# Business Process Management as a Determinant of Change in the Organisational Culture of Enterprises

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**Abstarct:**

**Purpose:** *This study aims to determine the relationship between BPM and the organizational culture of enterprises.*

**Design/Methodology/Approach:** *Business Process Management (BPM) is a series of interrelated activities that force companies to face specific contemporary challenges, i.e., competence, technology, and organizational, social, and environmental challenges. BPM assumptions bring opportunities to build new competitive advantages, create new areas of activity, and find new types of business benefits, but it also raises doubts and questions. The study assumes that mistakes made when implementing this concept result in enterprises' mismatched organizational culture. The empirical research was conducted in the SME sector.*

**Findings:** *The research results indicate the importance of building an open organizational culture, as its creation will enable the creation of systems based on breakthrough relationships between an open organizational culture and BPM, which is necessary to create modern business model standards.*

**Practical Implications:** *Signalling the role of culture in processes supporting BPM. Based on the conclusions drawn, it can be recommended that when implementing BPM assumptions, organizational culture should match the characteristics/values relating to this concept's assumptions, also requiring from employees and other involved parties an understanding of such culture. Otherwise, there is a risk that instead of BPM, the achieved result will be precisely the opposite of the intended one.*

**Originality/Value:** *A theoretical and empirical study based on a literature review linking BPM with enterprises' organizational culture and the author's research. The paper attempts to define organizational culture as a form of support for implementing the BPM concept in enterprises.*

**Keywords:** *Business Process Management (BPM), organisational culture, open organisational culture.*

**JEL Codes:** *L20, L26.*

**Paper type:** *Research article.*

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## 1. Introduction

According to researchers, Business Process Management (BPM) is a holistic approach to management. The aim of this concept is related to the adaptation of all aspects of management to customer needs. It is also essential to improve its effectiveness and efficiency through innovation and integration with business intelligence information technology.

Companies, therefore, need to get to grips with the essence of this concept and the resulting adaptive changes by continuously improving the management process. When concentrating on change, complex and financial analysis methods should be abandoned, and the focus ought to be on long-term soft aspects, intangibles, and the acquisition of the right skills and competencies by the personnel. Consequently, the goal of BPM is to develop a management model that provides an organization with a sustainable competitive advantage. These activities should be based on the continuous recognition of customer needs and expectations. A company's ability to adapt quickly to customer needs can be one of the performance indicators, as the speed of adaptation reflects the ability to solve different problems. The study assumes that the development of the BPM concept among enterprises depends on the existing organizational culture, which can be considered the main driver of change (Goshal *et al.,* 1999; Vinodh, 2010; Ashrafi *et al.,* 2005).

Although the relationship between culture and the management process has been observed in many previous studies (Ogbonna and Harris, 2000; Rousseau 1991; Kotter and Heskett, 1992; Marcoulides and Heck, 1993), few have addressed the direct link between organizational culture and its impact on the BPM development. Therefore, it is necessary to provide specific arguments for the relevance of business process research concerning corporate culture characteristics that support its development in this context. In other words, organizations with an organizational culture endowed with characteristics that support BPM are more likely to implement this concept (Vinodh, 2010).

With this in mind, the article's main objective is to indicate the relationship between BPM and enterprises' organizational culture. For this purpose, an empirical study was conducted. The study provides information for future research and managers on the factors influencing the development of BPM. Furthermore, this article is divided into five parts, with the introduction as the first part. Part two presents the theoretical aspects of organizational culture in the light of BPM. Part three presents the research methods and findings. Part four describes the implications for managers. Part five closes the chapter with a conclusion.

## 2. Literature Reviewm - Theoretical Background

*Organisational culture as a context for BPM:* Technological progress, which exists in every area of life, affects various areas of business. For years, companies have

been faced with the necessity of finding the best and fastest way to face the competition. Therefore, managers should be able to react quickly to new ideas that appear, evaluate them, and transform them into innovations to help achieve the set goals. Coinciding with these requirements is the evolution of the management process observed in recent years leading towards business process management.

