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ORGANIZATIONAL AMBIDEXTERITY AND ITS PERFORMANCE IMPLICATIONS IN EMERGING ECONOMIES: EMPIRICAL STUDY FROM KAZAKHSTAN

Abstract

Today Kazakhstan enterprises are constantly challenged to become competitive in the domestic and foreign markets, adequately respond to an increasing number of changes and thus choose between innovations and efficiency. Earlier research proposed an ambidextrous strategy as a means of overcoming this challenge. However, previous literature mainly relies on data from developed economies. Few studies use the data from emerging economies, which includes Kazakhstan. Thus, the aim of this study is to empirically assess the effect of ambidexterity on firm performance and resilience. Following a quantitative method and using a multi-item survey instrument, a total of 323 questionnaires were distributed to 80 different organisations in Kazakhstan. SmartPLS 3 was used to investigate structural equation modelling (SEM) estimates. The results show statistically significant relationships between organisational ambidexterity and firm performance, and between ambidexterity and organisational resilience. The value of this paper lies in the following aspects. First, it extends the research on the impact of organisational ambidexterity on firm performance and the relevance of this relationship to emerging economies. Second, this study is, to the best of our knowledge, the first empirical investigation of the ambidexterity-performance and ambidexterity-resilience relationship in developing countries, particularly in Kazakhstan. An important practical relevance of this study is the finding that the application of organisational ambidexterity in the turbulent environment in which contemporary Kazakhstani firms operate can help transform organisations to respond to market uncertainty in a timely manner and remain competitive.

Key words: enterprises, ambidexterity, organisational effectiveness, developing economy, sustainability, research, exploitation.

Introduction

As a result of political and economic changes in Kazakhstan in 2019, the “The State Program for Industrial and Innovative Development of the Republic of Kazakhstan for the period 2020–2025” (SPIID) was approved. The goal of SPIID is to stimulate the international competitiveness of the industry. The main focus of SPIID is transferred from industries as a whole to the microeconomic aspect, that is, enterprises [1]. Namely, encouraging enterprises to become competitive in the domestic and foreign markets.

However, in the current volatile economic environment and times of rapid market and technological changes, it is extremely difficult for Kazakhstani firms to sustain an edge over their competitors [2]. Covid-19 pandemic has aggravated the situation and created new complexities that require quick solutions, including implementation of new strategic decisions. Thus, the era of realignment forces modern organizations to continuous changes. Whereas previously undeniable advantages of prosperous enterprises, namely, a stable organizational structure and established processes, which Kazakhstan inherited from the Soviet Union, now turn into a disadvantage. It is for the reason that rigid organization does not allow timely reaction to changing market requirements [3], thus, building innovative and flexible organizations becomes top priority to both survive and prosper. It follows that modern organizations in Kazakhstan are constantly challenged to choose between innovations

and efficiency. Earlier research proposed an ambidextrous strategy as a means of overcoming this challenge.

Organizational ambidexterity pertains to an organization's ability to effectively utilize both internal and external resources to address current business requirements while also remaining adaptable to future shifts in the market.

Tushman and O'Reilly were the first to empirically prove that ambidextrous companies are more resilient in the long run [4]. Examining further the connection between ambidexterity and firm survival, subsequent seminal studies were held on the analysis of the relationship between ambidexterity and organizational performance [5, 6].

However, previous literature empirically relies on the data from firms in developed economies. Few studies use the data from emerging economies and none of the quantitative research was done specifically for Kazakhstan. Therefore, this article aims to contribute to filling the gaps in the literature by empirically investigating the influence of organizational ambidexterity on the performance and resilience of Kazakhstani firms. Under the above research context, this study addresses the following questions:

RQ 1: Does organizational ambidexterity influence organizational performance?

RQ 2: Does organizational ambidexterity influence organizational resilience?

Important practical implications of this study are the conclusion that putting organizational ambidexterity in action in turbulent circumstances, in which modern Kazakhstani firms operate, can aid in the transformation of firms in order to adapt to market ambiguity and remain competitive. This research also extends the debate on effectiveness of ambidextrous capabilities among firms operation in high environmental uncertainty, which characterizes our country as well.

Materials and methods

Research approach

The present study used deductive research design using convenience-sampling methods. The deductive reasoning approach is suitable when the study's purpose is to test the theory rather than developing it. Multi-item questionnaire survey was used to administer the survey. The questionnaires were delivered through self-addressed envelopes, e-mail, and personal visits to the respondents as a self-completion method. We addressed the questionnaire to employees of different levels of organizational hierarchy.

Translation

Measurement instruments from earlier studies, which involved subjective measures for data collection and publication in English, were used in this research. Subsequently, following Brislin's approach [7], we adapted these tools to the Kazakhstani context through a back-translation approach. In this process survey questionnaires were translated into Russian and then back into English by a group of bilingual experts. The retranslated version was thoroughly examined to identify any substantial disparities from the original. This iterative retranslation process was repeated until no notable differences were observed between the original language and the native language of respondents.

Data collection procedure

We delivered 443 survey questionnaires through personal visits and received 343 replies. Finally, we used 323 replies after leaving defective responses with un-matched, missing, and outliers' issues. The response rate is 72.91 percent, which is found considerably higher than average response rate in the similar research [8]. The higher response is realized because we assured respondents' anonymity and confidentiality of the replies. Besides, it is noted in the study of Tomaskovic-Devey, Leiter, and Thompson that response rate between 30 percent to 35 percent is adequate when data is homogenous [9]. Thus, non-response is not a major concern.

Participants

Demographic profile of the respondents depicts that the percentage of females (62.5%) is higher than the percentage of the male (37.5%). Responses were collected from employees at different levels of organizational hierarchy. Other estimates of the demographic and economic variables, namely, ownership and nature of the organization are summarized in table 1 (p. 298), while size of the organization in terms of number of employees summarized in table 2 (p. 298), and years of operation summarized in table 3 (p. 298) below.

