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THE IMPACT OF BUSINESS MODEL INNOVATION ON BUSINESS PERFORMANCE IN SOUTHEASTERN COUNTRY

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Abstract

In a dynamic and fast-changing business environment, enterprises are obliged to improve and innovate their ways of doing business to maintain competitiveness and achieve better performance. Business model innovation is seen as a critical source of modern enterprises in achieving success, primarily through focusing on finding new models of generating revenue and value for customers. This study aims to empirically investigate the relationship between the dimensions of business model innovation (BMI), namely novelty-oriented and efficiency-oriented, and the business performance of large enterprises in a Southeast European developing country. By collecting data from 150 enterprises through a structured questionnaire, the hypotheses were tested utilizing the regression analysis. The results indicate that changes in any component of the business model, efficiency-oriented or novelty-oriented, have a positive and significant influence on the business performance of large enterprises. In striving to achieve above-average performance, enterprises can innovate their business models by reducing production and transaction costs or by developing new methods of economic exchange between various enterprise stakeholders and/or the surrounding environment. In conclusion, the research contributes to the existing literature by demonstrating that enterprises can enhance financial and non-financial performance by innovating the dimensions of business models.

Keywords: Innovation, Business Model, Innovation-Oriented Business Model Innovation, Efficiency-Oriented Business Model Innovation, Business Performance

1. Introduction

In the modern business environment, business model innovation represents a driving force as well as managers' most common focus when it comes to improving enterprise performance. According to Snihur and Markman (2023) *"a business model is a blueprint that outlines how an organization creates value, generates revenue, delivers offerings, and even interacts with its direct stakeholders (employees, customers, suppliers) and indirect stakeholders (rivals, regulators, community)"* (Snihur and Markman, 2023) .

The interest of researchers in business models and business model innovations has particularly increased over the past twenty years due to their potential impact on creating greater value for customers and enterprises, improving competitiveness, and enhancing enterprise performance (Foss and Saebi, 2017; Spieth *et al.* 2023). In their literature review on business model innovation, Schneider and Spieth (2013a) called for the need to investigate the effects of business model innovations on enterprise outcomes, in terms of financial performance and other indicators relevant to the enterprise. Since then, a significant number of studies have been recorded that focus on the predictors and effects that business model innovation has on enterprise performance. Clauss (2023) identifies the values of business model innovations for three key purposes: (1) creating operational and strategic performance, (2) establishing conditions for organizational transformation, and (3) providing a comprehensive thinking framework for creating new business solutions.

In several meta-analyses (White *et al.* 2022; Ilyas *et al.* 2024) and review papers (Zott *et al.* 2011; Foss and Saebi, 2017; Wirtz *et al.* 2022), the authors attempted to systematize the existing findings in the field of business model innovations. Ilyas *et al.* (2024) in their comprehensive meta-analysis based on a sample of 147 primary studies from 27 countries, clearly showed a strong positive correlation between business model innovations and enterprise success, both in terms of innovation and financial performance. The results of the meta-analysis by White *et al.* (2022) indicate that the positive relationship between business model innovations and success performance is conditioned by contextual factors such as enterprise size and age, industry, and the stability of the environment. Ilyas *et al.* (2024) emphasize that not all types of firms benefit equally from business model innovations. Specifically, start-up firms gain greater benefits from business model innovations compared to more established firms. Limitations of implementing business model innovations in established firms are evident in structural, strategic, emotional, and cognitive tensions, while flexible organizational structure of start-up companies allows for easier adaptation of the business model, state Ilyas *et al.* (2024).

Previous studies that investigated the impact of business model innovations on business performance point to inconsistent findings. A number of studies confirmed a positive impact business model innovation on business performance (Aspara *et al.* 2010; Guo *et al.* 2018; Smajlović *et al.* 2019; Nunes and Pereira, 2020; Latifi *et al.* 2021). Performance improvements are reflected in reduced operational costs (Pohle and Chapman, 2006), providing faster and cheaper services (Latifi *et al.* 2021), increased efficiency in value creation (Clauss *et al.* 2021), and revenue increase (Karimi and Walter, 2016).There are also studies pointing to a delayed effect of improving enterprise's financial performance (Menter *et al.* 2023) and a negative impact of value capture from innovation as a dimension of business model innovation on enterprise performance (Clauss *et al.* 2021). Therefore, although the conducted studies offer valuable insights into how business model innovations affect performance, there is a research gap in this field.

