

ORGANIZATIONAL EFFECTIVENESS OF POLISH ENTERPRISES IN THE CONTEXT OF CHANGEABILITY AND UNFRIENDLINESS OF AN ENVIRONMENT

Paweł Chudziński¹, Szymon Cyfert²

¹ *AQUANET S.A., Poland*

² *Poznań University of Economics and Business, Poland*

Corresponding author:

Szymon Cyfert

Poznan University of Business and Economics

Department of Organizational and Management Theory

al. Niepodległości 10, 61-875 Poznań, Poland

phone: (+48) 61 854 38 92

e-mail: szymon.cyfert@ue.poznan.pl

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ABSTRACT

The dynamics of the processes taking place in an environment, which is rendered in the altered perception of the character of this environment, induces a need to find answers to the following questions: (1) How do managers perceive an environment in the dimensions of stability/ changeability and friendliness/unfriendliness? (2) Is there a correlation between the stability/changeability and friendliness/unfriendliness of an environment, i.e. if an environment is more stable, is it perceived as more friendly, and if an environment is more changeable is it perceived as unfriendly? (3) Does environmental stability/changeability as well as friendliness/unfriendliness exert any influence on organizational effectiveness? In an attempt to answer the above quoted questions, the article's objective has been defined as a discussion on the interdependencies perceived by managers between an environment's dimensions of stability/changeability and friendliness/unfriendliness (analysed in terms of institutional categories) and the organizational effectiveness of Polish enterprises.

The managers evaluated the legal environment as the least stable. In their opinion, that milieu was also more intimidating than friendly. Concurrently, a technological environment was perceived by the respondents as the most stable and favourable. The results of the effected research allow forming a conclusion concerning the existing correlation between the friendliness and stability of particular categories of an environment, at the same time pointing out to the occurrence of correlations between stability/changeability and friendliness/unfriendliness of some categories of an environment and the organizational effectiveness of the examined enterprises.

KEYWORDS

organisation's environment, environment changeability, environment friendliness, organizational effectiveness.

Introduction

Treating an organization in terms of an open system that runs mutual exchange with an environment helps to draw a conclusion that the success of an organization depends on its efficient cooperation with the environment [1, 2]. The environment, being constituted by variables excluded from the composition of the organization, but keeping various interactions with it, imposes some limitations upon the organization. A failure to take into account those limitations,

in view of the fact that the environment controls the resources [3], results in organization failure.

Striving to assure balanced relations with the environment, forces the organization to adjust to the changes taking place both on the outside and on the inside of the organization; however, that balanced condition, if achieved at all, will be short-term. The changes occurring within the organization itself, through feedback mechanisms will induce changes in the environment, thus evoking turbulences in the state of balance obtained before. The inability to

reach a long-term balance stems from organizational inertia which can be translated into postponement of the effects of introduced changes [4]. It should be noted, however, that the inability of obtaining permanent balance, from the perspective of long-term success of an organization, does not and should not be interpreted as an unfavourable and undesirable phenomenon. It may lead to a situation when an organization lagging behind a dynamically changing environment, due to the discontinuity of the process of environmental changes, will eventually start outpacing the environment.

The above mentioned considerations signalling the existence of environment's impact upon the functioning of the organization, evoke questions delineating the objective of this study, which refers to the discussion on the correlation between environment's dimensions of stability/changeability as well as friendliness/unfriendliness, as perceived by the managers, and organizational effectiveness of Polish enterprises: (1) How do managers perceive business environment? (2) Is there a correlation between various characteristics of the environment? (3) Do the dimensions of environmental characteristics have an impact on organizational effectiveness? In the course of research, the authors have become aware of high complexity of the environment and of their being unable to investigate all characteristics and categories of environment. As a result it was decided to narrow down the research to:

- 1) the dimensions of stability/changeability and friendliness/unfriendliness, assuming that there should be some correlations between them, and that those dimensions help characterize the environment in a synthetic way,
- 2) institutional environment (analysed in four dimensions: political-legal, economic, socio-cultural and technological), assuming that since the institutional environment imposes specific "rules of the game" which must be accepted by the organization, it greatly influences the way in which the organization functions.

The main goal of the conducted research procedure was to find answers to questions about the impact of the company's environment on its organizational effectiveness.

The changeability and unfriendliness of the business environment is a challenge for entrepreneurs and managers. The experiences of entrepreneurs create to a certain extent a common, dominant logic. While the dominant logic of managers affects the conceptualization of enterprise resources, managers have to face operational limitations in the functioning of enterprises. Because these limitations affect managers

decisions, their opinions on the assessment of stability and friendliness of the environment give a picture of the impact of the environment on the functioning of enterprises, including their organizational effectiveness.

The methodological process steps of the research is depicted in Fig. 1.