Table 1 – Estimates of the economic variables: ownership and nature of the organization (n=323)

Variables	Levels	Frequencies	Percentage
Ownership	Local	156	48.3
	Foreign	74	22.9
	Joint venture	93	28.8
Nature of the organization	Manufacturing	57	17.6
	Trade	78	24.1
	Service	188	58.2

Note: Compiled by the author.

Table 2 – Estimates of the demographic variables: number of employees (n=323)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	139	43.0	43.0	43.0
	2	26	8.0	8.0	51.1
	3	71	22.0	22.0	73.1
	4	87	26.9	26.9	100.0
	Total	323	100.0	100.0	

Note: Compiled by the author.

Table 3 – Estimates of the demographic variables: years of operations (n=323)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	81	25.1	25.1	25.1
	2	95	29.4	29.4	54.5
	3	34	10.5	10.5	65.0
	4	113	35.0	35.0	100.0
	Total	323	100.0	100.0	

Note: Compiled by the author.

Measurement tools

Study included three sections. In section I, we added a short description about the study followed by the proposed title of the study. Furthermore, we gave a few suggestions on how to respond to the survey. In section II, we included all the items representing different variables, which was adopted from prior studies. Items were arranged in the form Likert scale 1 (strongly disagree) to 6 (strongly agree) and we exclude ‘neutral’ from the scale. Particularly, we excluded any identifiable clue of the respondents’ identity to ensure their accurate responses.

Exploration and exploitation variables were utilized to assess organizational ambidexterity. The operationalization of ambidexterity involved multiplying the exploration and exploitation factors. To address the risk of multicollinearity, the author mean-centered both exploration and exploitation variables before calculating their product. This measurement approach is derived from He and Wong (2004), Gibson Eurasian Journal of Economic and Business Studies, Volume 67, Issue 4, 2023, and Birkinshaw (2004), as well as Cao et al. (2009), aligning with commonly accepted practices in ambidexterity literature. Table 4 (p. 299) displays eight items employed to gauge ambidexterity.

Table 4 – Survey questions on organizational ambidexterity

No.	Survey questions
1	Our organization accepts consumer demand changes that go beyond our existing products and services
2	Our organization often uses new opportunities in new markets
3	Our organization regularly explores new technologies
4	Our organization is actively attracting new customers from new target groups
5	Our organization is constantly working to improve the efficiency of products and services production.
6	Our organization constantly improves the quality of existing products and services.
7	Our organization regularly raises the level of automation of its operational processes
8	Our organization regularly examines and takes action to meet the existing needs of its customers.
Note: Compiled by author.	

Table 5 displays eight items employed to assess employee performance.

Table 5 – Survey questions on employee performance

No.	Survey questions
1	Employee satisfaction level in our organization is higher than in competing / similar organizations
2	The level of motivation of our employees is higher compared to competing / similar organizations
3	Our employees' commitment/dedication is higher compare to our competing/similar firms/organizations
4	Our employees want to stay in our company for a longer period compare to competing / similar organizations.
Note: Compiled by author.	

Table 6, provided below, illustrates the items utilized to assess the four dimensions of organizational resilience.

Table 6 – Survey questions on organizational resilience

No.	Survey questions
	Our organization is able to successfully overcome the consequences of unforeseen events
	Our organization is able to withstand and resist external pressure
	Our organization is able to withstand stressful situations, while not losing the focus on priority (core) goals and needs of the company.
	Our organization does not refuse to follow its strategic course in case of difficulties and is able to preserve its positions.
Our organization adapts quickly to changing circumstances.	
	Our organization responds promptly to the destructive factors causing disruptions in the work of the organization
	Our organization restore services quickly during unexpected events
	Our organization is able to promptly develop and apply alternative scenarios to benefit from any negative circumstances.
	Our organization is able to use other facilities when its own facilities cannot be used
	Our organization employ alternative options to sustain operations during unexpected events
	Our organization is able to re-allocate resources (human, financial, etc.) within the company
	Our organization has a copy of company's most important files through backing up the database
	Our organization is able to prioritize the tasks in case of unexpected events. (RS)
	Our organization is capable of sustaining operations with limited funding.
	Our organization is able to mobilize internal resources in case of unforeseen situations.
	Our organization has sufficient reserve resources to support the company's operations during unforeseen situations.
Note: Compiled by author.	

The author devised a set of measurement items for robustness, redundancy, resourcefulness, and rapidity, as none were previously available for these characteristics proposed by Bruneau et al. (2003) (refer to Table 6: Survey questions on resilience). Utilizing Bruneau et al.'s (2003) operational definitions for each dimension, the author generated the corresponding items.

Finally, section III reported on respondents' demographic profile and economic variables.

Analytical tools

The present study used Microsoft Excel 2016, SPSS 25, and SmartPLS 3 for examining the results. Particularly, SmartPLS 3 is used for investing the estimates for structural equation modeling. Structural equation modeling is used over other regression techniques because it provides a holistic preview of the results in an integrated manner. Structural equation modeling is considered robust because it combines both measurement model via confirmatory factor analysis and cross-loading and structural model via path estimates and model fitness [8]. The present study chose PLS-based structural equation modeling (PLS-SEM) over covariates-based structural equation modeling because the PLS-SEM yields better results when the purpose of the study is prediction [10]. Thus, using PLS-SEM is justified.

Main provisions

In recent years Kazakhstan has made considerable progress in transforming its planned economy to a market economy. Despite these socio-economic changes, contemporary Kazakhstani organizations face many challenges in implementing effective and corresponding environmental management practices. The country's strategic approach towards economic growth, the government's attempts at diversifying the country's economy, increasing presence of international companies, and participation in international trade and economic alliances, such as WTO and EAEU, creates a high demand for establishing well-developed management practices that will be able to provide an impact on the ongoing changes and create a competitive advantage [11]. Above all, such features of post-Soviet Kazakhstan organizational culture as rigid vertical structures keep it in transition from the Soviet heritage to the existing practices of Western multinational companies. Realizing and transforming business strategies to make them more open, flexible, and effective will be required to realize all these priorities.