Business process management (BPM, the process approach) is one of the concepts companies use to improve their efficiency and effectiveness (Taylor). A company's functioning in the new economic conditions is based on implementing change - from R&D areas to business management practice. To do this, an enterprise must take a step back to analyze and understand all the enterprise processes to improve those areas of management that need correction. The support of designed processes by information technology becomes critical in implementing BPM processes. In particular, it is essential to answer the following question: do enterprises implement BPM tools?

It should also be noted that BPM focuses on more repetitive and continuous processes that follow a predetermined pattern. The design of an enterprise process diagram often leads to presenting only critical areas of its activities. What follows is discovering so-called areas of insufficient knowledge or ignorance in terms of what managers consider a helpful management model developed over many years through the trial and error method. The decision to start implementing the BPM concept frequently does not result from the process maturity of a given organization or its readiness for radical change. Often, it is forced by implementing other activities with a process basis (e.g., ERP, ISO). The management of an organization is very rarely fully aware of the consequences of such projects, which ultimately leads to conflicts or paralysis in the project management process.

A conscious decision of the company management must always be the first step in a long process of organizational changes resulting from applying the BPM concept. It means, above all, the readiness to change the functional paradigm into the process paradigm (Van Rensburg and Antonie, 1998). BPM is a widespread and mature discipline that can be defined as the art and science of overseeing how work is done in an organization to ensure consistent performance. However, this is not always feasible, given the maturity and life cycle of the organization. Transforming an enterprise into a process-managed organization most often takes place in several consecutive phases.

The first phase of the BPM implementation project is the so-called solution design, which includes conducting analysis, defining requirements, and developing a business concept of the target solution. Performing a pre-implementation analysis allows for reliably assessing a given organization's maturity in terms of the culture of change, IT culture, infrastructure, and understanding of the very idea of the process approach. The next task includes defining customer requirements about organizational improvements resulting from the design of business processes. The last element of this phase is developing a concept of the target implementation with

the use of technology purchased by the customer - the BPMS class system. The concept development phase aims to define an optimum match between customer requirements and capabilities and limitations resulting from the IT technology available in the project.

A dilemma may often arise as to what extent a given organization is ready to use the available IT solutions to implement the BPM concept. Essential for this stage is signing a document containing the project goals and measures, the customer's needs, the characteristics of selected IT tools, and the schedule for the following implementation phase. Obtaining an agreement in this area enables the realization of the second phase of the project and effective implementation of the solution described in the planning process, which assumes the following tasks: building a prototype, starting the business processes, and optimizing their optimization. Building a prototype of the solution based on the concept of implementation developed in the first phase starts the most challenging stage.

There is a risk of a whole range of inconsistencies between the delivered solution and the requirements written in the concept, which may additionally be subject to permanent changes. Another problematic aspect of solution acceptance is the decision to migrate the defined processes to the new system. It means full involvement and decision-making on the part of the contracting authority in accepting individual elements of the solution. The last step, which ultimately determines the project's success or failure, is the organization's readiness to introduce changes based on the optimization activities. The lack of readiness on the part of the management to stimulate changes resulting from the expertise and business knowledge possessed in the process organization ultimately invalidates the purpose of activities carried out in the BPM area (Smith, 2003).

All the described stages are the consequence of the premises of process changes that motivate the BPM implementation. Additionally, it is necessary to remember the internal organizational premises resulting from a given enterprise's activity and the external organizational premises, which refer to the changes taking place in the environment.

To sum up, the primary determinant of project implementation success according to the BPM concept is the whole organization's readiness to carry out radical changes resulting from a paradigm shift in the existing management model. It can be concluded that the success or failure of a BPM project largely depends on the maturity of the organizational culture existing in the company, which will be a catalyst supporting the described processes.

