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Concept of the organization process maturity assessment

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Abstract

Aim/purpose – The aim of this article is to present the concept of a multicriteria model of process maturity assessment (MMPM), which allows to assess the degree of implementation of process solutions with respect to three dimensions: short-term, long-term and systemic.

Design/methodology/approach – The characteristics of the model presented in the article was preceded by a review of the literature and the analysis of secondary research related to the assessment of the degree of implementation of elements of the process approach in management.

Findings – As a result of the review of the literature and the analysis of secondary re-search, a thesis was formulated that quantitative research using the existing methodologies for identifying the implementation of a process approach in management is insufficient in the precise assessment of the organization's process maturity. This means that they should be extended to include qualitative research. The solution to this problem may be the use of a multi-dimensional model of process maturity assessment of the organization.

Research implications/limitations – The application of MMPM makes it possible to assess the degree of implementation of the process approach elements using the opinion poll method. This means that the results may be subject to random or non-random errors, depending on the selection technique of the research sample. At this point, it should also be emphasized that in order to provide a precision assessment of process maturity using the MMPM, the questions in the questionnaire should be adapted to the specifics of the area under examination.

Originality/value/contribution – The scope of this article fills in the research gap that exists in terms of assessing the process maturity of the organization in the long run, understood as defining the direction of development, stagnation or atrophy of implemen-

tation of process solutions in the organization. The concept of the MMPM presented in the article makes it possible to assess process maturity in three dimensions: short-term, long-term and system-based. In addition, the structure of the model enables the reconfiguration of the research questionnaire with questions of a self-reinforcing character by the respondent to questions, enabling the assessment of the level of maturity on the basis of symptoms.

Keywords: process management, process approach, process maturity, evaluation of process maturity, MMPM.

JEL Classification: M21, O3.

1. Introduction

The literature on the subject presents the thesis about too many available models of process maturity assessment of the organization (de Bruin, Rosemann, Freeze, & Kulkarni, 2005; Pöppelbuß & Röglinger, 2011). This should be understood as ongoing criticism over the essence of models of maturity, as the patterns characterizing the course of reconfiguration of the organization step by step from the functional into process one with too much simplification of reality (McCormack et al., 2009). More precisely, in the author's opinion, models of process maturity described in the literature are of universal nature. Two premises stood behind such a formulated thesis. The first one concerned the limited ability of models to configure assessment criteria taking into account the specificity of functioning of the examined organizations. The second one concerned the inability to conduct a detailed analysis of the selected areas of functioning of the examined objects in the system dimension.

Moreover, in a large number of characterized empirical studies on the process maturity of the organization, the use of opinion polls in assessing the implementation of process solutions prevails. As a result of the analysis of secondary research carried out in Poland, it was found that the research questionnaires used were based on self-assessment questions. These are questions to which the respondent responds in a subjective manner, indirectly assessing the level of implementation of elements of the process approach in the examined organization.

In the described area, one can identify a research gap resulting from too broad boundaries between individual levels of process maturity in the models described in the literature. This indicates the lack of possibility of a holistic view by defining the direction of management activities in the organization. It should be understood that the use of the MMPM (multicriteria model of process maturity assessment) presented in the article with the use of a survey opinion poll may result in a more accurate assessment of the current state, as well as the direction of implementation of the process approach elements in management.

The concept of the MMPM presented in the article, unlike the solutions described in the literature, enables a flexible reconfiguration of the research tool (questionnaire) with self-evaluating questions, resulting in subjective assessment of the respondent's state of organization's transformation from functional to process, to questions that enable the analysis of the maturity level based on the identified symptoms of implementation of the process solutions. This means that using a MMPM, using the survey opinion poll method, it is possible to assess the current state more accurately, as well as the direction of implementation of process solutions in management.

The aim of this article is to present the concept of a MMPM, which allows to assess the degree of implementation of process solutions with respect to three dimensions: short-term, long-term and systemic.