Thereby, the complexity of the problems that managers of firms operating in transition economies, including those of Kazakhstan, are facing nowadays, the need to take into account current trends in the formation and development of successful organizations make the issue of organizational ambidexterity urgent.

Ambidexterity and industrialization

The first industrialization in Kazakhstan took place during Soviet times. With a completely different economic situation, the main factor in the success of that program was the fact that the country was surrounded by fourteen partners and allies. Thus, this affected both the speed of modernization and competitiveness. Socialist management, with all its advantages and limitations, was giving significantly greater control over the situation than capitalist.

Modern Kazakhstan is no longer surrounded by allies, but competitors from all the sides. In the framework of the EAEU, Kazakhstani producers are faced with the fact that they cannot compete on their own territory with the flow of cheap imports from giants such as Russia and Belarus [12].

Thus, the inability of enterprises that grew in a planned economy to compete in free markets led to de-industrialization.

In this regard, Kazakhstan began to vigorously deploy the economy towards the industrial economy. The program includes following the policy of export-oriented industrialization based on the creation and development of new businesses oriented to the world market and viable in the conditions of global competition, which should be combined with reasonable protection and development of the domestic market. In studies of international entrepreneurship, scholars have admitted that "process of internationalization is an ambidexterity context" [13, p. 13], when firms should balance between exploration and exploitation to facilitate internationalization speed. Thus, the development of ambidextrous organizations will be certainly helpful for internationalization of industry and export-

oriented firm in Kazakhstan, trying to achieve at least similar competitive positions as their counterparts in developed countries.

Ambidexterity and Industry 4.0

As a part of industrialization, Kazakhstan is developing and adopting a set of measures for the technological re-equipment of basic industries, including elements of the fourth industrial revolution. Successful navigation and adaptation of Kazakhstan in the world of the fourth industrial revolution, which will help Kazakhstan to become one of the leaders of the new world, imply changes in business models and processes in global production networks. This, in turn, creates a need for a quick response to the rapidly changing cyber threat landscape. Empirically, previous research demonstrates evidence that organizational ambidexterity is one of the essential parts for successful implementation of Industry 4.0.

Ability of the organizations to counterbalance their exploitative and explorative activities internally and leverage their external network for collaboration and knowledge sharing, accelerated their progress in further implementation of Industry 4.0 related concepts. This is consistent with what has been found in previous study by Yoo and Kim, which stated that overall digitalization reinforces the need for an open innovation model, where organizations cannot rely solely on internal sources of knowledge and technology [14]. Therefore, the significance of both openness and capability to simultaneously explore and exploit become apparent in the adoption of Industry 4.0. This is particularly relevant for SMEs, as they often face constraints in resources for exploratory endeavors, which implies the active use of external sources.

Ambidexterity and environmental uncertainty

Basically, the idea of ambidexterity takes root from adaptive systems theory that claims that periods of environmental and technological change call for firms to adapt and change their structural alignments accordingly [15, 4]. Seminal studies on antecedents of organizational ambidexterity claim that the higher the environmental uncertainty, more and better positive outcomes can be expected from developing ambidexterity capabilities. Moreover, Raisch and Birkinshaw stated that “the level of dynamism and competitiveness in a business environment may be an important boundary condition for organizational ambidexterity” [16, p. 394]. Hence, the concept of organizational ambidexterity is especially relevant for transition economies, such as Kazakhstan in particular, that undergo a set of structural transformations.

Literature review

Organizational ambidexterity and firm performance

Term “ambidexterity” infers from psychophysiology meaning the capacity to utilize both hands similarly well. The representation of ambidexterity, initially linked to enterprises by Dunkan [17], has got consideration from scholastics, policymakers and specialists in management after March’s fundamental study on exploration and exploitation [15]. In a general sense, organizational ambidexterity alludes to an organization’s capacity to at the same time investigate and misuse their inside and outside assets to meet today’s commerce needs as well as being versatile to future advertise changes [4]. March distinguished two measurements of the organizational ambidexterity, investigation, which involves “search, variety, chance taking, experimentation, play, adaptability, discover”, and abuse, which includes “refinement, effectiveness, choice and implementation”, as two in a general sense distinctive, inconsistent forms [15]. Thus, one of the major challenges in organizational ambidexterity operationalization is the tensions between those two dimensions. However, despite the fact that capabilities, culture, structure and the processes required to ensure both exploitation and exploration are distinct and thus compete for limited resources of the firm, the data strongly indicates the need to strike a balance between these two for the prolonged survival of the firm and improved profitability.

The idea of organizational ambidexterity – firm performance linkage originated in the argument that maintaining the balance between exploitation and exploration activities is one of the primary factors in organizations long-term survival and prosperity.

Following Dunkan and March’s seminal articles, Tushman and O’Reilly explored in greater detail the phenomenon of ambidexterity and were the first to empirically prove that ambidextrous companies are more resilient in the long run [4]. Delving into the idea of ambidexterity – firm survival linkage,

subsequent seminal studies were held on the analysis of the relationship between ambidexterity and organizational performance [5, 6]. Results of these studies have reported positive effects. It also includes recent research employing extensive samples with longitudinal data, documenting the long-term impacts of ambidexterity [6, 18]. These findings point to the contingent nature of the ambidexterity–performance relationship. For instance, Geerts, Blindenbach-Driessen, and Gemmel [19] have conducted a study involving over 500 firms in a 4-year period. The results revealed that organizational ambidexterity positively influences firm growth.

Laplume and Dass demonstrated, over a span of 65 years, how a company successfully adapted through diverse forms of ambidexterity [20]. House and Price documented how Hewlett-Packard, yet another giant in an industry, managed to move from electronic instruments to mini-computers to printers to services [21]. Additional studies have depicted the adaptation processes in companies such as Polaroid, IBM, Oticon, URS, NCR, and others. The significance of these studies lies in their ability to capture the intricate nature of ambidexterity, grounding the phenomenon in practical reality.