Therefore, taking action in the framework of the BPM concept often requires a reorientation of the hitherto prevailing values, norms, and patterns of behavior that constitute the worldview for all human resources employed in a given enterprise (Renn *et al.,* 2009; Meadows, 1999; ISO, 14001). Nowadays, researchers of the

topic suggest that a modern business plan developed for different organizations must be combined with BPM (Vinodh, 2010) while considering various determinants of change. It means that the support of BPM is closely related to the effort to minimize risks generated by the environment. Many companies are becoming more open to designing and developing products and services closely oriented to modern customers' needs (Leal-Rodríguez, 2017). Such actions are the result of the main objectives set by BPM for companies. These objectives direct enterprises' main strategies towards promoting development policies that support production activities, entrepreneurship, creativity, and innovation, encouraging the development of all enterprises.

It has been suggested that the main area that needs to be modified and aligned by companies with BPM principles is their organizational culture. The paradigm underlying the belief that culture influences the achievement of goals is consistent with the central premise of BPM. With BPM, companies solve various problems and achieve their goals. At this point, the question should be asked: what qualities should a culture have to support companies in developing these objectives? Looking for an answer to this question, the study assumes that the conscious choice of instruments supporting the BPM concept among enterprises depends on the existing organizational culture, which can be considered the main driving force of social and economic development (Goshal *et al.,* 1999). It is assumed that an organizational culture with open characteristics becomes particularly important. This means that open organizational culture and BPM are considered the leading performance indicators of modern companies (Vinodh, 2010; Leal-Rodríguez *et al.,* 2017; Ivory, 2017). However, this requires an understanding that companies' values and norms must be matched with the norms and values of companies' process-based organizational culture and vice versa. Therefore, it can be concluded that there are feedbacks between BPM and the organizational culture of enterprises, and their understanding requires more in-depth exploration and interdisciplinary analyses. This will lead to better understanding and developing appropriate business models to support companies in implementing BPM concepts.

In the context of thus outlined issues, it is worth considering the role of organizational culture in BPM development. The belief that culture is an essential aspect of business performance and effectiveness, affecting, directly and indirectly, the overall development of enterprises has prevailed for years (Kotter and Heskett, 1992). However, despite recognizing the relevance of organizational culture, the concept itself and the practical way of managing culture to implement BPM remain unclear to this day, which ultimately raises some fundamental questions, i.e.:

- − What is organisational culture?
- − Why is organisational culture relevant for BPM?
- − How can organisational culture be managed in order to properly implement the BPM concept in enterprises?

While answering the first question, it should be noted that the concept of organizational culture has permanently entered the vocabulary of the theory of management (Smircich, 1983) and other social sciences. This can be seen in the multitude of definitions (Denison, 2000; Sanford, 2015; Ravasi and Schultz, 2006; Tseng, 2010), models (Schein, 2010; Davies, 2000; Hofstede, 1980; Tseng, 2010), and typologies of this term. It is generally accepted that culture concerns fundamental values that describe an organization's main characteristics (Flamholrz, 2018). The research conducted by Watkins (2013) on understanding the definition of organizational culture allows for making such a conclusion. The author, who collected about 300 different definitions of this concept, drew synthetic conclusions. It can be concluded that in the face of ongoing changes, organizational culture should be seen as a multifaceted category that will support many different processes (Watkins, 2013). According to Watkins:

- organisational cultures are dynamic because they change incrementally and constantly in response to external and internal changes,
- assessing organisational culture is complicated by the reality of trying to hit a moving target, opening up a range of different possibilities,
- culture change can be managed as an ongoing process rather than through major shifts (often in response to crises), highlighting the idea that a stable 'target' can never—indeed should never—be reached,
- organisational cultures should always be learning and developing, e.g. by establishing inter-organisational relationships,
- organisational cultures are never monolithic, as many factors cause internal variation in the culture of business functions and in individuals,
- culture is the process of "sense-making" in organisations. Sense-making has been defined as a collaborative process of creating shared awareness and understanding from different perspectives of individuals and different interests.

