second-order sub-constructs do not have their own indicators but are second-order constructs (value creation innovation, new value proposition innovation, and value capture innovation) determining business model innovation. Initially, the indicators of the first-order variables were assigned to the corresponding second-order latent variables, and then all indicators of the first-order variables were integrated

into the construct of business model innovation. Subsequently, the weights of the second-order constructs were collectively used to form the third-order latent variable, namely business model innovation. Following this, the initial results of the company's performance will be described, along with the corresponding determinants of business model innovation.

3. RESEARCH RESULTS AND DISCUSSION

Due to the complexity of the model in this study and the inability to test the model in its initial form, in the first step of the analysis, factor scores for each of the three dimensions of business model innovation (value creation innovation, new value proposition innovation, and value capture innovation) were calculated. Principal component analysis was used as the method of extraction, with the number of factors fixed at one. Subsequently, tests were conducted to assess the quality of the constructs, evaluate the structural model, and analyze the impact of firm strategic orientations on business model innovation.

After conducting the testing, tests were performed to measure the alignment between the assumed and empirical models of firm performance. Composite reliability indicators, average variance extracted (AVE), and the rho α indicator were presented. According to Byrne (2010), composite reliability must have a value of 0.6 or higher to meet the criterion of minimum composite reliability. This measure indicates the level of alignment between the items used and the constructed construct used in the structural modeling process. Average variance extracted (AVE) indicates the level of variance explained on average when forming the constructs used in the structural modeling process, and its value must exceed 0.5 for each variable, while the rho α indicator indicates the validity of the constructed used in the structural equation, with each construct in the equation needing to meet a minimum value of 0.7 to satisfy the validity criterion (Byrne, 2010). The aforementioned indicators are presented in Table 2.

Table 2 Indicators of compliance between assumed and empirical model

Variables/indicators	Rho α	Composite reliability	Average variance extracted
Market orientation	0,882	0,867	0,572
Technological orientation	0,866	0,859	0,552
Entrepreneurial orientation	0,912	0,907	0,584
Learning orientation	0,931	0,929	0,567
Business model innovation	0,929	0,927	0,809

Source: authors' calculations

Table 3 Coefficients and Significance of Effects in the Model

Influences in the model/indicators	Standardized coefficients	<i>Sd</i>	<i>t</i>	<i>p</i>
Market orientation -> Business model innovation	0.049	0.103	0,884	>0,05
Technological orientation -> Business model innovation	0.087	0.114	1,967	<0,05
Entrepreneurial orientation -> Business model innovation	0.342	0.117	2,385	<0,05
Learning orientation -> Business model innovation	0.567	0.100	41,70	<0,05