Fig. 1. The methodological process steps of the research.

Review of literature

The performed review of related publications presented below encompasses the questions which provide theoretical background for discussing the key issues and notions associated with the topic of the article. The starting point for the theoretical part are the considerations devoted to the functioning of an organization within the context of an environment, which helped identify and describe environment characteristics, as well as define the construct of organizational effectiveness, and which was also conducive for the discussion of correlations between the nature of environment and organizational effectiveness.

Organization in an environment

One of the crucial characteristics of an organization analysed on the basis of the systemic approach is the homeostasis, which is the organization's ca-

pability to maintain relatively stable condition in the spheres which are vital for its success. The phenomenon of homeostasis is revealed in an effort to maintain the assumed level of internal balance of the system through the use of self-control mechanisms, should any turbulences occur in the environment [5]. Organizations are capable of reacting flexibly to external stimuli, whose intensity does not exceed specifically defined levels, by means of feedback. Homeostatic feature is linked to the adaptability of an organization, that is an organization's capability to adjust to environment demands in the most beneficial way for the implementation of the adopted system of goals. Adaptation-wise adjustments to the changes taking place in the environment take on the qualities of organizational development, enabling an organization to reach the state of dynamic balance with the environment.

The studies on the nature and significance of organization environment mentioned in the publications related to our topic indicate the emergence of four interpretation perspectives: the adaptive, the resource-dependence, the cognitive, and the population-ecology oriented [6]. Concurrently, the approaches to environment structuring presented in literature allow differentiating between the institutional environment that imposes on an organization particular 'rules of the game' which must be accepted by this organization, and the competitive environment, within the frames of which a given organization undertakes its cooperative and competitive activity. Due to the complexity of the environment, the authors of the present research decided to concentrate on the evaluation of institutional environment, analysed in four dimensions: political-legal, economic, socio-cultural and technological.

Environment characteristics

While discussing environmental characteristics M. Bednarczyk [7] states that the description of an environment may incorporate diversified details related to the features of its structure, while the same environmental feature may be treated both as a characteristic or as a criterion of evaluation. This diversification allows identification of many various characteristics facilitating the description of phenomena taking place in an environment. Available publications related to the topic [8–13] designate a wide range of variables encompassing: dynamics, concentration, aptitude, hostility, complexity, uncertainty, abundance, addiction. Those diversified and numerous characteristics that make environmental analysis more difficult, all together persuaded the authors to limit their research to the key, interrelated variables.

An enterprise functioning in a given environment is subject to environmental impact, which plays a crucial role in how this enterprise is shaped. Assuming that the higher the level of changes in an environment are, the stronger the organizational involvement in identifying those changes and adaptation to new conditions should be [14], one may presuppose that the key characteristic is the dynamics of an environment generically described by means of two dimensions: its stability and changeability [12]. Environment dynamics exert an influence on the level of instability and changeability of an environment thus, from the organization's point of view, generating a specific range of development opportunities. One may notice that in the context of a changeable environment organizations gain more freedom and operational space than when they function in stable and predictable circumstances. However, the high level of dynamics of the processes taking place in an environment corresponds to the increase of the level of changes and uncertainty [15, 16], which hinders the course of organizational adjustments.

Enterprise environment may on one hand be perceived through the context of innovative processes, technology development, and, with respect to competitive processes, continuously changing number of business entities operating in a particular market. On the other hand, the conditions for business activity within the environment of a given branch of industry are the same for all the entities that operate within its frames. The changeability of an environment being the most characteristic feature of contemporary market requires quick reactions from enterprises which must adjust their managerial processes to the challenges they face in their environment.

That is why, the study adopted another assumption: the attitude of the environment, depending on the nature of impact that it exerts over the organization, may be favourable or unfavourable, which helps differentiate between two radical dimensions – unfriendliness or friendliness [15, 17]. According to Zahra [13], an unfriendly environment is typically characterised by very intensive competitiveness and low profitability of a given branch of industry, whereas the friendly environment provides favourable conditions for development.

Organizational effectiveness

The notion of organizational effectiveness is construed in a very diversified way in the literature related to the subject [18]. The definition of organizational effectiveness depends on what frames have been adopted for the considerations, and what have been the assumptions and objectives for which the orga-

nization has been founded [19]. Daft [20] specifies effectiveness as the degree to which an organization reaches its goals, which Pszczołowski [21] interprets as organizational efficiency. For Lee and Chu [22] in turn, organizational effectiveness is understood as the organization stakeholders' perception of the degree to which it is successful in the sphere of market share, profitability, growth speed and its innovativeness in comparison with the key competitors. Such understanding of organizational effectiveness implies inquiries about the factors that have some impact upon it. Zheng et al. [23] indicate that knowledge management, while staying compliant with the organizational culture, structure and strategy, may influence organizational effectiveness.