Spieth *et al.* (2023) note that the majority of studies examining the relationship between business model innovation and performance are actually qualitative in nature. There is a limited number of studies applying a quantitative approach to researching the phenomenon of business model innovation, which points to the need to test theories, interdependencies, relationships, and effects of business model innovation using quantitative methods (Spieth *et al.* 2023). Furthermore, research on interdependencies between business model innovation and performance was mainly conducted on samples of small and medium-sized enterprises (Cucculelli *et al.* 2014; Pucihar *et*

al. 2019; Nunes and Pereira, 2020; Clauss *et al.* 2021; Clauss *et al.* 2022; Salfore *et al.* 2023). Several studies conducted on the sample of large enterprises explored the relationship between business model innovations and mostly financial performance, considering various predictors of business model innovation, such as intangible assets (Aspara *et al.* 2010), managerial competences and entrepreneurial competences (Guo *et al.* 2013; Guo *et al.* 2018; Poljić, 2019), technological innovations (Smajlović *et al.* 2019), product market strategy (Zott and Amit, 2008), and so on.

Business model innovations are gaining importance not only in developed countries; they are also a particularly important driver of growth and development in emerging economies such as Bosnia and Herzegovina (Poljić, 2019; Smajlović *et al.* 2019). It can be concluded that there is a research gap regarding the impact of business model innovations on business performance, especially individual dimensions of business model innovations on performance (Wirtz *et al.* 2022). There is also a strong need to test these relationships using quantitative methods (Spieth *et al.* 2023), with the focus on large enterprises.

Therefore, the aim of this paper is to investigate the impact of individual dimensions of business model innovation on business performance, viewed through financial and non-financial performance, in large enterprises in a country of Southeastern Europe. By applying regression analysis, the study examines the impact of business model innovation dimensions, observed through innovation-oriented and efficiency-oriented business model innovations, on business performance using a sample of 150 valid questionnaires completed by enterprise managers. The analysis aims to highlight the benefits that business model innovation dimensions can have on an enterprise's performance. The main contribution of this study lies in its comprehensive examination of the impact of business model innovation dimensions on business performance. While previous studies (Guo *et al.* 2017; Smajlović *et al.* 2019) have explored the general relationship between business model innovation and firm performance, this study focuses on analyzing the impact of individual dimensions of business model innovation on business performance. Additionally, by integrating financial and non-financial performance indicators, the study expands the understanding of how business model innovation enhances profitability and market share, customer loyalty, brand reputation, and corporate image.

The paper is structured as follows. Introductory considerations are presented and thoroughly discussed in the first part of the paper. The second part brings a literature review on business models, business model innovation, and business performance. The third part is dedicated to the development of hypotheses. The research methodology is given in the fourth part, along with the sample, data collection methods, and measuring scales. The fifth part is focused on the analysis and discussion of the results. Finally, the conclusion presents the theoretical and managerial implications, as well as the study limitations.

2. Literature review

2.1. Business model and business model innovation

Every manager and entrepreneur understand how a business works and how value is created. In other words, a manager has an intuitive understanding of the enterprise's business model. However, although he/she influences all business decisions, in most cases, rarely can a manager describe the business model in a clear and simple way (Linder and Cantrell, 2000). Teece (2010) believes that the concept of a business model lacks a fundamental theoretical foundation in economics or business studies, while George and Bock (2011) state that the concept of a business model has its roots in corporate practice. However, judging by the number of published papers and scientific research (Baden-Fuller and Haefliger, 2013) it can be concluded that the interest in researching the business model construct is both justified and necessary. Below is a review of basic conceptual research in business model and business model innovation.

These studies primarily aimed to a better understanding of the phenomenon of business model innovation. The contribution of research papers can be seen in framework conceptualizations and development of hypotheses. Since, according to some authors, there is

no unique business model (Barringer and Ireland, 2010) for an industry or for a target market within an industry, most of the research to date, aimed at clarifying and deepening the knowledge into various aspects of business model innovation, were based on qualitative research through case studies, multiple case studies, conceptualizations, and experiments, particularly in high-tech industries and e-businesses. A few studies, however, were based on the application of quantitative research methods. The given reasons make the research in the field of business model innovation significantly complex (Casadesus-Masanell and Zhu, 2013).