It is also confirmed by other authors (Saad and Asaad, 2015; Altaf, 2011; Gimenez-Espin, 2013; Neagu and Nicula, 2012), who consider culture as the "personality" of an organization which influences the behavior of employees in various areas, among others: in the management process, innovation, work standards, approach to risk and change, etc. Culture, therefore, manifests itself in almost every area of an organization. BPM and culture are reflected in different relationships (processes) that occur both inside and outside the organization. These processes form a system that directs the relationships between the realizers of its goals towards actions comprising sets of sequential activities. Thus perceived processes are sequences of activities that change an idea and human effort into an effect defined by a waiting customer.

To answer the second question, it is essential to recognize that we have seen the traditional, closed model of success based on structure, plans, and scale of

operation, etc., fall away over the years, making way for a new, open paradigm created by a series of different and extensive, open relationships between different stakeholders. As mentioned earlier, to ensure the success of BPM, two main dimensions of transformation need to be addressed: intra-organizational and extra-organizational (Linder, 2013). These activities will help companies to better adapt to the changing environment. The success of new activities in line with BPM can be ensured by the element that binds different activities together: organizational culture (The Economist Intelligence Unit, 2005; Dubey, 2013; Bawany, 2017; Kesler *et al.,* 2017; Neeley, 2015), with an indication of its openness (Linder, 2000). The indicated openness includes the ability of companies to sense intra- and extra-organizational changes.

Sambamurthy *et al.* (2003) postulate that organizational agility related to the implementation of the BPM concept is shaped by six interrelated elements closely associated with the management process: (i) decisions-making better business decisions in order to achieve the set goals and strategy more effectively; (ii) strategic goals—developing a strategy is the starting point of the BPM method, and the basis for evaluating the activities carried out; (iii) measurement systems enabling the use of methods for measuring and analyzing results; (iiii) data - setting key performance indicators, understandable to all employees, and indicating clear responsibilities of individuals or whole teams, having financial and non-financial dimensions, easily measurable; (iiiii) visualization tools—the use of and access to the results of analyses by all employees, results presented in a simple form, e.g. (iiiiii) computer software - using information technology to process data (Sambamurthy *et al.,* 2003). At this point, it is necessary to ask the question, what dimensions and characteristics of BPM culture should a modern enterprise have?

Over the past years, researchers have identified several different dimensions and characteristics of organizational culture, illustrating a broad spectrum of views on various topics. The reason for proposing so many dimensions is that organizational culture is a comprehensive issue that is considered in terms of different aspects (e.g., the type of organization, the environment in which it operates, the period of operation, people, etc.) and consists of many complexes, interrelated, diverse, and often ambiguous elements (Linder, 2000). Therefore, it is impossible to consider all the essential factors when determining an organization's culture type. It is necessary to identify new dimensions that emerge under the influence of various dynamic changes, e.g., technological, social, cultural, environmental, organizational, etc., and illustrate the views of sustainable development assumptions.

Accordingly, after evaluating and analyzing the literature and contemporary trends of change relevant to BPM, it was proposed that the organizational culture, in this case, could be described with the use of four dimensions. The dimensions correspond to internal and external organizational premises. Therefore, the following dimensions were specified: the so-called openness to space (open to space - OS), high readiness for change (open to changes - OCH), openness to innovation (open innovation - OI), and flexibility (open to flexibility - OF) (Szymańska 2016).

Additionally, it was considered that the given definition was closely aligned with the areas described by Arnold *et al.* that are important for the development of BPM assumptions (Arnold *et al.,* 2016). The mentioned openness should refer to customers, suppliers, or competitors, and many other stakeholders who have complementary capabilities and do not hesitate to use them to build sustainable development jointly. Thus, the process-based organizational culture aims to detect those characteristics that will influence customer needs and expectations while respecting its social and environmental criteria and objectives.