Based on the preceding discussion, the following hypothesis is proposed:

H1: Organizational ambidexterity influences organizational performance

Organizational ambidexterity and resilience

Researchers stated that businesses, in order to succeed within the confront of a turbulent business environment, must drive home strong resilience figures. Organizational resilience alludes to the capability of the organization to react and recover from crisis situations, as well as adapt in the post-event phase through restructuring, change and knowledge acquisition in the face of a threat [22].

Similarly to Cutter [22], various researchers characterize resilience as more than survival and bounce back, recuperating rapidly and successfully taking after an occurrence, but almost turning challenges into openings and in this manner making a prevalent execution than some time recently, hence bouncing forward. Though ‘bouncing forward’ changes the primary noteworthiness of adaptability, it gives the assurance of a framework against which post-debacle measures have to be undertaken [23].

Moreover, it was stated that resilience refers not only to the post-event state, but also relevant to the capacity to foresee the occurrence of negative events. In line with this view, pre-event analysis and preparedness is central to the concept of resilience in disasters and crisis situations. Thus, the concept of organizational ambidexterity is especially relevant for uncertain times of Covid-19 pandemic and for efforts of organizations “to stabilize in the new environment and strategies for what’s next” [24], thus assisting companies in building resiliency.

Therefore, based on the previous literature review and assumptions, the study proposes the following hypotheses:

H2: Organizational ambidexterity influences organizational resilience

H3: Organizational resilience influences organizational performance

Results and discussion

Main results

Table 7 reported the estimates on direct effects. H1 predicted that there is an influence of organizational ambidexterity on organizational performance. Table 7 reported that the influence is significant ($\beta=0.325$, t -statistics=5.155, $p=0.000$). Thus, the result shows that H1 is supported. In H2, the present study hypothesized that organizational ambidexterity influenced organizational resilience. Results in table 7 (p. 303) showed that the influence is significant ($\beta=0.438$, t -statistics=8.710, $p=0.000$). Therefore, H2 is supported. Finally, in H3, it is hypothesized that, organizational resilience impacted organizational performance. Results revealed that influence is also positive and significant ($\beta=0.229$, t -statistics=3.400, $p=0.001$). Hence, H3 is also supported.

Discussions and analysis

This study aimed to examine whether engaging in both exploratory and exploitative activities concurrently, demonstrating ambidexterity, leads to increased levels of organizational performance and resilience in emerging economies.

Table 7 – Estimates on direct effects

Hypothesis	Path relations	β	STDEV	t-statistics	p-value	Decision
H1	OA \Rightarrow OP	0.325	0.063	5.155	0.000	Supported
H2	OA \Rightarrow OR	0.438	0.050	8.710	0.000	Supported
H3	OR \Rightarrow OP	0.229	0.067	3.400	0.001	Supported

Note: Compiled by the author.
 β – Beta coefficient; STDEV – Standard deviation; OA – Organizational ambidexterity; OP – Organizational performance; OR- Organizational resilience.

The findings from our research supported the ambidexterity hypothesis, indicating that organizations practicing ambidexterity achieve elevated levels of organizational performance. Overall these findings are in accordance with empirical results reported in seminal articles by Tushman and O’Reilly [4], Lubatkin and colleagues [5], He and Wong [18]. All of them provided robust arguments that while it is challenging to simultaneously handle exploratory and exploitative activities within a single organization, becoming ambidextrous brings about numerous significant advantages for firm performance. This interrelation could be explained by the research findings of Clauss and colleagues [25] who stated that organizational ambidexterity provides a competitive advantage by enabling organizations to develop new products and services while maintaining the efficiency of existing operations. That explanation was supported by Kumkale’s finding that simultaneous exploration and exploitation leads to enhanced adaptation and foster innovation, which consequently lead to improved performance in a changing business environment [26].

Results of this research confirm that organizational ambidexterity is positively associated with resilience. Previous studies also proved that enterprises capable of concurrently engaging in exploratory and exploitative innovations can not only effectively leverage existing products, services and processes, but also foster the development of new frameworks, conduct experiments and create more radical products and services targeted at new customers and markets. This, in turn, leads to long-term viability of the firm [18, 24].

Interestingly, these results go beyond previous reports, revealing stronger connection between organizational ambidexterity and firm performance and resilience. It could be explained by the fact that data for this study was collected at times of Covid-19, which is characterized by an extremely turbulent business environment. This finding supports the notion of Raisch and Birkinshaw that organizational ambidexterity is more valuable during economic uncertainties [16].

Although the present results clearly support the interrelation between organizational ambidexterity, firm performance and resilience, it is appropriate to recognize that there are also studies that present rejecting perspectives or mixed findings. Hwang and colleagues suggested that the relationship between ambidexterity and performance is U-shaped [27]. They found that moderate levels of ambidexterity had a positive impact on performance, whereas extreme levels resulted in diminishing returns. One interpretation of these arguments is resource constraints which may limit the organization’s ability to allocate resources for exploratory activities or resilience strategy implementation. For instance, Zhang found that resource-constrained firms in developing countries struggle to achieve ambidextrous innovation due to limited resources [28].

Aslam and colleagues claim that promoting ambidexterity within an organization might lead to role conflict and ambiguity [29], hindering employee performance and subsequent organizational outcomes. The most compelling explanation to this limitation is that cultural, social and institutional factors prevalent in developing countries context may pose challenges to ambidexterity adoption [30]. These factors, including risk aversion that leads to high resistance to change, bureaucratic red tape and lack of managerial capabilities, can hinder the successful implementation and performance outcomes of ambidexterity. This idea is further supported by the finding that organizational resilience requires collaboration among several stakeholders, and inadequate support from governments, regulatory bodies can hinder organization’s ability to build resilience effectively. Developing countries may not have necessary infrastructure, systems and leadership skills to implement resilient strategies

effectively. Thus, lack of readiness at both individual and organizational levels can limit the positive impact of resilience on performance.

Differing perspectives emphasize the need for further research of cultural, institutional and resource-related challenges that could limit the positive influence. Nevertheless, the overarching conclusions seem evident: in uncertain environments, there is a positive correlation between organizational ambidexterity and improved performance as well as increased survival rates.