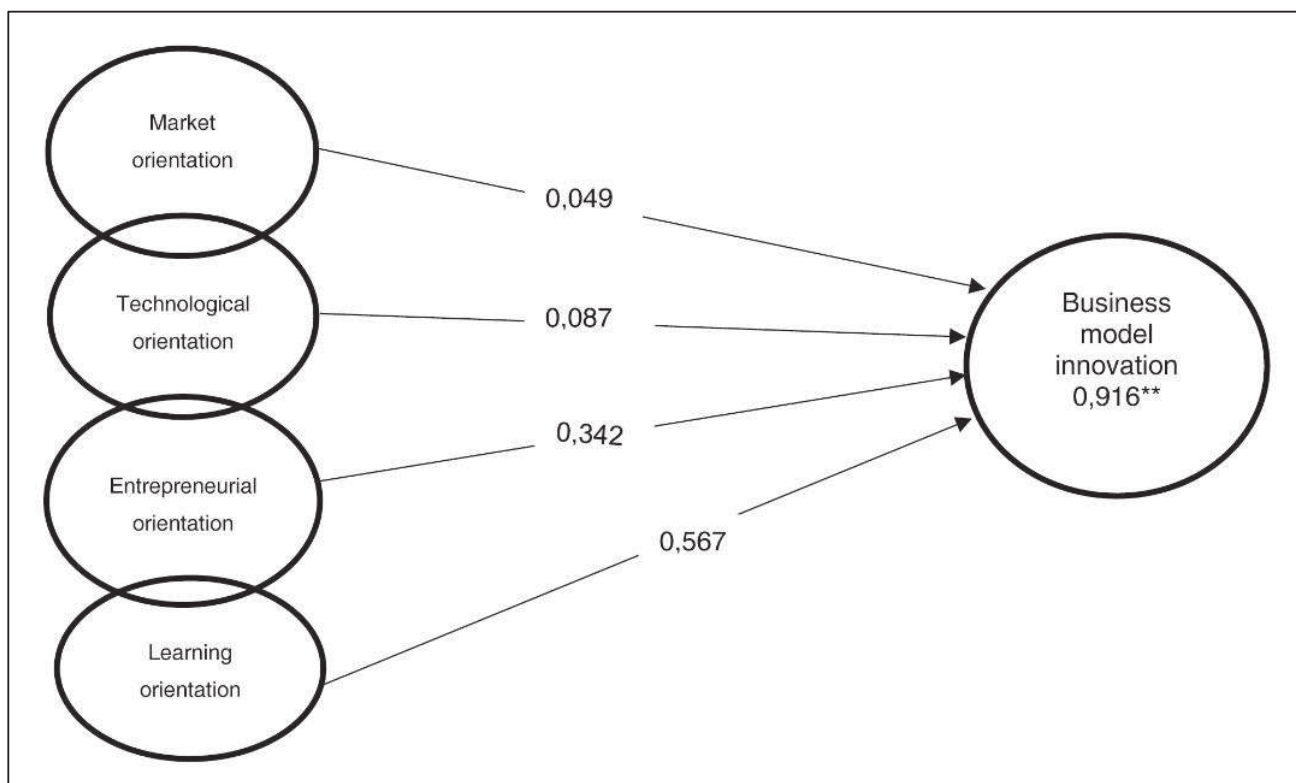
Source: authors' calculations

The results of the analysis of the previously described indicators indicate the satisfaction of all criteria for the alignment between the assumed and empirical models, whereby the initial results can be considered relevant for interpretation and the formation of further research outcomes.

The results of the model testing are presented in Table 3. The initial results of the model testing of business performance indicate an insignificant influence of the market orientation construct on business model innovation ($t=0.88$; $p>0.05$). The aforementioned results provide sufficient empirical evidence to reject hypothesis H1. Furthermore, technological orientation is a statistically significant predictor of business model innovation and positively and significantly influences it ($t=1.96$; $p<0.05$). In conclusion, the

more a company is open to technological solutions and digitization, the higher the level of business model innovation by 8.7%. The above results provide enough evidence to accept hypothesis H2. Entrepreneurial orientation is also a statistically significant construct in predicting business model innovation ($t=2.385$; $p<0.05$), meaning that when the level of autonomy and entrepreneurial climate in the company increases, the level of business model innovation linearly increases by 34.2%, thus confirming hypothesis H3. Additionally, learning orientation is a crucial construct in predicting business model innovation. Learning orientation positively and significantly influences the construct of business model innovation ($t=41.70$; $p<0.05$). Specifically, as the level of learning orientation in the company increases, the level of innovation will linearly increase by 56.7%, providing sufficient evidence

Figure 1 Impact of strategic orientations on business model innovation



*significance>0,05 **R²

Source: authors' calculations

to accept hypothesis H4. The model demonstrating the impact of strategic orientations on business model innovation is depicted in Figure 1.

The research results did not show a strong positive relationship between market orientation and innovative business models. The impact of the market orientation construct (which consists of orientation towards competition, customer orientation, and coordination among business functions) on business model innovation is not significant ($\beta=0.049$; $p>0.05$). This result is consistent regardless of the age and size of the company, which is unexpected because other research indicates the influence of market orientation on business model innovation.

On the other hand, the results of the impact of technological orientation on business model innovation show that technological orientation significantly and positively influences business model innovation ($\beta=0.087$; $p>0.05$). The aver-

age scale value is 3.63 with fairly consistent ratings for individual statements ranging from 3.49 to 3.79. Respondents' perceptions do not differ significantly based on the size and age of the company. Research and utilization of technological capabilities, through joint action, can create a competitive advantage through innovative business models and, consequently, above-average business performance. This calls for managers to integrate both product and technological innovations with business model innovations to turn technological success into market success. Although the research results show a statistically significant positive relationship and, in line with the discussion, confirm that the more a company is open to new technological solutions, the higher the degree of business model innovation, this impact is not as significant as might be expected. Specifically, increasing technological orientation increases business model innovation by 8.7%, which is the second smallest result next to market orientation.

This study empirically examines the relationship between entrepreneurial orientation and business model innovation, considering that their positive relationship is theoretically plausible but empirically underexplored. Empirical research on a sample of the Croatian food industry has shown that entrepreneurial orientation is a statistically significant construct in predicting business model innovation ($\beta=0.342$; $p>0.05$), meaning that when innovation, proactivity, and risk-taking in the company increase, business model innovation linearly increases by 34.2%. The average scale value of 3.48 is the lowest among all four observed strategic orientations, and there are no statistically significant differences depending on the size and age of the company. Although this was not a hypothesis of the study, the direct impact of entrepreneurial orientation on business success was confirmed ($\beta=0.210$; $p>0.05$). However, the direct impact of business model innovation is weaker than indirect, suggesting that innovative business models improve market success within the scope of entrepreneurial orientation activities.