Steers [24] having performed a review of seventeen multi-variant models of organizational effectiveness indicates fourteen criteria of organizational effectiveness and points to the problems arising while measuring it. Campbell [25] differentiates between thirty criteria of organizational effectiveness, whereas Cameron [19] specifies nine dimensions of organizational effectiveness in the tertiary education institutions. While evaluating organizational effectiveness, the most important areas for the stakeholders [22] will be profitability and market share. In view of the fact that market share size is the effect of acquiring new customers and retaining the current ones, Piwoni-Krzyszowska [26] claims that controlling customer relations leads to an increase of enterprises effectiveness. The article adopted an assumption that the dynamics of market share rate and customer loyalty rate constitute market effectiveness indicators. The dynamics of profitability and the dynamics of sales as the results of perfecting business processes taking place in an enterprises [27] are the indicators reflecting the managerial effectiveness. Both the managerial and market effectiveness are at the core of interest of company managers as well as enterprise owners. Internal stakeholders, i.e. company employees, in turn, being the carriers of knowledge resources and being interested in security, concentrate on employment stability. However, since managing knowledge has a crucial impact on organizational effectiveness [28], employment growth¹ may be an indicator of an increase in organizational effectiveness in terms of social sphere activity.

The present study has been based on the postulation that organizational effectiveness is a complex construct, constituted by social, managerial and market effectiveness.

Organisational effectiveness factors presented in earlier considerations have been adopted in the present article for:

- 1) Social effectiveness – Average annual employment growth as compared to actual competitors
- 2) Managerial effectiveness – average annual sales growth (net) as compared to actual competitors as well as profitability dynamics (net profit) as compared to actual competitors.
- 3) Market effectiveness – Dynamics of market share rate as compared to actual competitors and customer loyalty rate as compared to actual competitors.

Market economy is based on the assumption that the 'driving force' of organization development is the competitiveness among business entities operating in the market [29]. If organizations want to exist they have to develop at a pace at least approximating the speed of development of the environment [30], otherwise their activity gets negatively verified by the environment and the enterprise is eliminated by market mechanisms as ineffective [3]. Adopting this assumption forces organizations to undertake activities oriented towards refurbishment and improvements in order to secure appropriate level of competitiveness, obtained as a result of flexible adjustments to the changes taking place in the environment. Striving to assure appropriate level of competitiveness, an organization performs an analysis of the business model applied, in terms of its expediency and justification for maintaining some part of operations within it, or transactional expenditures related to resource acquisition from the environment.

Research conducted by Małkowska-Borowczyk [31] helped draw a conclusion that the enterprises operating in changeable environment are more often oriented towards growth and achieve better economic results than the companies functioning in a stable environment. A similar observation was made by Wiklund, Patzelt and Shepherd [31], according to whom environment's dynamics exerts both direct and indirect impact on growth, whereas uncertainty and unfriendliness of the environment have only got an indirect influence upon the outcomes of organization outcomes.

Having verified the developed structural models, Turulja and Bajgoric [32] observed a negative impact of environment changeability upon effectiveness, while noticing at the same time, that the increasing innovativeness, instilling new activities of an enterprise, is translated to a positive influence exerted by environment changeability on organiza-

¹Employment growth is understood as an element of the sustainable development of corporate social responsibility and does not reflect the efficiency of labor resources.

tional effectiveness. Investigating the impact of environment's dynamics and attitude Frank, Güttel and Kessler [33] observed links between the level of flexibility and environment dynamics, while the increase in the sphere of environment unfriendliness is translated to the perceived level of threats.

The results of research effected by Yu, Ramanathan, Wang, and Yang [34] show that operational capability as a crucial dynamic capability, has a significant impact on efficiency, which in turns leads to the effectiveness improvement. Research outcomes of Yu, Ramanathan, Wang, and Yang suggest that productivity fully mediates the correlation between the capability of operational and business efficiency, and that the dynamics of environment significantly reduces the correlation between the operational capability and productivity. The studies of Lee and Chu [22] in turn, provide evidence that the effects of being oriented towards entrepreneurship, environment dynamics and resource rarity have a positive impact on the efficiency of the organization, which means that entrepreneurship orientation leads to improvement of efficiency in a situation where enterprises have rare resources at their disposal and function within a dynamic environment.

Research methods

The snowball sampling method and PAPI data collecting technique, with the use of a questionnaire composed of closed questions, were applied to the performed research. The interviews were conducted in the period of July 2017–March 2018, encompassing the sample of 103 respondents consisting of either the owners or managers of enterprises founded after 1990.

Techniques

Research procedures applied the method of a survey study with the help of direct questionnaire technique, making use of structured, standardized questionnaire, administered through the PAPI data collecting technique.