As can be seen, four primary areas of organizational culture are identified in the definition adopted. The dimension of openness to space (OS) is associated with a company's activity related to creating conditions for various cooperation networks (relations) with the broadly understood environment. Nowadays, the full integration of production, organizational and social processes must take place. The BPM assumes the formation of networks which require many partners' connection to integrate around the described concept. The constant search for and using necessary resources pushes companies' activities, even their competitive actions, towards entering into a cooperation strategy. Collaboration between companies becomes a natural sequence of appropriate strategic choices crucial for creating higher value and capturing other values which coexist simultaneously and allow a company to be open to customer needs.

The dimension of readiness for collaboration and dynamic and innovative change (OI) is linked to openness to new knowledge and different areas (Chesbrough, 2006). Open innovation is combined with creating sustainable cultural values, ultimately leading to strategic benefits in the long term (Teece, 2010; Achtenhagen *et al.,* 2013). Thus, as Chen points out, innovation contributes to strengthening companies' competitive position (Chen and Lin, 2017; Lin *et al*., 2015).

Additionally, the knowledge and ability to identify and respond to new threats generated by the environment is fundamental (Doz and Kosonen, 2008). Enterprises must take these actions to reduce the risk of making mistakes and effectively exploit emerging opportunities in the environment. As a result of these actions, companies can effectively change, dynamize and sustain the developed competitive advantage in their sustainable development. High tolerance of uncertainty will be helpful in this respect, especially in dynamic changes in the environment. This dimension results from the possession, both by managers and employees, of open knowledge, the essence of BPM, which requires concrete action and flexibility in action (OF).

Open knowledge is a common good from which everyone can benefit, both the employee and the whole organization, as well as its business partners (Gregory *et al.,* 2009). Therefore, in BPM, it is crucial to combine internal capabilities to identify opportunities arising from the environment (Sambamurthy and Grover, 2007; Holsapple and Li, 2008). Knowledge is open if everyone has free access to it, can use it, modify it, and share it with others, subject to current requirements, at

most marking the sources of its origin or keeping it open. Thus, this plane ensures interoperability, i.e., full compatibility between organizational openness and the elements indicated.

Such an organizational culture will support a rapid response to change and opportunities, strengthening a company's ability to perform critical activities in line with BPM, primarily through innovation and learning.

The formation of an open organization ready to implement the BPM concept is triggered by an open-process organizational culture. As a result of creating among owners and employees open features assigned to each described dimension, an environment is created that integrates processes in a given company with processes between different market stakeholders. The alchemy of openness in force nowadays must trigger people to search for new ideas and inspiration for their realization by establishing new open relations that support BPM (Schmiedel, 2014). In terms of the collective and individual characteristics of organizational culture, treating openness holistically makes it a unique element of an organization's resources supporting BPM.

Therefore, in every enterprise, one should strive to build such a culture that supports implementing a function that ensures internal and external alignment. The question then arises: what characteristics must an organizational culture supporting BPM have? Cultures open to change should be characterized by general features related to (Johnston *et al.,* 2007; Boerner, 1994) openness to innovation, acceptance of a multiplicity of diverse interests, equality of opportunity in the realization of goals, individualism, individual freedom, autonomy, tolerance of other people's goals and ideals, and continuous learning, which enables active shaping of one's life.

These characteristics allow us to conclude that traditional cultures, which people's characteristics have shaped for years, must give way to cultures focused on sustainable development. A process-oriented culture is based on characteristics that motivate the creation of innovations. Such a culture is a catalyst that supports and integrates economic, environmental, and social goals. It enables a smooth transition of companies towards BPM.