Conclusion

The main objective of the study is to empirically identify the direct influence of organizational ambidexterity on firm performance and resilience in emerging markets, specifically in Kazakhstan. According to the results of the study, the following conclusions can be suggested.

Firstly, given the environmental uncertainties and an increasing number of technological and market changes, modern organizations are constantly challenged to choose between innovations and efficiency. In this regard, the authors proposed a solution to this tension through the concept of organizational ambidexterity. Based on a synthesis of the ambidexterity literature, the author's formulation of the definition of organizational ambidexterity was provided:

Organizational ambidexterity pertains to an organization's ability to effectively utilize both internal and external resources to address current business requirements while also remaining adaptable to future shifts in the market.

Secondly, the concept of organizational ambidexterity involves two distinct dimensions: exploration, characterized by "search, variation, risk-taking, experimentation, play, flexibility, discover", and exploitation, which encompasses "refinement, efficiency, selection, and implementation" [15]. These are recognized as fundamentally different and incompatible processes. Despite the different skills, mindset, structures, and processes required for exploitation and exploration, the evidence strongly indicates the necessity of striking a balance between the two for long-term firm survival and organizational success. An under- or over-emphasis on ambidexterity or either of its components comes with a cost, potentially leading to the failure of the firm. Moreover, various solutions to the exploration/exploitation trade-off were discussed.

Thirdly, results of an empirical study, with respect to the first research question, revealed strong evidence of the influence of organizational ambidexterity on firm performance ($\beta=0.325$, t -statistics=5.155, $p=0.000$). Thus, the result shows that H1 is supported. The second major findings of this study is the strong correlation between organizational ambidexterity and organizational resilience ($\beta=0.438$, t -statistics=8.710, $p=0.000$). Therefore, H2 is supported. Finally, it was hypothesized that organizational resilience impacted organizational performance. Results revealed that influence is also positive and significant ($\beta=0.229$, t -statistics=3.400, $p=0.001$). Thereby H3 is also supported. Thus, we came up with the conclusion that ambidexterity is positively associated with firm performance and resilience.

Fourthly, numerous research investigations into the antecedents of organizational ambidexterity argue that the benefits derived from cultivating ambidextrous capabilities are particularly significant for firms operating in highly uncertain markets. Meanwhile, the degree of dynamism and competitiveness within a business environment may serve as a crucial boundary condition for the effectiveness of organizational ambidexterity.

Thus, the concept of organizational ambidexterity is especially relevant for transition economies, to which Kazakhstan belongs. Therefore, it can be inferred that implementing organizational ambidexterity in a volatile context, in which modern Kazakhstani firms operate, can aid in the transformation of firms in order to adapt to market ambiguity and remain competitive. This research also extends the debate on effectiveness of ambidextrous capabilities among firms operation in high environmental uncertainty, which characterizes our country as well.

Further research

The complexity of the problems that managers of firms operating in transition economies, including those of Kazakhstan, are facing nowadays, the need to take into account current trends in the formation and development of successful organizations make the issue of organizational ambidexterity urgent. However, previous literature mainly relies on the data from firms in developed economies.

Few studies use the data from emerging economies, which includes Kazakhstan. This needs further investigation and could be considered as a recommendation for further research.

Existing research on organizational ambidexterity falls into four main research areas such as conceptualization, dimensions, outcomes, and effect on firm performance and moderators. However, empirical studies on ambidexterity-performance linkage in developing countries remain scarce. Moreover, more complex relationships and potential moderating effects are the burning research questions that require further investigation to advance theory and practice on organizational ambidexterity.

REFERENCES

- 1 Official information source of the Prime Minister of the Republic of Kazakhstan. URL: <https://primeminister.kz/en/documents/gosprograms/industrial>
- 2 Кенжебаева Г. Экономическая оценка деятельности и конкурентоспособности предприятия // Вестник университета «Туран». – 2022. – № 2(94). – С. 143–152. URL: <https://doi.org/10.46914/1562-2959-2022-1-2-143-152>
- 3 Moradi E., Jafari S., Doorbash Z., Mirzaei A. Impact of organizational inertia on business model innovation, open innovation and corporate performance // *Asia Pacific Management Review*. 2021, no. 26(4), pp. 171–179.
- 4 Tushman M., O'Reilly C. Ambidextrous organizations: managing evolutionary and revolutionary change // *California management review*. 1996, no. 38(4), pp. 8–29. URL: <https://doi.org/10.2307%2F41165852>
- 5 Lubatkin M., Simsek Z., Ling Y., Veiga J. Ambidexterity and performance in small-to medium-sized firms: The pivotal role of top management team behavioral integration // *Journal of management*. 2006, no. 32(5), pp. 646–672.
- 6 Hughes M. Organizational ambidexterity and firm performance: burning research questions for marketing scholars // *Journal of Marketing Management*. 2018, no. 34(1–2), pp. 178–229. URL: <https://doi.org/10.1080/0267257X.2018.1441175>
- 7 Fan L., Mahmood M., Uddin M. Supportive Chinese supervisor, innovative international students: A social exchange theory perspective // *Asia Pacific Education Review*. 2019, no. 20(1), pp. 101–115.
- 8 Tomaskovic-Devey D., Leiter J., Thompson S. Organizational survey nonresponse // *Administrative science quarterly*. 1994, no. Sep 1, pp. 439–457. URL: <https://www.jstor.org/stable/2393298>
- 9 Brown T., Moore M. Confirmatory factor analysis. *Handbook of structural equation modeling*. 2012, pp. 361–379.
- 10 Hair J., Hollingsworth C., Randolph A., Chong A. An updated and expanded assessment of PLS-SEM in information systems research // *Industrial management & data systems*. 2017, no. Apr 10. URL: https://www.emerald.com/insight/content/doi/10.1108/IMDS-04-2016-0130/full/html?casa_token=2Sz_1wuSxZEA AAAA:wTm1GWquIdRYLwU6VqPgl5LrTZC4jHij8opMH1XnvYC0SLwPQ22m8UJ7QjZLoLFYmPkmU_Z0H7I_HP_gC5HLUB1bzbywL8EoPmNh5kbS-MaS6pKqic
- 11 Бактымбет С., Оспанов М., Бакирбекова А., Бактымбет Ә. Повышение конкурентоспособности национальной экономики в условиях глобализации // Вестник университета «Туран». – 2022. – № 1(??). – С. 51–57. URL: <https://doi.org/10.46914/1562-2959-2022-1-1-51-57>
- 12 Yarashevich V. Competitiveness through new industrialization in the EAEU // *Post-Communist Economies*. 2021, no. 33(2–3), pp. 305–330.
- 13 Lin S., Si S. The influence of exploration and exploitation on born globals' speed of internationalization // *Management Decision*. 2018, no. Aug 7. URL: https://www.emerald.com/insight/content/doi/10.1108/MD-08-2017-0735/full/html?casa_token=eFKLI4hGKzMAAAAA:IVxMTDzpTneDQI7wUvrgZkX8oexOpo-gkL1DWikQH_t8FFYRLvnSCg95rFmrBY1m9-WuMRHPPrWI_EXOccp14AkXJVb4INnOLJV5JETY2Qfws Хе6MTaI Может, сократить ссылку?
- 14 Yoo J., Kim J. The effects of entrepreneurial orientation and environmental uncertainty on Korean technology firms' R&D investment // *Journal of Open Innovation: Technology, Market, and Complexity*. 2019, no. 5(2), p. 29.
- 15 March J. Exploration and exploitation in organizational learning // *Organization science*. 1991, no. 2(1), pp. 71–87.
- 16 Raisch S., Birkinshaw J. Organizational ambidexterity: Antecedents, outcomes, and moderators // *Journal of management*. 2008, no. 34(3), pp. 375–409.
- 17 Duncan R. The ambidextrous organization: Designing dual structures for innovation. *The management of organization*. 1976, no. 1(1), pp. 167–188.