Table 1. The overview of most significant studies of business model and business model innovation

Author(s)	Paper	Method	Discipline
Amit and Zott (2001)	Value Creation in E-Business	Multiple case study	Entrepreneurship
Chesbrough and Rosenbloom (2002)	The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies	Case study	Strategic management
Margretta (2002)	Why Business Models Matter	Conceptual paper/case illustration	
Morris *et al.* (2005)	The entrepreneur's business model: toward a unified perspective		Entrepreneurship
Chesbrough 2007	Business model innovation: it is not about technology anymore	Conceptual paper/case illustration	Corporate strategy
Zott and Amit (2007)	Business Model Design and the Performance of Entrepreneurial Firms	Econometric analysis /panel of 190 companies from Europe and the USA	Entrepreneurship/ organizational sciences
Johnson *et al.* (2008)	Reinventing Your Business	Conceptual paper / case illustration	Corporate strategy
Baden-Fullen and Morgan (2010)	Business Models as Models	Description/ conceptual paper	
Chesbrough (2010)	Business Model Innovation: Opportunities and Barriers	Conceptual paper	Organizational study
Demil and Lecocq (2010)	Business Model Evolution: In Search of Dynamic Consistency	Case study	Strategic management
McGrath (2010)	Business Models: A Discovery Driven Approach	Conceptual paper	
Osterwalder and Pigneur (2010)	Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers	Book	
Sosna, Trevinyo-Rodríguez and Velamuri (2010)	Business Model Innovation through Trial-and-Error Learning the Naturhouse Case	Case study	Organizational study
Teece (2010)	Business model, business strategy and Innovation	Conceptual paper/case illustration	Strategic management
Amit and Zott (2010)	Business model innovation - creating value in times of change.	Conceptual paper	Strategic management
Zott, Amit and Massa (2011)	The Business Model: Recent Developments and Future Research	Literature review	

Source: Authors' processing

Demil and Lecocq (2010) state that *"business model can be described with three core components: its resources and competences, its organizational structure and its proposition for value delivery"* (Demil and Lecocq, 2010). The broadest definition of a business model in the literature was provided by Teece (2010): *"a business model defines how the enterprise creates*

and delivers value to customers, and then converts payments received into profit (...). In essence, a business model is a conceptual, rather than financial model of a business" (Teece, 2010). As a unit of analysis, Amit and Zott (2001) stated that *"a business model depicts content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities"* (Amit and Zott, 2001). This definition has been most commonly adopted in various studies on business models (Andreini and Bettinelli, 2017).

More extensive research has been conducted with the aim of identifying content components (elements) of the business model (Amit and Zott, 2001; Hamel, 2002; Zott and Amit, 2007; Osterwalder and Pigneur, 2010; Spieth and Schneider, 2016; Clauss, 2017). Hamel (2002) observes the business model through four basic components: core strategy, strategic resources, network of partnerships, and customer relations. Osterwalder and Pigneur (2010) proposed a set of nine "building blocks" of the business model, starting with the value proposition as the central element, followed by customer segments, distribution channels, and customer relations, key activities, partners, and resources, and finally ending with the financial structure of revenue and costs. These blocks are the elements of the business model canvas (Osterwalder and Pigneur, 2010). Amit and Zott (2001) view the business model by defining the activities that need to be performed (content), determining how and on what basis the activities are interconnected (structure), and who implements the activities (governance).

The theoretical foundations used as the basis for business model innovations are rooted in research on strategic management (Zott and Amit, 2008), innovation management, and entrepreneurship (George and Bock, 2011). Lambert and Davidson (2013) emphasize that the concept of the business model and business model innovation attracted the attention of economists and marketing experts. Many academic papers were dedicated to business model innovations (Johnson *et al.* 2008; Casadesus-Masanell and Ricart, 2010; Chesbrough, 2010; Gambardella and McGahan, 2010; Amit and Zott, 2012; Schneider and Spieth, 2013b). The primary reason for this is the rapid advancement of information and communication technologies, which enable organizations to fundamentally change the way they "do business" (Margretta, 2002) and point to the fact that business model innovation constitute a very broad research field.