## 3. Methodology

Literature studies conducted in 2018/2019 by the author of the article have revealed a cognitive-research gap manifested in the insufficient recognition of issues combining elements and features of organizational culture with BPM requirements in the context of Polish enterprises' development. It was concluded that there was a need to conduct research related to assessing organizational culture and Polish enterprises' preparedness to implement BPM assumptions. For this purpose and to verify the hypothesis, empirical research was carried out in two stages. In the first stage, expert research was conducted. Based on scientific, substantive, and impact criteria, selected experts qualified the variables into four groups of proposed

organizational culture dimensions that influence BPM. The following were qualified:

- – openness to space (OS): 6 variables,
- – openness to innovation (OI): 4 variables,
- – openness to changes (OCH): 4 variables,
- – internal openness (OF): 5 variables.

In the second stage, empirical research was carried out using the survey research method, using a multimode technique, combining two research techniques, CAPI (Computer Assisted Personal Interview) and CATI (Computer Assisted Telephone Interview). It should also be noted that the described research results are only a part of the project concerning the interrelationships between organizational culture and other assumptions which were subjected to a broader statistical analysis.

Respondents in the research included the top management (managers and their deputies) and owners of the studied companies (usually in the case of small enterprises). In order to achieve the assumed goals, the appropriate survey research was conducted among enterprises across Poland. The study covered enterprises with up to 249 employees operating in Poland. The predominant group of respondents included micro-enterprises (67.7%), the second group comprised small enterprises (23.9%), and the third one was made up of medium-sized enterprises (8.4%).

The largest group of respondents dealt in retail and service provision (31.9%), followed by manufacturing, retail, and service provision (22.3%), service provision (18.3%), retail (16.7%), and wholesale trade (10%). In the study, experts qualified several parameters, i.e., features relevant for BPM, to each of the dimensions of open organizational culture. The assessment thereof allowed for evaluating the features of sustainable organizational culture in the analyzed enterprises. 2

Thus, respondents indicated their involvement in the processes of BPM. They expressed their opinions using a scale from 1 to 3, where: "1" indicated a low, "2" medium, and "3" high level of involvement. This approach allowed for identifying the openness of organizational culture in terms of development and use of BPM.

## 4. Results

In assessing the features of organizational culture classified by experts into the four dimensions necessary for implementing sustainable development, a level close to average was identified for each feature (Table 1).

**Table 1.** *Matrix presenting the degree of development of the BPM concept in micro, small and medium-sized enterprises*

| Dimensions OK | BPM parameters | SME (N=249) / score on a scale 1-3[1]/ (%) | | | Average SCORE for SME ( scale of 1 to 3) |
|---|---|---|---|---|---|
| | | MM (N=170) | M (N=60) | S (N=21) | |
| Open Space (OS) | Open to relations with the environment | 1 (27.1) | 2 (35.0) | 1 (28.6) | 1.6 |
| | Open to relations with other enterprises in the BPM area | 1 (26.4) | 1 (23.3) | 2 (47.6) | 1.3 |
| | Research of the environment in the scope of BPM | 1 (35.3) | 2 (38.3) | 2 (33.3) | 2.0 |
| | Cultural similarity of partners | 1 (44.4) | 2 (51.8) | 2 (30.1) | 2.0 |
| | Joint actions based on creating cooperation networks | 1 (43.7) | 2 (53.3) | 2 (47.6) | 2.0 |
| | Quality of communication in inter-organisational relations | 1 (44.3) | 3 (65.0) | 3 (34.9) | 2.7 |
| | Total/average score | 6 (1.0) | 12 (2.0) | 11 (1.8) | 1.9 |
| Open Innovation (OI) | Openness to solving manufacturing and market problems jointly with partners | 1 (18.8) | 1 (30.0) | 2 (47.6) | 1.3 |
| | Ability to identify and respond to new threats | 2 (35.3) | 2 (38.3) | 2 (33.3) | 2.0 |
| | Openness to innovation and creativity | 2 (50.5) | 2 (49.7) | 2 (31.7) | 2.0 |
| | Openness to implementation of new products, processes and technology | 2 (45.7) | 3 (47.0) | 3 (35.0) | 2.7 |
| | Total/average score | 7 (1.7) | 8 (2.0) | 9 (2.2) | 2.0 |
| Open Changes (OCh) | Openness to changes | 1 (32.3) | 2 (51.5) | 3 (71.4) | 2.0 |
| | Openness to share the risk of market activities with partners | 1 (12.6) | 1 (10.1) | 1 (28.6) | 1.0 |
| | Openness to many diverse interests | 1 (39.5) | 1 (26.7) | 1 (9.5) | 1.3 |
| | Risk-taking propensity | 1 (45.0) | 2 (44.8) | 2 (20.6) | 2.3 |
| | Total/average score | 4 (0.8) | 6 (1.5) | 7 (1.7) | 1.6 |
| Open Flexibility (OF) | Stimulating employees to take BPM-related actions | 1 (32.3) | 1 (32.3) | 2 (47.6) | 1.3 |
| | Creating attitudes of sustainable organisational culture | 2 (51.5) | 1 (12.6) | 2 (33.3) | 1.6 |
| | Knowledge sharing | 1 (39.5) | 2 (45.0) | 2 (49.7) | 2.3 |
| | Listening to and implementing ideas of | 1 (44.5) | 2 (44.8) | 2 (45.7) | 2.0 |