- 18 He Z., Wong P. Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis // *Organization science*. 2004, no. 15(4), pp. 481–94.
- 19 Geerts A., Blindenbach-Driessen F., Gemmel P. Achieving a balance between exploration and exploitation in service firms: longitudinal study // *In Academy of Management Proceedings*. 2010, no. 1, pp. 1–6. URL: <https://journals.aom.org/doi/abs/10.5465/ambpp.2010.54493894>
- 20 Laplume A., Dass P. Exploration and exploitation for various stages of firm growth through diversification. In *Annual meetings of the Academy of Management*. 2012. URL: <https://journals.aom.org/doi/abs/10.5465/AMBPP.2012.11420abstract>
- 21 House C., Price R. *The HP phenomenon*. Stanford University Press. 2009.
- 22 Cutter S., Barnes L., Berry M., Burton C., Evans E., Tate E., Webb J. A place-based model for understanding community resilience to natural disasters // *Global environmental change*. 2008, no. 18(4), pp. 598–606. URL: <https://doi.org/10.1016/j.gloenvcha.2008.07.013>
- 23 Manyena B., O'Brien G., O'Keefe P., Rose J. Disaster resilience: a bounce back or bounce forward ability? *Local Environment: The International Journal of Justice and Sustainability*. 2011, no. 16(5), pp. 417–424.
- 24 Pricewater house Coopers. Key success factors for operational resilience. 2020. URL: <https://www.pwc.com.au/assurance/digital-trust/July-COVID19-Operational-resilience.pdf>
- 25 Clauss T., Kraus S., Kallinger F., Bican P., Brem A., & Kailer N. Organizational ambidexterity and competitive advantage: The role of strategic agility in the exploration-exploitation paradox // *Journal of Innovation & Knowledge*. 2021, no. 6(4), pp. 203–213.
- 26 Kumkale İ. Organizational Ambidexterity. In *Organizational Mastery: The Impact of Strategic Leadership and Organizational Ambidexterity on Organizational Agility*. Singapore: Springer Nature Singapore. 2022, pp. 1–22.
- 27 Hwang B., Lai Y., Wang C. Open innovation and organizational ambidexterity // *European Journal of Innovation Management*. 2023, no. 26(3), pp. 862–884.
- 28 Zhang H. Does combining different types of innovation always improve SME performance? An analysis of innovation complementarity // *Journal of Innovation & Knowledge*. 2022, no. 7(3), pp. 100–192.
- 29 Aslam H., Syed T., Blome C., Ramish A., Ayaz K. The multifaceted role of social capital for achieving organizational ambidexterity and supply chain resilience. *IEEE Transactions on Engineering Management*. 2022.
- 30 Alshwayat D., Elrehail H., Shehadeh E., Alsalhi N., Shamout M., Rehman S. An exploratory examination of the barriers to innovation and change as perceived by senior management // *International Journal of Innovation Studies*. 2023, no. 7(2), pp. 159–170.

REFERENCES

- 1 Official information source of the Prime Minister of the Republic of Kazakhstan. URL: <https://primeminister.kz/en/documents/gosprograms/industrial>. (In English).
- 2 Kenzhebaeva G. (2022) Jekonomicheskaja ocenka dejatel'nosti i konkurentosposobnosti predpriyatija // *Vestnik universiteta «Turan»*. № 2(94). P. 143–152. URL: <https://doi.org/10.46914/1562-2959-2022-1-2-143-152>. (In Russian).
- 3 Moradi E., Jafari S., Doorbash Z., Mirzaei A. (2021) Impact of organizational inertia on business model innovation, open innovation and corporate performance // *Asia Pacific Management Review*, no. 26(4), pp. 171–179. (In English).
- 4 Tushman M., O'Reilly C. (1996) Ambidextrous organizations: managing evolutionary and revolutionary change // *California management review*, no. 38(4), pp. 8–29. URL: <https://doi.org/10.2307/2F41165852>. (In English).
- 5 Lubatkin M., Simsek Z., Ling Y., Veiga J. (2006) Ambidexterity and performance in small-to medium-sized firms: The pivotal role of top management team behavioral integration // *Journal of management*, no. 32(5), pp. 646–672. (In English).
- 6 Hughes M. (2018) Organizational ambidexterity and firm performance: burning research questions for marketing scholars // *Journal of Marketing Management*, no. 34(1–2), pp. 178–229. URL: <https://doi.org/10.1080/0267257X.2018.1441175>. (In English).
- 7 Fan L., Mahmood M., Uddin M. (2019) Supportive Chinese supervisor, innovative international students: A social exchange theory perspective // *Asia Pacific Education Review*, no. 20(1), pp. 101–115. (In English).