The first part of the article presents a description of the problem, a research gap and the research objective of the article. The second point, as a result of a literature review, the selected models of process maturity were characterized, and the features showing the process immaturity and maturity of the organization were presented on their basis. Next, the research methods used during the design of the multicriteria model of the organization's process maturity were described. The fourth point describes the theoretical assumptions of the presented model and characterized the criteria for assessing the level of implementation of process solutions with its use. Subsequently, the symptoms of the implementation of elements of the process approach in management based on the assumptions of the presented model were synthesized. As a result, the process maturity levels of the MMPM were characterized, broken down into a short and long-term dimensions.

2. Literature review

The concept of maturity is polysemantic. This implies the need to clearly indicate the discipline in which it is operated. In this article, the term of maturity was defined for the discipline of management sciences. Bearing in mind the above, maturity is "a measure to evaluate the capabilities of an organization in regards to a certain discipline" (Rosemann & de Bruin, 2005). In turn, the level of the organization's process maturity identifies the degree to which processes are formally defined, managed, flexible, measured and effective (Grajewski, 2007, pp. 119-120). More precisely, it is: "the state of the system, in which it the continuously discounts the benefits of the advancement of the applied process solutions that is an expression of the modern organization's aspiration to provide

itself with the ability to respond to turbulent challenges requiring flexible solutions of the environment” (Grajewski, 2016, p. 125). It has a gradual character, therefore, its assessment is based on specific patterns, defined in the literature as evaluation models of the process maturity. In the discussed concept of the MMPM, the evaluation of the organization’s process maturity is understood as recognition of the increase in the development of positive features stating the implementation of the selected elements of the process approach in the organization in the space from the process-immature organization towards the process-mature organization, taking into account the short and long-term dimension.

Table 1 presents a list of features that demonstrate the process maturity and immaturity of the organization based on the selected models.

Table 1. A summary of the characteristics of the process maturity and immaturity based on the selected models of the organization’s process maturity

Author/authors	Lowest Maturity Level	Upmost Maturity Level
1	2	3
Mauil, Tranfield & Mauil (2003)	Group 1: Organizations are in the early phase of business process reengineering (BPR) project planning	Group 5: Organizations use the knowledge gained from BPR projects to re-engineer the whole business
Fisher (2004)	Siloed: Individual groups work to optimize their own piece of the organization. Information tends to be siloed	Intelligent Operating Network: Optimal efficiency throughout the end-to-end value chain and free-flow of real-time information is achieved.
Rosemann & de Bruin, (2005); Rosemann, de Bruin, Power, (2006)	Initial State: Attempts towards BPM are non-existent or very uncoordinated and unstructured (ad-hoc, individual efforts).	Optimized: BPM is core part of both strategic and operational management within the organization.
Hammer (2007)	P-1/E-1 (examples): The process has not been designed on an end-to-end basis. Fragmented legacy IT systems support the process	P-4/E-4 (examples): Process design fits with customer and supplier processes. Modular IT architecture exists
Lee, Lee, & Kang, (2007)	Initial: Processes are managed in an ad-hoc manner	Optimizing: Processes are proactively monitored and controlled. Process performance data is systematically used for improvements
Rohloff (2009)	Beginning Processes are not defined. Success depends on specialists. Parameters, such as schedule, quality and costs are not orecasted	Optimization Processes are systematically analyzed, optimized and adapter to market requirements. Modern management methods, such as benchmarking, are used

Table 1 cont.