| | | | | |
|---|---|---|---|---|
| employees | | | | |
| Increasing the internal efficacy in terms of taking BPM-related actions | 3 (71.4) | 3 (45.0) | 3 (35.0) | 3.0 |
| **Total/average score** | 8 (1.6) | 9 (1.8) | 11 (2.2) | 2.04 |

*Note: where 1—low, 2—medium/average, 3—high*
*Source: Author's own research.*

*Assessing the first organizational culture dimension:* OS, it was found that BPM was the most strongly developed in small enterprises (2.0), followed by medium-sized enterprises (2.2) and micro-enterprises (1.0). In the second dimension of organizational culture - OI features important for BPM were the most strongly developed in medium-sized enterprises (2.2), followed by small enterprises (2.0), and the least developed in micro-enterprises (1.7). A similar distribution was obtained in the third dimension, i.e., OCH. The most robust BPM culture characteristics were found in medium-sized enterprises (1.7), followed by small (1.5) and micro-enterprises (0.8). Also, in the fourth and last organizational culture dimension - OF, a similar distribution was obtained. The features belonging to this dimension were the most strongly developed in medium-sized (2.2), small (1.8), and micro (1.6) enterprises, respectively.

The obtained result is an effect of, on the one hand, the willingness of the SME sector to meet the needs and requirements of the environment, and, on the other hand, a consequence of still low openness to BPM. Subsequently, to ascertain the relationship between the examined dimensions, the Pearson correlation coefficient was calculated, and co-occurrence measures were obtained (Table 2).

**Table 2.** *Measures of co-occurrence of dimensions*

| Dimensions OC | Coef. 1 | Coef. 2 | Coef. 3 | Coef. 4 |
|---|---|---|---|---|
| OS | 1.000 | 0.383 | 0.617 | 0.397 |
| OI | 0.383 | 1.000 | 0.373 | 0.559 |
| OCh | 0.617 | 0.373 | 1.000 | 0.499 |
| OF | 0.397 | 0.559 | 0.499 | 1.000 |

*Source: Own elaboration based on research results.*

As the study indicates, all obtained correlation coefficients are statistically significant ($p < 0.001$), as they are different from zero with a probability above 0.95, i.e., it can be assumed that there are relationships between the studied dimensions, which confirms the adopted hypothesis. All dimensions, OS, OI, OCH, and OF, are also positively correlated, which indicates that as the value of one dimension increases, the values for the other dimensions also increase. This means that if a company has a high rating in a given dimension, e.g., OS, then the rest of the dimensions should also be high and vice versa. This means that more open to space companies are generally more open in all the dimensions indicated. Consequently, they take into account organizational culture characteristics that are important for