The first group of questions pertained to how the respondents see organizational effectiveness of their enterprises within the three dimensions: social effectiveness, managerial effectiveness and market effectiveness. Organizational effectiveness was measured in the scale of score points from 1 to 5 (where 1 denoted 'far worse', 2 – 'worse', 3 – 'almost the same', 4 – 'better' and 5 – 'far better') in comparison with enterprises being the actual competitors. In the course of research, the respondents were asked to evaluate:

- 1) average annual employment growth as compared to actual competitors,
- 2) average annual sales growth (net) as compared to actual competitors,
- 3) dynamics of market share rate as compared to actual competitors,
- 4) dynamics of profitability (net profit) as compared to actual competitors,
- 5) customer loyalty rate as compared to actual competitors.

The second group of questions referred to the dimensions of stability/changeability and friendliness/unfriendliness of four categories of environment: legal environment, economic environment, socio-cultural environment and technological environment. The evaluation of stability/changeability and friendliness/unfriendliness dimensions of the environment was effected in the scale of –5 to 5, where the lowest scores corresponded to the most changeable or the most unfriendly environment, whereas the highest scores were ascribed to the environment which has been perceived as the most stable or the most friendly.

Respondents

In the course of research, questionnaires have been obtained from 103 respondents; however, some participants did not answer all the questions related to the environment. Consequently, the final number of responses taken into account is lower (83) than the overall number of respondents taking part in the study.

Since the research performed within our studies was a part of broader investigation proceedings related to the architecture of Polish enterprises, participation of micro-companies was considerably limited in the structure of our research sample, because strategic management processes or advanced solutions in the field of management systems are either absent or scarcely applied to this type of companies. In view of respondents' availability and the applied method of respondent selection, the sample is dominated by enterprises from Wielkopolska. The structure of the sample according to the size of enterprises is depicted in Fig. 2.

The application of the snowball sampling method to the process of respondent selection resulted in limiting the research sample to the territory of Wielkopolska, which, due to the character of this region, caused the absence of some business branches. The largest share in the investigated sample was occupied by the following branches: processing industry (16%), building and construction (14%) and commerce (10%), which is the reason why the structure

of the sample subject to analysis does not overlap the overall entrepreneurial structure observed in Poland. What is more, the diagram presents some branches jointly (22%), because it was decided that individual presentation of a given branch requires a 4% threshold of sample share.

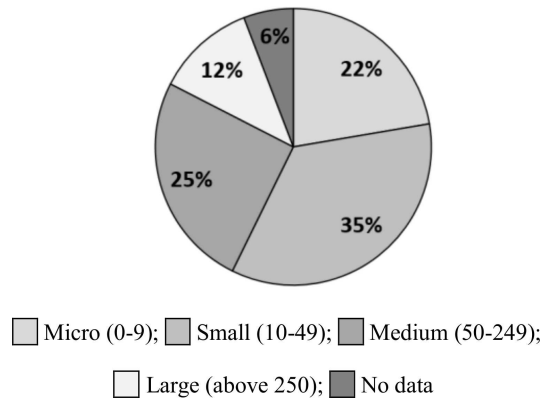


Fig. 2. The structure of investigated enterprises according to the number of employees (source: performed research, $n = 103$).

Results and discussion

The conducted research helps formulate a conclusion that the enterprises subject to our study, in the opinion of respondents, in all the evaluated dimensions are characterised by above-average results in the domain of organizational effectiveness (see Table 1); however, inasmuch as the scores related to the

average annual employment growth indicate a situation similar to the situation of actual competitors, the scores given to average annual sales growth (net) and the dynamics of market share rate are decidedly higher than the results achieved by the actual competitors. The situation in which the investigated entities, making use of approximately the same human resources as their competitors, obtain better results on their operations than their competitors, should be considered as favourable and proving the capability of optimal utilization of resources and competences.

In the context of above average results achieved by the investigated entities in the domain of organizational effectiveness, there arises a question whether the evaluation performed by the respondents has been influenced by stability/changeability and friendliness/unfriendliness of the environment, in which those entities have been operating. Posing the above question in a more specific manner, one should refer to three issues. (1) How do managers perceive the environment in the dimensions of stability/changeability as well as friendliness/unfriendliness? (2) Is there a correlation between stability/changeability and friendliness/unfriendliness of the environment, i.e. if an environment is more stable, is it perceived as more friendly, and if an environment is more changeable is it perceived as unfriendly? (3) Does environmental stability/changeability as well as friendliness/unfriendliness exert any influence on organizational effectiveness?

Table 1
Organizational effectiveness indicators ($n = 103$).