1	2	3
Grajewski (2007)	The process immature organization. Improvisation of processes by employees and managers. Reaction management (short-term response to emerging crises). Scheduling and budget are usually exceeded because they are not based on stable processes. With unchangeable constraints on the schedule and budget, they are enforced at the expense of the quality and functionality of the product or service. There are no formalized and objective criteria for product, quality or process evaluation and early identification problems	Process mature organization The ability to build and improve a product and/or service is a feature of the organization, not individual employees. Processes are fully identified, and knowledge about them is effectively passed on to employees. Works relate to the design of processes are planned. Processes are observed and improved also by means of controlled experiments an analysis of the cost-to-effect relationship. The division of roles and responsibilities is clearly defined within the organization and individual projects. The quality of products and/or services as well as the degree of customer satisfaction are monitored
Sliz (2016a)	Level 1. The organization is task-oriented. It does not use the 'process' term. The desired role of the employee in the organization is to perform the assigned tasks, so that the implementation of the processes depends primarily on the creativity of the employee. Employees' awareness is focused on function and departments. Employee training is not implemented or realized only in the top-down manner. Training is treated as part of employees' motivation system. Processes are not identified or measured	Level 5. Modern management methods are used in the assessment and implementation of processes. Process optimization is based on computer simulation. Changes come from all employees and are carried out during the process. The customer's requirements are the change stimulator. Knowledge is treated as a resource and is transferred in a planned way. The internal supplier is evaluated by a structured and optimized set of meters. Market relations are at the junction between departments

Source: Adapted from: Röglinger, Pöppelbuß, & Becker (2012).

In the literature on the subject, the patterns that enable the evaluation of the degree are defined as the evaluation models of process maturity. The authors of the selected solutions should include, among others: Maull, Tranfield, & Maull, (2003, pp. 596-624), Fisher (2004, pp. 11-15), Rosemann & de Bruin (2005), Hammer (2007), Lee, Lee, & Kang, (2007, pp. 384-39), Rohloff (2009, pp. 128-142), Grajewski (2016, pp. 122) and Sliz (2016a, pp. 534-525).

Not without significance is the fact that their number may cause that the selection of the appropriate model in the practical application is complicated, because it requires the analysis of the operating conditions of an organization, including in particular the evaluation of application strategies that can be

implemented. In addition, as a result of the review of the subject literature, different assessment criteria for individual levels of process maturity were found. This means that in the analysis of the results of research related to the assessment of the process's maturity, using the model characterized in tab. 1, the characteristics of individual levels of maturity should be studied in detail.

3. Research methodology

The review of literature and secondary research on organization's process maturity evaluation constituted grounds for the careful analysis and assessment of organization's process approach symptoms. The concept of the MMPM process maturity evaluation proposed in the article concerns the descriptive model (Becker, Knackstedt, & Pöppelbuß, 2009). During the course of conceptual works on the MMPM presented in the article, the focus was on the analysis of the process maturity models available in the literature on the most frequently cited foreign articles and post-conference studies. This means that the literature review was carried out after choosing such keywords as: process approach in management, process management, organizational process maturity models, improvement of business processes, determinants of the process organization. In addition, the presented MMPM was designed based on the analysis of secondary studies characterized in the literature and empirical proceedings on the assessment of process maturity of the organization, carried out by the author.

4. Research findings and discussion

4.1. Theoretical assumptions of the multicriteria evaluation model of the process maturity

The multidimensionality of the MMPM is related to the possibility of assessing the organization in three dimensions: short-term, long-term and systemic. At this point, it must be emphasized that the first two classify the organizations with regard to the temporal scope, while the third is the material scope. The short-term dimension concerns the evaluation of the degree of implementation of the process approach elements in management on a five-level scale. The levels were marked as: L1 – functional organization showing weak symptoms of the process approach, L2 – identified and formalized processes, L3 – measured processes, L4 – managed processes and L5, the highest level – improved processes. The second dimension is closely integrated with the short-term dimension.

For each of the five levels, three dimensions have been assigned to assess the process maturity in the long-term perspective. They are: development in the implementation of determinants of the process organization, stagnation, identified as staying on the current level and atrophy, understood as the cessation of the implementation of process solutions and orientation towards a functional approach in management. Table 2 characterizes the exemplary notation of dimension for the fifth, highest level of process maturity expanded by long-term labelling.