BPM. The value of the correlation coefficient shows the strength of the relationship. As the research has shown, if a company is open to space, it is "more" (or rather "more often") open to change ($r = 0.617$ OS vs. OCh) than to innovation ($r = 0.383$ OS vs. OI). The evaluation of the parameters of the coefficients obtained indicates average relationships between the indicators present. Therefore, it can be concluded that the surveyed companies are characterized by a relatively low degree of fidelity to the features of openness of organizational culture in the four indicated dimensions relevant to BPM. Therefore, building an open organizational culture is recommended, as its emergence will make it possible to create systems based on breakthrough relations between an open organizational culture and BPM, which is necessary to create modern business model standards.

## 5. Discussion

The conducted research has shown that small and medium-sized enterprises are slightly more efficient than micro-enterprises regarding openness to creating organisational culture features essential for BPM. Unfortunately, most of them obtained relatively low values of all examined dimensions. This means that creating features of the organisational culture essential for the BPM implementation in the surveyed SMEs should be assessed as average.

In each of the organisational culture dimensions crucial for BPM, there are still many features with deficient activity. First, it is necessary to create a culture more open to external suggestions, ready to experiment and make mistakes (the so-called error-embracing-culture), and second, a culture capable of adapting and creating extensive cooperation and collaboration networks. Although not the easiest, these activities are the most critical aspect of the current changes concerning moving across the BPM plane. The consequence of this may be a greater capacity of small and medium-sized enterprises to be open at different levels of integrating activities carried out, i.e., building innovative concepts and business models taking into account interactions with the contemporary environment. It will create a new model of BPM - oriented organisational culture.

## 6. Conclusions

The paper assumes that an open organizational culture is an essential supporting element of BPM. Therefore, a critical theoretical conclusion allows for considering a close relationship between BPM and organizational culture. A culture that influences the achievement of organizational goals improves the effectiveness of BPM implementation (Schmiedel, 2013). In the study, organizational culture, which cannot be seen, touched, or smelt, was described using the four dimensions presented with open-ended characteristics. It was assumed that it could be the primary dynamic catalyst for multifaceted and multi-stakeholder BPM implementation activities and business continuity. Based on the conducted research, it can be concluded that the necessity of carrying out changes in the presented dimensions of organizational culture may meet with resistance and skeptical

attitude, especially among the management, which is mainly responsible for the development and expansion of market shares of an organization.

Within the framework of the research work carried out, efforts were made to maintain appropriate methodological rigor to ensure a high degree of objectivity and reliability of conclusions. Despite this, the tool developed and certain limitations characterize the results of the research conducted. The result, first of all, from the impossibility to determine all the features of organizational culture supporting BPM. The focus was on the most important ones demonstrated by experts. Thus, the considerations do not show the whole spectrum of problems, i.e., determinants and barriers, which encourages further research in this area. Firstly, it would be exciting to identify and assess the analyzed relationships on a representative sample of enterprises located in different countries. Secondly, further assessment of the degree of development of qualitative variables selected may be influenced by the size of the studied enterprises and their industry, location, degree of innovation, area of operation, etc. Therefore, it is imperative to continuously advance research in the indicated area, which will enable the development of a complete set of general conditions for the success of BPM activities and tools for their support.

In conclusion, today's turbulent and uncertain environment poses various challenges for enterprises. One of the possible solutions is implementing BPM, which will enable companies to succeed and survive in these difficult times. Under such conditions, organizational culture can become a real asset for enterprises in supporting various transformation processes. Therefore, further steps need to be taken to take culture into account in every company area. The key objective is that every employee in the organization should know, accept, and act according to the organizational culture that supports BPM.

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