- 8 Tomaskovic-Devey D., Leiter J., Thompson S. (1994) Organizational survey nonresponse // *Administrative science quarterly*, no. Sep 1, pp. 439–457. URL: <https://www.jstor.org/stable/2393298>. (In English).
- 9 Brown T., Moore M. (2012) Confirmatory factor analysis. *Handbook of structural equation modeling*, pp. 361–379. (In English).
- 10 Hair J., Hollingsworth C., Randolph A., Chong A. (2017) An updated and expanded assessment of PLS-SEM in information systems research // *Industrial management & data systems*, no. Apr 10. URL: https://www.emerald.com/insight/content/doi/10.1108/IMDS-04-2016-0130/full/html?casa_token=2Sz_1wuSxZEA AAAA:wTm1GWquIdRYLwU6VqPg15LrTZC4jHij8opMH1XnvYC0SLwPQ22m8UJ7QjZLoLFYmPkmU_Z0H71_HP_gC5HLUB1bzbywL8EoPmNh5kbS-MaS6pKqic. (In English).
- 11 Baktymbet S., Ospanov M., Bakirbekova A., Baktymbet Ə. (2022) Povyszenie konkurentosposobnosti nacional'noj jekonomiki v uslovijah globalizacii // *Vestnik universiteta «Turan»*. No. 1(??&&&&). P. 51–57. URL: <https://doi.org/10.46914/1562-2959-2022-1-1-51-57>. (In Russian).
- 12 Yarashevich V. (2021) Competitiveness through new industrialization in the EAEU // *Post-Communist Economies*, no. 33(2–3), pp. 305–330. (In English).
- 13 Lin S., Si S. (2018) The influence of exploration and exploitation on born globals' speed of internationalization // *Management Decision*, no. Aug 7. URL: https://www.emerald.com/insight/content/doi/10.1108/MD-08-2017-0735/full/html?casa_token=eFKLI4hGKzMAAAAA:IVxMTDzpTneDQI7wUvrgZkX8oexOpo-gkL1DWikQH_t8FFYRLvnSCg95rFmrBY1m9-WuMRHPrWI_EXOocp14AkXJVb4INnOLJV5JETY2QfwsXe6MTalMozhet,sokratit'ssylku? (In English).
- 14 Yoo J., Kim J. (2019) The effects of entrepreneurial orientation and environmental uncertainty on Korean technology firms' R&D investment // *Journal of Open Innovation: Technology, Market, and Complexity*, no. 5(2), p. 29. (In English).
- 15 March J. (1991) Exploration and exploitation in organizational learning // *Organization science*, no. 2(1), pp. 71–87. (In English).
- 16 Raisch S., Birkinshaw J. (2008) Organizational ambidexterity: Antecedents, outcomes, and moderators // *Journal of management*, no. 34(3), pp. 375–409. (In English).
- 17 Duncan R. The ambidextrous organization: Designing dual structures for innovation. *The management of organization*. 1976, no. 1(1), pp. 167–188. (In English).
- 18 He Z., Wong P. (2004) Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis // *Organization science*, no. 15(4), pp. 481–94. (In English).
- 19 Geerts A., Blindenbach-Driessen F., Gemmel P. (2010) Achieving a balance between exploration and exploitation in service firms: longitudinal study // *In Academy of Management Proceedings*, no. 1, pp. 1–6. URL: <https://journals.aom.org/doi/abs/10.5465/ambpp.2010.54493894>. (In English).
- 20 Laplume A., Dass P. (2012) Exploration and exploitation for various stages of firm growth through diversification. In *Annual meetings of the Academy of Management*. URL: <https://journals.aom.org/doi/abs/10.5465/AMBPP.2012.11420abstract>. (In English).
- 21 House C., Price R. (2009) *The HP phenomenon*. Stanford University Press. (In English).
- 22 Cutter S., Barnes L., Berry M., Burton C., Evans E., Tate E., Webb J. (2008) A place-based model for understanding community resilience to natural disasters // *Global environmental change*, no. 18(4), pp. 598–606. URL: <https://doi.org/10.1016/j.gloenvcha.2008.07.013>. (In English).
- 23 Manyena B., O'Brien G., O'Keefe P., Rose J. (2011) Disaster resilience: a bounce back or bounce forward ability? *Local Environment: The International Journal of Justice and Sustainability*, no. 16(5), pp. 417–424. (In English).
- 24 Pricewaterhouse Coopers. Key success factors for operational resilience. 2020. URL: <https://www.pwc.com.au/assurance/digital-trust/July-COVID19-Operational-resilience.pdf>. (In English).
- 25 Clauss T., Kraus S., Kallinger F., Bican P., Brem A., & Kailer N. (2021) Organizational ambidexterity and competitive advantage: The role of strategic agility in the exploration-exploitation paradox // *Journal of Innovation & Knowledge*, no. 6(4), pp. 203–213. (In English).
- 26 Kumkale İ. (2022) *Organizational Ambidexterity. In Organizational Mastery: The Impact of Strategic Leadership and Organizational Ambidexterity on Organizational Agility*. Singapore: Springer Nature Singapore, pp. 1–22. (In English).
- 27 Hwang B., Lai Y., Wang C. (2023) Open innovation and organizational ambidexterity // *European Journal of Innovation Management*, no. 26(3), pp. 862–884. (In English).
- 28 Zhang H. (2022) Does combining different types of innovation always improve SME performance? An analysis of innovation complementarity // *Journal of Innovation & Knowledge*, no. 7(3), pp. 100–192. (In English).