Business model innovation is defined as the discovery of a fundamentally different business model within an existing business (Markides, 2006), or the processes of designing new or modifying existing systems of activities within enterprises (Amit and Zott, 2010). Amit and Zott (2015) stated that innovative business models can result in superior value creation and replacement the old way of performing things. Business model innovations can either create a new market or innovate transactions in an existing market (Zott and Amit, 2007). Amit and Zott (2012) state that business model innovations arise from redefining one or all of the elements of the business model as follows: adding new activities, linking different activities and changing the parties performing the activities. Business model innovations help activate previously unrecognized corporate sources of value (Amit and Zott, 2001) and assist in creating different transactional systems that are difficult to imitate (Amit and Zott, 2010).

2.2. Business performance

In measuring business performance, both objective and subjective (perceptual) approaches are present. When choosing between subjective and objective measures of business performance, Dess and Robinson (1984) conclude that there is compatibility between subjective and objective performance measures, such as indicators of return on assets and sales growth. Furthermore, the authors state that, although objective measures are more desirable, researchers may consider using subjective perception measures, under the following two conditions: 1) if objective measures are not available, and 2) if considering performance cannot be excluded from the research design.

Previous studies examined business performance from different perspectives with various theoretical aspects (Baron and Markman, 2003; Turulja and Bajgoric, 2019). While some studies measured performance through company growth (Schneider and Spieth, 2013b), Chen

et al. (2009) observe business performance through financial and non-financial performance, stating that financial performance relate to how well a enterprise utilizes its existing assets to generate revenue, while non-financial performance are viewed through reputation, customer loyalty, and so on. Venkatraman and Ramanujam (1986) state that business performance include financial indicators such as: sales level and growth, profitability, and stock price; and operational indicators such as: market share, new product introduction, operational efficiency, social welfare, customer loyalty, image, etc.

3. Hypotheses development

Business model innovations are considered to be important sources of competitive advantage for companies and of business performance (Giesen *et al.* 2010; Teece, 2010). As stated by Demil and Lecocq (2010), increase or decrease in organizational performance is achieved through constant interaction of the business model content components. A significant number of studies focused on investigating the impact of business model innovations on business performance (Zott and Amit, 2007, 2008; Schneider and Spieth, 2013b; Futterer *et al.* 2018; Smajlović *et al.* 2019; Clauss *et al.* 2021).

The findings of a study conducted on a sample of 60 German retail corporations from various industries show that business model innovation has a positive, but delayed effect on enterprise performance, meaning that the effects do not occur immediately but are rather realized over time (Menter *et al.* 2023). The authors conclude that changes in value creation, such as those in processes and structures, require time for implementation and do not immediately reflect in financial returns in the short run. In a study conducted on a sample of 432 enterprises from the electronics industry Clauss *et al.* (2021) found that two out of three dimensions of business model innovation—value proposition innovation and value creation innovation—were significantly linked to a higher level of business performance, while negative effects on performance were registered in the dimension of value capture innovation.

Latifi *et al.* (2021) on a sample of 563 European small and medium sized enterprises confirmed direct positive and significant impact of business model innovation on overall performance. Authors stated that by adopting an innovative business model, enterprise may reduce operational costs, provide faster and cheaper services to its customers, and improve overall business efficiency. A similar offer of products and services may result in radically different performance depending on the business model (Chesbrough, 2010). A study conducted by IBM, in which over 750 leaders from the public and private sectors worldwide were interviewed on the topic of innovation, showed that companies which over the past five years focused more on business model innovations in their innovative efforts achieved twice the profit margin compared to competitors that preferred other types of innovation (product, service, and process innovations) (Pohle and Chapman, 2006). Nunes and Pereira (2020) concluded that changes in any of the three components of business model innovation—value creation, value proposition, and value capture—have a positive effect on the performance of small and medium-sized enterprises. The results of the study conducted by Anwar (2018) on a sample of 303 small and medium-sized enterprises in the manufacturing sector confirmed that business model innovation has a significant positive impact on competitive advantage and financial performance in manufacturing enterprises. In an empirical study on a sample of medium and large enterprises, Poljić (2019) demonstrated that achieving superior performance is significantly contributed to by the capabilities of the enterprise, evident in business and entrepreneurial competencies, technological innovations, and business model innovations (which are observed as multidimensional construct consisting of novelty-oriented and efficiency-oriented business model innovation). The author confirmed a clear and positive impact of business model innovation on success performance, as shown through achieved sales and profitability, profit, and market share. These findings suggest the way in which enterprises may achieve superior performance and competitive advantage in the context of the transition economy in which enterprises in Bosnia and

Herzegovina operate (Poljić, 2019; Smajlović *et al.* 2019; Turulja and Smajlović, 2021). Therefore, the research hypotheses are postulated as follows:

H1. Efficiency-oriented business model innovation positively impacts business performance.