	Far worse	Worse	Al most the same	Better	Far better	Normalized effectiveness indicator
Average annual employment growth as compared to actual competitors	3	12	45	22	3	51.5%
Average annual sales growth (net) as compared to actual competitors	2	5	26	39	13	60.4%
Dynamics of market share rate as compared to actual competitors	2	8	22	39	14	60.2%
Dynamics of profitability (net profit) as compared to actual competitors	1	12	31	24	14	55.1%
Customer loyalty rate as compared to actual competitors	1	3	36	31	11	57.1%

Normalized effectiveness indicator = (number of subjects evaluating the effectiveness as 'far worse' *1 + number of respondents evaluating the effectiveness as 'worse'*2 + number of respondents evaluating the effectiveness as 'almost the same' *3 + number of respondents evaluating the effectiveness as 'better' + number of respondents evaluating the effectiveness as 'far better' *5)/103*100% as 'better'*4 + number of respondents evaluating the effectiveness as 'far better' *5)/(5*103)*100%. Source: performed research, $n = 103$.

The assessment of environment changeability performed by the respondents (see Table 2) let us formulate a conclusion that in principle, the environment is perceived as stable; however, the results obtained in particular dimensions differ considerably. According to the respondents, the most stable dimension of environment was technology (2.71), followed by the socio-cultural (1.48) and economic facets of business context (0.84), whereas legal dimension of the environment is perceived as changeable (−0.81).

While analysing the outcomes of our research from the semantic differential perspective, one can notice that in the opinion of the respondents, business environment is perceived as turbulent. This observation mostly concerns the legal and economic environment in which the range of scores given by respondents is significant (in the case of legal environment 51 respondents pointed to its instability (scores below 0) and 35 of them to its stability (score above 0), in the case of economic environment 30 respondents perceived it as instable and 59 of survey participants evaluated it as stable.)

Obviously, the obtained results should be amended with a comment that the investigated enterprises have had a similar geographical location (all of them seated in the region of Wielkopolska); however, from the point of view industry branches representation, there have been significant differences between them, which might have pertained to the diversity in the perception of environment changeability.

Just like in the case of environment's changeability, while evaluating the friendliness of the environment, the respondents pointed out the preva-

lence of positive factors (see Table 3). Technological setting was considered most friendly (3.22), followed by socio-cultural (1.19) and economic environment (1.09), even though the differences between those three categories of environment might be considered significant. Negative assessment of legal environment, perceived by respondents as unfriendly (−0.41), results from the instability of legal regulations and the occurrence of interpretation problems. Legal environment is perceived by the respondents not only as unfriendly, but also turbulent to the highest extent (the range of scores can be deemed significant, with 49 scores below 0 in the scale of friendliness and 39 scores below 0 in the scale of unfriendliness), whereas in the case of the remaining categories of environment, one might observe substantial prevalence of positive scores, thus the range of grades is one-sided. High appraisal of friendliness of technological environment may only partially be explained by referring to the structure of the investigated sample in view of the type of their business activities (the sample being dominated by processing industry and building and construction industry), because the dynamic changes in ICT influence all branches of industry to almost the same extent. Contrary to the high scores of friendliness of technological environment, the relatively low grade of friendliness of socio-cultural is striking; however, one might try to explain it with the fact that in the HR structures of the enterprises under investigation there appeared representatives of the X and Z generations, whose behaviour patterns might be difficult to integrate with the so-far applied organizational culture patterns.

Table 2
Evaluation of environment stability/changeability.

	Average score	Number of scores (−5)	Number of scores (+5)	Number of scores below 0	Number of scores above 0
Legal	−0.81	18	4	51	35
Economic	0.84	2	2	30	59
Socio-cultural	1.48	1	2	13	70
Technological	2.71	1	17	4	81

Source: performed research, $n = 83$.

Table 3
Assessment of the dimension of environment friendliness/unfriendliness.

	Average score	Number of scores (−5)	Number of scores (+5)	Number of scores below 0	Number of scores above 0
Legal	−0.41	10	3	49	39
Economic	1.09	3	2	20	67
Socio-cultural	1.19	2	2	21	65
Technological	3.22	0	17	2	82

Source: performed research, $n = 83$.

Subsequently, an attempt was made at answering the question concerning the correlations between environment stability/changeability and friendliness/unfriendliness, assuming that stable environment is perceived as friendly whereas the changeable environment is treated as unfriendly. Pointing to the above correlations one should notice, however, that a situation where high changeability of the environment is desirable, because then the stability value will be translated in the form of unfriendly perception of the environment.

The results of the conducted analysis (see Table 4) indicate a correlation between stability/changeability and friendliness/unfriendliness of the environment. The increase in the sphere of the changeability of environment is translated into its perception in terms of unfriendliness. The performed research revealed the occurrence of: (1) very high correlation (0.75) between the changeability of legal environment and its perception in terms of unfriendliness; (2) high correlation (0.52) between the stability of economic environment and its perception in terms of friendliness; (3) very high correlation (0.73) between the stability of socio-cultural environment and its perception in terms of friendliness; (4) average correlation (0.46) between the stability of technological environment and its perception in terms of friendliness, while it should be stressed that the obtained results are statistically significant ($p < 0.01$).