Table 2. Characteristics of system features assessed in the in the multidimensional organization process maturity assessment

Short-term designations	Long-term designations	Short- and long-term designations	Characteristics of the short-term dimension
L5	A+	L5 A+	Development
L5	A	L5 A	Stagnation
L5	A-	L5 A-	Atrophy

Source: Author's own study.

In turn, Table 2 presents the characteristics of the third dimension, which were the systemic features. The following were qualified: specialization, hierarchy, centralization and formalization¹. The decision on their selection was conditioned by the adaptation of the examined characteristics to the assessment of the organization's development towards the implementation of process solutions. It should be understood that the omission of the standardization feature as one of the so-called Astonian dimensions was purposeful. It has been assumed that standardization concerns the unification of ways of acting, which in turn may lead to the process procedure completion. At the same time, the author realizes that in business practice, when designing system solutions and processes, the existence of a certain level of standardization should be considered (Trocki, 2004, p. 64). More precisely, "choosing the level of standardization appropriate for the given organization is not an easy matter and requires rethinking the consequences of such a decision. It is important to take into account the space between the system of operation of the processes resembling the detailed procedures limited by time, space and implementation conditions [...] and design or consulting companies, where the level of standardization [...] should be very low" (Grajewski, 2012, p. 65). At this point, it should be emphasized that the area of process standardization has been included in the characteristic features of formalization (Table 3).

¹ According to other researchers, Biazzo & Bernardi (2003, pp. 154-156), the process approach should be implemented in the areas of four structures. The following were qualified: process architecture, process visualization, monitoring and improvement mechanisms.

Table 3. Characteristics of system features assessed in the in the multidimensional organization process maturity assessment

System feature	Characteristics for the functionally manager organization	Characteristics for the process-managed organization
Specialization	The separated functions as the basis for grouping cells. Improving skills within unified operations with limited impact range	Economic processes as the basis for creating interdisciplinary teams. Improving interdisciplinary implementation skills.
Hierarchy	Formal authority, multi-level. Dominance of power relations and cooperation. Real responsibility hard to determine	Dominance of horizontal relationships over hierarchical ones. The owner of the process replaces the current functional manager. Responsibility for the actual results of the work, the degree of meeting the needs (customer satisfaction)
Centralization	Decision powers relate to the formal hierarchical position. The picture of the whole is obtained at the top of the pyramid of power	Delegating permissions on process managers. Independence of contractors in creating the structure of processes
Formalization	Employees' activity focused on activities consistent with top-down procedures. Relatively long petrification of principles of operation, associated with a large expense of change	Employees' activity aimed at seeking effective implementation procedures. The method of operation adapter to the client's expectations

Source: Adapted from: Grajewski (2016, p. 169).

The application of the MMPM to the implementation of methodological and utilitarian objectives has been characterized in three variants. The first one – simplified, consisting in assessing the process maturity of the organization only in the short-term dimension, the second one – periodic, used for the analysis using the short and long-term dimension, and the third one – holistic, requiring a holistic view of the organization from the perspective of the three dimensions described. At this point, it must be emphasized that the condition for using each of the mentioned variants is the use of a research questionnaire designed to assess the degree of implementation of process solutions in the organization based on the symptoms of processing.

The proposed MMPM has three functions:

1. Evaluating – allowing analysis of the organization in three characterized dimensions, according to reference criteria, for each level of process maturity.
2. Comparing – allowing comparison of the degree of implementation of elements of the process approach in management, in the short-term, long-term and system dimension, of a group of studied objects.

3. Perfecting – regarding the assessment of the real-world system dimension and the selection of the appropriate strategy for the transformation of a functional organization into a process one.