H2. Novelty-oriented business model innovation positively impacts business performance.

4. Research methodology, sample, data collection, measures

In this study, positivism was chosen as the research ideology, along with a deductive research approach, as the study is based on testing a theory using quantitative data. Data collection was conducted through primary research involving large enterprises in Southeastern developing country, Bosnia and Herzegovina.

During the empirical research process, a survey questionnaire was used as the data collection method. The questionnaire consisted of questions related to demographic indicators and the independent and dependent variables. All questions in the questionnaire were closed-ended and covered managers' attitudes towards demographic indicators, the dimensions of business model innovation and business performance in their respective enterprises. Content validity was ensured by using validated measuring scales and consulting a group of experts from the academic and business communities. All indicators were thoroughly reviewed in terms of text, specificity, and sentence length to ensure relevance to the research context. Since most indicators were taken in their original form, certain indicators were only translated from English to Bosnian.

The study population consisted of large enterprises with turnover exceeding 8.000.000,00.00 BAM. General managers of these enterprises were identified as the respondents. The primary data collection was conducted between July to October 2023 using online survey. Invitations to participate in the research were distributed via email, which contained a link to the questionnaire created using the Lime Survey software. A total of 150 validated questionnaires were analyzed in this study (Smajlović *et al.* 2024)[1].

The independent variables, the dimensions of business model innovation (BMI) are efficiency-oriented BMI and novelty-oriented BMI. The measuring scale was adopted from Zott and Amit (2007). Efficiency-oriented BMI consisted of 13 items and sample item is: "*Inventory costs for participants have been significantly reduced* ". Novelty–oriented BMI was consisted of 11 items, and the simple item is: "*The method of connecting participants with transactions has been innovated*. " The dependent variable, business performance, consisted of ten financial and non-financial performance indicators and measuring scale was adopted from Chen *et al.* (2009). All items of dependent and independent variables were measured using a seven-point Likert scale, ranging from (1) "completely disagree" to (7) "completely agree."

The descriptive statistics are provided in this study regarding analysis of the enterprises socio-economic characteristics, and the regression analysis was employed as the statistical method to test the postulated hypotheses, and the SPSS software package was used for statistical support.

5. Research results and discussion

5.1. Descriptive analysis

After processing the collected data, Table 2 provides an overview of the socio-economic characteristics of the enterprises included in the research sample.

[1] A previous study conducted on the same population and sample examined the impact of corporate entrepreneurship on business model innovation. Further in the research paper: Smajlović, S., Muratović, A. and Umihanić, B. (2024) 'Influence of corporate entrepreneuship on business model innovation of companies in Bosnia and Herzegovina after COVID-19 pandemic', *Management: Journal of Contemporary Management Issues*, 29(1), pp. 31–45. doi:10.30924/mjcmi.29.1.3.

Besides the structure of activities and organizational form of the respondents, it is also interesting to analyze their territorial affiliation and ownership structure. In terms of territorial affiliation, the largest percentage of the respondents, 54.70%, conduct their business activities in the Federation of Bosnia and Herzegovina, 42.70% in Republica Srpska, while 2.70% come from the Brčko District of Bosnia and Herzegovina. Furthermore, when it comes to ownership structure, it is important to note that 83.20% of the respondents are privately owned, 13.40% are publicly owned, while 3.40% of the respondents are with a mixed ownership structure.

Table 2. Overview of characteristics of sampled enterprises

Criterion / characteristic		Number of respondents	% respondents
Activity	Agriculture, forestry, and fishing	6	4.00
	Mining of ores and stones	6	4.00
	Manufacturing industry (production)	44	29.30
	Production and supply of electricity, gas, steam, and air conditioning	5	3.30
	Water supply, wastewater treatment, waste management, and environmental remediation activities	7	4.70
	Construction	20	13.30
	Wholesale and retail trade: repair of motor vehicles and motorcycles	15	10.00
	Transport and storage	4	2.70
	Accommodation services and food preparation (hospitality and catering)	1	0.70
	Information and communication	6	4.00
	Financial activities and insurance activities	1	0.70
	Professional, scientific, and technical activities	3	2.00
	Health and social care activities	18	12.00
	Other service activities	14	9.40
Organizational form	Joint stock/stock company	11	8.30
	Limited liability company (ltd)	122	91.70