Inasmuch as the interdependencies mentioned above, due to their occurrence within the same categories of environment (when a given category of environment is perceived as stable/changeable, it is transferred to its evaluation as friendly/unfriendly) do not require extended interpretation, it is interesting to discuss the correlations found within economic environment which reveal the occurrence of correlations between stability of economic environment and the observance of: (1) legal environment as unfriendly (high correlation 0.60); (2) socio-cultural environment as friendly (average correlation 0.40); (3) of technological environment as friendly (average correlation 0.32). The existence of the above correla-

tions is interesting insofar as the stability of economic environment has been evaluated by the respondents as average at most (0.84), with relatively high scores dispersion (according to 30 respondents, the economic environment is instable, whereas in the opinion of 59 respondents, it should be considered as stable). While attempting to explain the observed correlation, one can refer to the significance of economic environment which has a direct impact on the financial condition of the company, whereas the influence of the remaining categories related to the environment is indirect and is only felt in the long term. The observation indicating the existence of correlations between stability of economic environment and unfriendliness of the environment, helps claim that most probably the unfriendly legal environment stabilizes the economic milieu, which, through self-control mechanisms attempts to compensate for the impact of unfavourable legal factors. Whereas the correlation between the stability of economic environment, friendliness of socio-cultural environment and technological environment can be explained by the fact that the foreseeable economic factors generate encouragement for innovations, which are then translated onto technological progress and provide opportunities of development in the socio-cultural dimension.

The performed research (see Table 5) indicated a correlation between average annual sales growth (net) as compared to actual competitors and (1) the stability of economic environment (mean correlation 0.37), as well as (2) the stability of socio-cultural environment (mean correlation 0.35). It did not reveal the occurrence of any correlations between the remaining dimensions of effectiveness and stability/changeability of the environment (however, one might expect that a few correlations should appear in this respect). The existing correlations may be explained through reference to the impact of predictability of economic factors and phenomena from the socio-cultural sphere (making it possible to forecast the events in the environment) upon the sustainable development and, as a result, on the above average (net) sales growth.

Table 4
Matrix of correlations between environment dimensions of stability/changeability and friendliness/unfriendliness.

	Friendliness/unfriendliness				
		Legal	Economic	Socio-cultural	Technological
Stability/changeability	Legal	0.749			
	Economic	0.599	0.519	0.399	0.316
	Socio-cultural			0.729	
	Technological				0.459

Source: performed research, $n = 83$, significant relationships $p < 0.01$.

Table 5
Correlation between environment stability/changeability and organizational effectiveness.

	Organizational effectiveness dimensions					
		1	2	3	4	5
Environment stability/changeability	Legal					
	Economic		0.368			
	Socio-cultural		0.347			
	Technological					

Key: 1 – Average annual employment growth as compared to actual competitors; 2 – Average annual sales growth (net) as compared to actual competitors; 3 – Dynamics of market share rate as compared to actual competitors; 4 – Dynamics of profitability (net profit) as compared to actual competitors; 5 – Customer loyalty rate as compared to actual competitors. Source: performed research, $n = 83$, significant relationships $p < 0.01$.

Table 6
Correlation between friendliness/unfriendliness of the environment and organizational effectiveness.

	Organizational effectiveness dimensions					
		1	2	3	4	5
Environment friendliness/unfriendliness	1	2	3	4	5	
	Legal					
	Economic		0.318			
	Socio-cultural		0.424	0.371	0.403	
	Technological					

Key: 1 - Average annual employment growth as compared to actual competitors; 2 - Average annual sales growth (net) as compared to actual competitors; 3 – Dynamics of market share rate as compared to actual competitors; 4 – Profitability dynamics (net profit) as compared to actual competitors; 5 – Customer loyalty rate as compared to actual competitors. Source: performed research, $n = 83$, significant relationships $p < 0.01$.

The analysis of correlations between the friendliness/unfriendliness of the environment and organizational effectiveness dimensions (see Table 6) allowed observing four significant areas of relatedness between (1) friendliness of economic environment and the average annual sales growth (net) as compared to actual competitors (mean correlation 0.32); (2) friendliness of socio-cultural environment and the average annual sales growth (net) as compared to actual competitors (mean correlation 0.42); (3) friendliness of socio-cultural environment and the dynamics of market share rate as compared to actual competitors (mean correlation, 0.37); (4) friendliness of socio-cultural environment and the dynamics of profitability (net profit) as compared to actual competitors (mean correlation, 0.40). Correlations between the unfriendliness of legal environment as well as the stability of technological environment and the dimensions of organizational effectiveness or between the average annual employment growth as compared to actual competitors as well as the customer loyalty rate as compared to actual competitors and particular categories of environment have not been identified. The observed parallels allow formulating two main conclusions. Firstly, environment's friendliness/unfriendliness has a limited direct impact on organizational effectiveness dimensions. Secondly, the

friendliness of socio-cultural environment (to a higher extent) and friendliness of economic environment (to a lesser degree) is reflected in the organizational effectiveness of enterprises encompassed by the research.