29 Aslam H., Syed T., Blome C., Ramish A., Ayaz K. (2022) The multifaceted role of social capital for achieving organizational ambidexterity and supply chain resilience. IEEE Transactions on Engineering Management. (In English).

30 Alshwayat D., Elrehail H., Shehadeh E., Alsalthi N., Shamout M., Rehman S. (2023) An exploratory examination of the barriers to innovation and change as perceived by senior management // International Journal of Innovation Studies, no. 7(2), pp. 159–170. (In English).

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ҰЙЫМДАСТЫРУШЫЛЫҚ АМБИДЕКСТРИЯ ЖӘНЕ ОНЫҢ ЭКОНОМИКАСЫ ДАМУШЫ ЕЛДЕРДЕГІ КӘСІПОРЫНДАРДЫҢ ТИІМДІЛІГІНЕ ӘСЕРІ: ҚАЗАҚСТАНДАҒЫ ЭМПИРИКАЛЫҚ ЗЕРТТЕУ

Андатпа

Қазақстандық кәсіпорындар үнемі ішкі және сыртқы нарықтарда бәсекеге қабілетті болу, нарықтағы өсіп келе жатқан өзгерістерге барабар жауап беру және осылайша инновациялар мен тиімділік арасында таңдау жауап міндетін қояды. Бұрынғы зерттеулер бұл қиындықты жеңу құралы ретінде екіжақты стратегияны ұсынды. Алайда алдыңғы ғылыми еңбектер дамыған елдердің деректеріне негізделген. Амбидекстрияның дамушы экономикалы соның ішінде Қазақстандық компаниялардың тиімділігіне әсері қосымша зерттеуді талап етеді. Осылайша, зерттеудің мақсаты – амбидекстрияның ұйымдық тиімділік пен тұрақтылыққа әсерін эмпирикалық түрде бағалау. Сандық әдіспен және көп тармақты сауалнама құралын пайдалана отырып, Қазақстандағы 80 түрлі ұйым арасында барлығы 323 сауалнама таратылды. Құрылымдық теңдеулерді модельдеу (SEM) бағаларын зерттеу үшін SmartPLS 3 пайдаланылды. Нәтижелер ұйымның әмбебаптығы және фирманың өнімділігі мен тұрақтылығы арасындағы статистикалық маңызды қатынастарды ұсынады. Бұл жұмыстың құндылығы келесі аспектілерде жатыр. Біріншіден, ол ұйымдық әмбебаптылықтың фирманың өнімділігіне әсері және осы қатынастың дамушы экономикаларға қатыстылығы туралы зерттеулерді кеңейтеді. Екіншіден, бұл зерттеу, біздің білуімізше, дамушы елдерде, атап айтқанда, Қазақстанда екі жақтылық-өнімділік және екі жақтылық-тұрақтылық байланысының алғашқы эмпирикалық сараптамасы. Осы зерттеудің маңызды практикалық салдары қазіргі қазақстандық фирмалар жұмыс істейтін турбулентті жағдайларда ұйымдық екіұштылықты іске асыру нарықтық белгісіздікке уақытында жауап беру және бәсекеге қабілетті болу үшін ұйымдардың өзгеруіне ықпал етуі мүмкін деген қорытынды.

Тірек сөздер: кәсіпорындар, амбидекстрия, ұйымдастырушылық тиімділік, дамып келе жатқан экономика, тұрақтылық, зерттеу, пайдалану.

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ОРГАНИЗАЦИОННАЯ АМБИДЕКСТРИЯ И ЕЕ ВЛИЯНИЕ НА ЭФФЕКТИВНОСТЬ ПРЕДПРИЯТИЙ В СТРАНАХ С РАЗВИВАЮЩЕЙСЯ ЭКОНОМИКОЙ: ЭМПИРИЧЕСКОЕ ИССЛЕДОВАНИЕ В КАЗАХСТАНЕ

Аннотация

Сегодня перед казахстанскими предприятиями стоит задача повышать уровень конкурентоспособности на внутреннем и внешнем рынках, адекватно реагировать на все большее количество изменений на рынке и, таким образом, выбирать между инновациями и эффективностью. Более ранние исследования предлагают

амбидекстральную стратегию как средство преодоления этой проблемы. Однако предыдущие научные труды опираются в основе своей на данные из развитых стран. В то время как влияние амбидекстрии на эффективность компаний из стран с развивающейся экономикой, включая Казахстан, требует дополнительного рассмотрения. Таким образом, цель исследования состоит в том, чтобы эмпирически оценить влияние амбидекстрии на организационную эффективность и устойчивость. В соответствии с количественным методом и с использованием инструмента многоэлементного опроса в общей сложности 323 анкеты были распространены среди 80 различных организаций в Казахстане. SmartPLS 3 использовался для исследования оценок моделирования структурных уравнений (SEM). Результаты показывают статистически значимые взаимосвязи между организационной амбидекстрией и эффективностью компаний, а также между амбидекстрией и организационной устойчивостью. Ценность данной работы заключается в следующих аспектах. Во-первых, она расширяет исследование влияния организационной амбидекстрии на производительность фирмы и актуальность этой взаимосвязи для стран с развивающейся экономикой. Во-вторых, это исследование, насколько нам известно, является первым эмпирическим исследованием связи амбидекстрии-эффективности и амбидекстрии-устойчивости в развивающихся странах, в частности в Казахстане. Важной практической значимостью данного исследования является вывод о том, что применение организационной амбидекстрии в турбулентных условиях, в которых работают современные казахстанские фирмы, может способствовать трансформации организаций, чтобы своевременно реагировать на рыночную неопределенность и оставаться конкурентоспособными.

Ключевые слова: предприятия, амбидекстрия, организационная эффективность, развивающаяся экономика, устойчивость, исследование, эксплуатация.