Source: Authors' processing based on the classification of sectors taken from the statistical classification of economic activities of the European Community - NACE, Rev. 2

Prior to further calculations, a reliability check of the measuring scales was done so as to assess their resistance to random errors. Since the primary data in our study were collected in one instance, the reliability of the measurement scale was assessed through internal consistency, that is, by determining the degree to which the values that make up the scale measure the same underlying attribute. In our study, measurement was carried out using Cronbach's alpha coefficient, which represents the average correlation between all values on the scale. This coefficient ranges from 0 to 1, with a value closer to 1 indicating greater reliability of the scale. Although different approaches for acceptable reliability levels can be found in the literature, in our study, an acceptable level of reliability was considered to be Cronbach’s alpha coefficient greater than 0.7. Therefore, the remaining part of the paper brings the assessment of the reliability of the measuring scales used in our study using Cronbach's alpha coefficient for the two dimensions of business model innovation (BMI) (efficiency-oriented and novelty-oriented) and enterprise business performance. The results obtained are presented in Table 3.

Table 3. Statistics of reliability of measuring scales used in the research

Measuring scale	Coefficient of Cronbach alpha	Coefficient of Cronbach alpha calculated based on standardized items	Number of items
Efficiency-oriented BMI	0.946	0.949	13
Novelty-oriented BMI	0.943	0.949	11
Business performance	0.938	0.939	10

Source: Authors' processing

Since in all three cases the values of Cronbach's alpha coefficient are greater than 0.7, the reliability of the basic measurement scales used in the research has been confirmed.

5.2. Results of hypotheses testing

Furthermore, the testing of the mutual impact between the mentioned variables was conducted using the regression analysis. Its results are given in the following table. Model 1 refers to the results of the impact of efficiency- oriented as a dimension of the business model innovation on business performance, while Model 2 refers to the results of the impact of novelty-oriented as a dimension of the business model on business performance.

Table 4. Evaluation of the model of impact of business model innovation dimensions on business performance

Model summary[b]				
Model	**R**	**Determination coefficient**	**Corrected determination coefficient**	**Standard estimation error**
1	0.547[a]	0.299	0.295	7.54599
2	0.533[a]	0.284	0.279	7.63016

a. Predictors: (const.), efficiency-oriented BMI, novelty-oriented BMI

b. Dependent variable: business performance

Source: Authors' processing

Table 5. Analysis of variance summary ANOVA

	Model	**Sum of squares**	**df**	**Mean square**	**F**	**Sig.**
1	Regression part	3.626,520	1	3.626,520	63,688	0,000
	Residual part	8.484,354	149	56,942		
	Total	12.110,874	150			
2	Regression part	3.436,201	1	3.436,201	59,022	0,000
	Residual part	8.674,673	149	58,219		
	Total	12.110,874	150			

Source: Authors' processing

In order to determine the proportion of variance in the dependent variable, which is explained by the model, the coefficient of determination was calculated. It shows that the first model explains 29.9% and that the second model explains 28.40% of the variance in company business performance (the first section of Table 4). The statistical significance of these indicators is presented in Table 5, which shows that both analyzed models reach statistical relevance since their significance is 0.000, which is less than 0.05.

In order to determine to what extent, the independent variables (efficiency-oriented and novelty-oriented) in the model contribute to predicting the dependent variable (business performance), the beta coefficient was calculated in the section of Table 6, which shows the standardized coefficients.

Table 6. Coefficients of the regression analysis of the model of impact of business model innovation dimensions on enterprise business performance

Model		**Nonstandard coefficients**		**Standard coefficients**	**t**	**Sig.**
		B	St. error	Beta		
1	(Constant)	29.095	3.869		7.521	0.000
	Efficiency-oriented BMI	0.428	0.054	0.547	7.980	0.000***
2	(Constant)	38.076	2.867		13.282	0.000
	Novelty-oriented BMI	0.387	0.050	0.533	7.683	0.000***