Conclusions

The aim of this study was the discussion on the correlation between the changeability and friendliness of the environment (analysed in terms of institutional environment) and organizational effectiveness of Polish enterprises as perceived by the managers.

The performed research shows that the studied enterprises reaching the above-average organizational effectiveness, have been functioning in an unstable and unfriendly legal environment, whereas the economic and socio-cultural environment has been evaluated by the managerial staff as moderately stable and friendly, and the technological environment as stable and most friendly. The analysis of the effected analysis have lead to form a conclusion that there are correlations between stability/changeability and friendliness/unfriendliness of the same particular environment categories, as well as correlations between stability of economic environment and unfriendliness

of legal environment, as well as friendliness of socio-cultural environment and technological environment. Concurrently, the results obtained in the course of research indicate a limited direct influence of stability/changeability and friendliness/unfriendliness of the environment on the organizational effectiveness dimensions subject to analysis within our study (dependencies have been observed only in the case of 5 analysed correlations).

As practical implications, the results of the research allow to formulate the conclusion on the legitimacy of business environment measurements, made by entrepreneurs, to determine the risk level before deciding to launch a business.

Research limitations

The presented research results have got limitations. The theoretical part's restraint was the selective review of literature which might have led to the omission of a significant source or study related to the analysis of similar phenomena. In the empirical layer, the size of the investigated sample is the reason that one cannot generalise research results on the overall population of enterprises. What is more, lack of focus on the analysis of the effectiveness of enterprises operating in particular branches of industry and highly scattered scopes of business of the companies subject to analysis might have caused that the similar results obtained by enterprises from various branches were differently evaluated. Another hurdle is associated with the fact that the measurement of effectiveness as well as the measurement of environment's stability and friendliness was based on the subjective assessment performed by managers who expressed their opinions. While performing a relative evaluation, comparing the results obtained by their enterprises with the results of competitors, they might not have had access to complete data allowing to effect evaluation. In addition, and this is quite natural, they might have estimated the results of their companies too optimistically.

Further research suggestions

The fields of research analysis have been purposefully narrowed down to an institutional environment, at the same time omitting a competitive environment, based on the assumption that the impact of a more distant environment is stronger and easier to observe. The above assumption obviously constitutes some sort of simplification and any further research should be extended to include competitive environment and to study the correlations between the constituents of both institutional and competitive environment. The performed research revealed the ex-

istence of correlations between the friendliness and stability of the environment; however, it did not indicate any relationship between the friendliness and stability of the environment and the effectiveness of enterprises. That is why, one should attempt to identify the factors being the moderators determining the effectiveness of enterprises. In the authors' opinion, the role of such factor could be fulfilled by dynamic capabilities or the level of entrepreneurial competences helping make use of environment's friendliness and stability, concurrently reducing the impact of unfavourable changes in an unfriendly environment. Future studies should attempt at eliminating research limitations suggested above.

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References

- [1] Adams J.S., *The structure and dynamics of behavior in organizational boundary roles*, [in:] M.D. Dunnette [Ed.], *Handbook of industrial and organizational psychology*, Chicago McNally, 1976.
- [2] Ashkenas R., *Crossing boundaries*, *Executive Excellence*, 20, 1, 3–4, 2003.
- [3] Hatch M.J., *Organization theory: modern, symbolic, and postmodern perspectives*, Oxford: Oxford University Press, 1997.
- [4] Majchrzak J., *Transformations of Polish enterprises in view of organizational change theory*, Wyd. AE, Poznań, 2001.
- [5] Bielski M., *Organizations. Nature, Structures, Processes*, Wyd. UŁ, Łódź, 1996.
- [6] Debenham J., *Organizational environment revisited. a conceptual review and integration*, *International Studies of Management and Organization*, 36, 3, 26–39, 2006.
- [7] Bednarczyk M., *Environment and entrepreneurship in the strategic management of an organization*, Wyd. AE, Kraków, 1996.
- [8] Bluedorn A.C., *Pilgrim's progress: trends and convergence in research on organizational size and environments*, *Journal of Management*, 19, 2, 163–191, 1993, <https://doi.org/10.1177/014920639301900201>.
- [9] Child J., *Organizational structure, environment and performance: the role of strategic choice*, *Sociology*, 6, 1, 1–22, 1972, <https://doi.org/10.1177/003803857200600101>.