Four layers were included in the characteristics of the theoretical assumptions of the MMPM. They were specified on the basis of the division formulated by Flieger (2016, pp. 171-179). They were the selected layers: subjective, objective, regulatory and process documentation. The first one was described taking into account the object of building the structure of the process organization, identified as a team. It is understood as “a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable” (Katzenbach & Smith, 1993, p. 112), replacing the classical organizational forms, that included the departments, branches and sections. The second layer, objective one, was formulated on the basis of the division of processing according to the criterion of the hierarchy. They were: mega processes, management processes, auxiliary processes (Dangel, 1994, pp. 31-34) and multi-processes (Sliz, 2016b, pp. 325-328). The third layer, the regulatory one, has been identified as the area to which general binding law regulations, organization development strategies and the statutes and regulations of the organization were qualified (Flieger, 2016, pp. 176-177). The last, fourth layer, concerned the area of process documentation, to which the following were selected: process flow charts, process effectiveness assessment sheets, control charts, process improvement procedures in the organization, as well as training and personnel development procedures.

4.2. Characteristics of criteria for adaptation of the process approach in the organization on the example in the multidimensional organization process maturity assessment model

When starting to assess the process maturity of an organization using the MMPM, evaluation criteria should be formulated. It consists in assigning points in the research questionnaire to each response. The five-level rank of points in the $Z = \langle 1;5 \rangle$ range was used to assess the responses in the research questionnaire. This means that the five-degree Likert scale was used to assess the severity of the symptoms of implementation of process solutions. At this point, it should be emphasized that extreme values: the number of 1 points means that the element does not appear in the examined parameter, while the number of 5 points, the highest one, indicates that the tested element occurs in the tested

parameter in full dimension. In summary, the number of points was assigned to each answer in the questionnaire. After adding it to each level, it is possible to identify the level of maturity in the short- and long-term dimension.

In order for the organization to aspire to the second level of maturity, it is necessary to confirm the symptoms indicating the identification of mega processes (basic, central processes) and auxiliary processes in the organization, their formalization in the form of process maps and operating the correctly defined concept of the 'process'. Additionally, it should be noted that in achieving the L1 E+ level, the management decision concerning the implementation of the quality management system (QMS) is a favorable factor, resulting from the internal needs of the organization. In addition, the first level, in the L1 E- and L1 E dimensions, in accordance with the adopted theoretical assumptions of the MMPM, is the state in which the organization shows a poor process pre-orientation. The L1 E+ dimension is noteworthy. Because, according to the assumptions made, the organization in this dimension is characterized by symptoms indicating the initiation of activities aimed at implementing a process approach in management. This is a condition in which key criteria have not been met, but there are indications that they will be achieved in the future.

In turn, achieving the third level, according to the characterized assumptions of the MMPM, requires meeting at least three criteria for the second level and the following three criteria that enable the adaptation to the third level. They were: a formula of employee participation in the implementation of management activities focused on the results and measurement of the identified mega processes and auxiliary processes. At this point, it should be emphasized that the assumed level requires structural changes based on the clear role of the leader, managing the intellectual potential of employees and the transfer of knowledge between staff.

In the perspective of the organization's adaptation to the fourth level, an important aspect includes the nature of applied management actions and organizational culture, oriented on improvements initiated and implemented by all members of the organization, in particular interdisciplinary teams of employees, functioning throughout the organization and focused on solving problems when they occur.

Achievement of the fifth, highest level of maturity, by the organization is determined by the confirmation of symptoms characteristic of the state in which the management of identified, formalized and metered processes is so dynamic that it enables their continuous improvement. Achieving the fifth level of process maturity is possible by confirming the existence of elements confirming the functioning of intra-market relationships in the implementation of the organization.

4.3. Synthesis of the organization's process maturity evaluation in the multidimensional organization process maturity assessment model

Table 4 cited markings of the level of process maturity, including short- and long-term dimensions, and characterized individual levels and the attributed long-term dimensions. At this point, it should be noted that the levels in Table 4 were ranked according to the level of implementation of the elements of the process approach in the management from the highest (L5) to the lowest one (L1).