The findings of this study enhance our understanding of the relationship between entrepreneurial orientation and business success, suggesting a more complex model that connects entrepreneurial orientation with innovative business models, leading to more successful operations. The empirical insights from this study are in line with conceptual research linking entrepreneurial orientation with innovative business models (e.g., Teece, 2010; Chesbrough and Rosenbloom, 2002). Ultimately, the results of the empirical model show that a learning orientation is a crucial construct in predicting business model innovation. A learning orientation significantly and positively influences business model innovation ($\beta=0.567$; $p<0.05$). Increasing the level of a learning orientation increases business model innovation by 56.7%, which is the strongest impact among all four observed strategic orientations. As the research results have shown, a learning orientation may not be crucial for the survival of companies, but it is certainly critical for increasing the level of business model innovation and achieving above-average results. A learning orientation has the strongest direct and indirect positive impact on business success, which should be sufficient incentive for

managers to direct more activities and resources into this strategic orientation.

4. CONCLUSION

This study conceptualized, theoretically argued, and empirically tested the model of the impact of strategic orientations on the business model innovativeness through four hypotheses. The positive impact of market orientation on the innovativeness of the business model was not statistically confirmed in the research (H1), which can be explained by the specifics of the Croatian food industry. The Croatian food industry is in a mature stage of the life cycle, and market orientation is a prerequisite for doing business in the market, but it is not a source of competitive advantage. On the other hand, a positive and statistically significant impact of technological orientation (H2), entrepreneurial orientation (H3), and learning orientation (H4) on the innovativeness of the business model was determined. Unlike manufacturing and technological innovations, which can often be very costly, innovations in business models do not necessarily require significant financial resources and can be carried out by both large and small companies. This is supported by the results of this study, which showed that there is no statistically significant difference in the business model innovativeness depending on the size of the company.

The research results support the views on the need to strengthen the innovation process in Croatian food companies. It is also important to note the need to avoid strategic shortsightedness that can arise if there is an innovation focus exclusively at the level of products, services, and business processes. It is necessary to consider the introduction and development of new business models that will better respond to changes in customer needs and desires and position themselves more effectively in the increasingly competitive market conditions. A greater focus on entrepreneurial orientation and learning orientation will lead to greater innovativeness of the business model, which will, through creating value, capturing value, and new propositions, contribute to better business success. This is an opportunity for Croatian companies

to improve their competitiveness through the benefits of knowledge, networking, and new ways of connecting their own resources, capabilities, and activities in the global environment.

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Utjecaj strateške orijentacije na inovativnost poslovnih modela u prehrambenoj industriji

Sažetak

Poslovni modeli se mijenjaju ovisno o jačini turbulencije okoline, tehnološkim i industrijskim promjenama, korjenitim promjenama u navikama u potrošnji i čitavom nizu drugih činitelja. Inovativnost poslovnog modela pokazuje adaptivnu sposobnost poduzeća odnosno njegov potencijal u traženju i stvaranju novih izvora konkurentske prednosti. Strateška orijentacija je način kako se poduzeće usmjerava k provedbi procesa i ponašanja putem kojih može postići nadmoćne performanse u djelatnosti. Iskazuje se u četiri oblika: kao tržišna orijentacija, tehnološka orijentacija, orijentacija k učenju i poduzetnička orijentacija, dok se inovativnost poslovnog modela sastoji od tri dimenzije: inovativnosti kreiranja vrijednosti, inovativnosti novih propozicija i inovativnosti zahvaćanja vrijednosti. Rad istražuje utjecaj strateške orijentacije na inovativnost poslovnog modela na uzorku hrvatskih prehrambenih poduzeća. Rezultati empirijskog istraživanja nisu dali potporu hipotezi da tržišna orijentacija poduzeća pozitivno utječe na inovativnost poslovnog modela, dok je za ostala tri oblika strateške orijentacije potvrđen pozitivan utjecaj na inovativnost poslovnog modela. U zreloj industriji, kao što je hrvatska prehrambena industrija, takvi zaključci upućuju na potrebu za usredotočenjem, kao prvo, na tehnološke i poduzetničke oblike strateške orijentacije i kao drugo, još važnijem na orijentaciju k učenju kao pretpostavku podizanja konkurentnosti na domaćem i međunarodnim tržištima.

Ključne riječi: inovacije poslovnih modela, orijentacija ka učenju, prehrambena industrija, poduzetnička orijentacija, strateške orijentacije, tehnološka orijentacija, tržišna orijentacija