- [10] Davenport D.R., *Environmental constraints and organizational outcomes: modeling communities of municipal police departments*, *Police Quarterly*, 2, 2, 174–200, 1999, <https://doi.org/10.1177/109861119900200203>.
- [11] Duncan R.B., *Characteristics of organizational environments and perceived environmental uncertainty*, *Administrative Science Quarterly*, 17, 3, 313–327, 1972, <https://doi.org/10.2307/2392145>.
- [12] Lawrence P.R., Lorsch J.W., *Organization and environment*, Boston, MA.: Harvard Business School Press, 1986.
- [13] Zahra S.A., *Environment, corporate entrepreneurship, and financial performance: a taxonomic approach*, *Journal of Business Venturing*, 8, 4, 319–340, 1993, [https://doi.org/10.1016/0883-9026\(93\)90003-N](https://doi.org/10.1016/0883-9026(93)90003-N).
- [14] Emery F.E., Trist E.L., *The causal texture of organizational environments*, *Human Relations*, 18, 1, 21–32, 1965, <https://doi.org/10.1177/001872676501800103>.
- [15] Miller D., Friesen P.H., *Strategy-making and environment: the third link*, *Strategic Management Journal*, 4, 3, 221–235, 1983.
- [16] Li D., Liu J., *Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China*, *Journal of Business Research*, 67, 1, 2793–2799, 2014.
- [17] Khandwalla P.N., *The design of organizations*, Harcourt Brace Jovanovich, 1977.
- [18] Ziębicki B., *The Organisational effectiveness of public sector entities*, Wyd. UE, Kraków, 2014.
- [19] Cameron K., *Measuring organizational effectiveness in institutions of higher education*, *Administrative Science Quarterly*, 23, 4, 604–632, 1978.
- [20] Daft R.L., *Organizational theory and design*, St Paul: West Publishing, 1995.
- [21] Pszczołowski T., *A small encyclopedia of praxeology and management theory*, Ossolineum, Wrocław, 1978.
- [22] Lee T., Chu W., *How entrepreneurial orientation, environmental dynamism, and resource rareness influence firm performance*, *Journal of Management & Organization*, 19, 2, 167–187, 2013, <https://doi.org/10.1017/jmo.2013.33>.
- [23] Zheng W., Yang B., McLean G.N., *Linking organizational culture, structure, strategy, and organizational effectiveness: mediating role of knowledge management*, *Journal of Business Research*, 63, 763–771, 2010.
- [24] Steers R.M., *Problems in the measurement of organizational effectiveness*, *Administrative Science Quarterly*, 20, 4, 546–558, 1975.
- [25] Campbell J.P., *On the nature of organizational effectiveness*, [in:] P.S. Goldman and J.M. Penningd, *New Perspectives on Organizational Effectiveness*, Jossey-Bass, San Francisco, 1977.
- [26] Piwoni-Krzyszowska E., *Management of the value of an enterprise's relationship with market stakeholders in the context of the value creation process*, Wyd. UE, Wrocław, 2014.
- [27] Słota M., *Business process management in a water supply company*, [in:] P. Chudziński [Ed.], *Water Supply Enterprise Management, Conditions of functioning and modern concepts of management*, PWE, Warszawa, 2018.
- [28] Chidambaranathan K., Swarooprani B.S., *Knowledge management as a predictor of organizational effectiveness: the role of demographic and employment factors*, *The Journal of Academic Librarianship*, 41, 758–763, 2015.
- [29] Faulkner D., *Competitive strategy* [in Polish: *Strategie konkurencji*], Gebethner & Ska, Warszawa, 1996.
- [30] Krupski R. [Ed.], *Business management in a turbulent environment. Towards a superelastic organization*, PWE, Warszawa, 2005.
- [31] Urbanowska-Sojkin E. [Ed.], *Principles of companies' strategic choices*, PWE, Warszawa, 2011.
- [32] Turulja L., Bajgoric N., *Innovation, firms' performance and environmental turbulence: is there a moderator or mediator?*, *European Journal of Innovation Management*, 22, 1, 213–232, 2018, <https://doi.org/10.1108/EJIM-03-2018-0064>.
- [33] Frank H., Güttel W., Kessler A., *Environmental dynamism, unfriendliness, and dynamic capabilities in medium-sized enterprises*, *The International Journal of Entrepreneurship and Innovation*, 18, 3, 185–194, 2017, <https://doi.org/10.1177/1465750317723219>.
- [34] Yu W., Ramanathan R., Wang X., Yang J., *Operations capability, productivity and business performance: the moderating effect of environmental dynamism*, *Industrial Management & Data Systems*, 118, 1, 126–143, 2017, <https://doi.org/10.1108/IMDS-02-2017-0064>.