i. Dependent variable: business performance

In order to determine whether the observed independent variables (efficiency-oriented and novelty-oriented) significantly contribute to predicting the dependent variable (in our case, business performance), it is necessary to observe the last column of the coefficient table. Since the significance is less than 0.05 (in our case, 0.000***), we conclude that efficiency-oriented and novelty-oriented, as the observed dimensions of the business model innovation, significantly contribute to predicting business performance as the dependent variable. As the results of the regression analysis show, efficiency-oriented business model innovation significantly impacts business performance with the standardized beta coefficient of 0.547 (Sig.<0.05). Novelty-oriented as a dimension of business model innovation also has a significant positive, although slightly less strong, impact on business performance (standardized beta coefficient of 0.533, Sig.<0.05). By implementing the dimensions business model innovation, enterprise may choose to reduce production and transaction costs or to develop new methods of economic exchange among different participants of the firm and/or the environment (Zott and Amit, 2007). Therefore, the research hypotheses are confirmed, and it is established that each dimension of business model innovation impact business performances of enterprises in Bosnia and Herzegovina.

6. Conclusion

It is well known that in times of increasing globalization, constantly changing technologies, and a dynamic business environment, the business model defines the extent to which an organization will achieve business success (Johnson *et al.* 2008). This study contributes to the existing literature by examining the impact of individual dimensions of business model innovation on enterprise business performance. Using a sample of 150 large enterprises from a developing country, the study tests the hypothesized relationships between the dimension of business model innovation and business performance. The analysis results indicate a significant positive impact of the dimensions of business model innovation on business performance. Continuous business model innovation is essential, as it may help enterprises become more successful in exceeding achieved advantages and size (Mitchell and Coles, 2003). Business model innovation more efficiently meet customer needs, improve the quality of existing products, and reduce production costs (Poljić, 2019). Changes in any dimension of the business model (value creation, value proposition, or value capture) positively impact organizations (Nunes and Pereira, 2020). By innovating the business model, an enterprise creates innovations extremely difficult for competitors to replicate, thus ensuring significant growth and increased profitability (Mitchell *et al.* 2004). The results of this study confirm these premises, which were also analyzed in other studies (Schneider and Spieth, 2013b; Karimi and Walter, 2016; Anwar, 2018; Smajlović *et al.* 2019; Latifi *et al.* 2021). The findings point to a clear and positive impact of business model innovation dimensions on business performance, expressed through sales and profitability, profit, market share, as well as customer loyalty, perceived image, and reputation. Such findings clearly suggest the way in which enterprise may achieve more superior performance and competitive advantage in the context of a transitional economy in which enterprises in Bosnia and Herzegovina operate.

The theoretical contribution of this paper is primarily evident in testing the relationship between the dimensions of business model innovation and business performance. Bearing in mind that most empirical studies were conducted on small and medium-sized enterprises, the contribution of the study lies in the fact that it was conducted on a sample of large enterprises. According to Teece (1986), large enterprises have adequate "specialized" and "co-specialized" resources and, regardless of how modest their technologies are, they achieve maximum benefits from their application in the innovation process, compared to small enterprises. Furthermore, the contribution is also evident in the testing of the hypotheses conducted on a sample of enterprises from various industries, which significantly enhances the possibility of generalizing the derived conclusions. This is especially important given that previous studies mostly focused on business model innovation and their interactive impact within a single industry, most often high-tech and biotechnology industries, or through case studies or multiple case studies.

Managers in various industries constantly seek to increase business performance and enhance competitiveness. This study suggests that business model innovations are a significant driver that largely contributes to business performance. Therefore, managers should pay more attention to innovating their business model dimensions to survive in the market and achieve above-average performance. One of the most important implications for managers lies in deepening their understanding of the content, structure, and governance of business activities, cost reduction for participants, simplified transaction processes, exchange of information among participants, and other aspects that shape the enterprise's business model. This understanding helps identify the elements whose innovation may lead to above-average business performance and overall well-being for the enterprise in which they operate.

When it comes to the limitations related to this empirical research, we can highlight the method used to measure the dependent variable, business performance, where subjective assessments from the respondents were used. Powell (1992) advocates that subjective measures of business performance correlate with objective measures.

Regarding recommendations for future research, greater emphasis could be placed on conducting longitudinal studies (Menter *et al.* 2023), considering the potential delayed effect of increased financial performance that comes as a result of business model innovation. Since there is no universal business model for every industry (Barringer and Ireland, 2010), future research should focus on large enterprises in specific industries in the context of examining the impact of business model innovations on performance. Although previous studies were more focused on the theoretical conceptualization of the business model and identifying its elements, future research should focus more on empirical investigations of possible moderators and mediators in the relationship between business model innovation and business performance.

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