Table 4. Characterization of levels and dimensions of process maturity in the short and long-term in the multidimensional organization process maturity assessment

Marking the process maturity level	Process maturity level characteristics for the long-term dimension
1	2
L5 A+	The process organization, in which all the specified criteria were met, demonstrating the correctly identified, formalized and metered process architecture. In the long-term dimension, the organization is characterized by the improvement of the metered and manager processes, using management methods, IT tools and innovative, original solutions. Organization, as a result of measurements of processes and improvements generated by all members of the organization, is looking for a new space in which the value added can be generated
L5 A	Process management is based on the results of the designed measurement system. Based on the analysis of the process effect, corrective actions are taken to continuously improve processes based on the client's requirements, in external and internal terms
L5 A-	Despite the attempts to improve manager processes, there are no symptoms indicating the search for newer generation solutions
L4 B+	Decision-makers and stakeholders in the organization make decisions related to the optimization and dynamization of the managed processes. The organization focuses on searching for new solutions resulting from an attempt to flexibly influence external impulses
L4 B	The identified and formalized processes are metered. Management decisions are focused on the effect of the process. The external and internal training system facilitates the transfer of knowledge between employees. A desirable role of the leader is to manage the diffusion of knowledge in the established, interdisciplinary teams oriented on the implementation of tasks and solving problems in the space of the entire organization
L4 B-	The measures applied primarily concern the assessment of mega processes (main and central processes). There are no decisions regarding the reconfiguration of the system of meters for all identified processes. Functional managers are responsible for coordinating tasks in the subordinate division. In the long term, the organization exhibits symptoms characteristic of the P3 level
L3 C+	In organizations, management decisions are focused on results. This means that the organization attempts to synergize the measurement result in making management decisions
L3 C	Most of the identified processes in the organization are formalized. The trainings are carried out in accordance with the plan determined in advance (e.g., by the grantor). The lack of symptoms indicating the implementation of internal training. The defined state of the process architecture is metered

Table 4 cont.

1	2
L3 C-	The developed system of measures mainly concerns the measurement of mega processes. Measurements are made for the needs of the top decisions (e.g., the grantor). Training is the motivational element of an employee. Their implementation does not support the exchange of views and development of the employees' competences
L2 D+	As a result of the formalized infrastructure of all identified processes, decisions are made regarding measurement of the selected processes in the organization. The simultaneous orientation towards the tasks and results prevents the overall measurement of all processes
L2 D	The organization uses the term 'process' correctly. This means that it is understood as a repetitive sequence of sequentially implemented actions which aim is to generate the added value. Only mega processes and some auxiliary processes are identified in the organization. This also applies to the formalization of processes in the form of maps
L2 D-	The organization uses the concept of the process, but it is identified incorrectly. It is often identified with the procedure, standard or task. Despite the identification and formalization of mega processes (or main processes), the orientation of management actions is focused on tasks
L1 E+	The organization is looking for new solutions in the field of management approach. The dominant functional management formula directs it towards functions and tasks. In the long-term dimension, there are measures to move away from the classical form of management through the bottom implementation of the quality management system, e.g., ISO, resulting from the internal needs of the organization.
L1 E	The organization has insignificant features of the implementation of the process approach. No identified factors that could change the orientation of the management approach in future management activities
L1 E-	An organization with strongly dominant elements of a functional approach in management. A multi-level hierarchical structure prevents horizontal pre-orientation. In the long-term dimension, there are no single symptoms that could indicate a change in orientation in management. The organization does not use the concept of a process

Source: Author's own study.

In summary, the organization cannot reach the next level of maturity if it does not meet the minimum criteria of the previous level. This means that the examined unit, which will obtain the number of points qualifying to the third level, and does not meet the minimum requirements of level two, will be assigned to the second level for which it meets the minimum criteria. It should be understood that the score classifying the organization in the short and long-term dimension was calculated independently for each level. This means that the sum of all points obtained in the quantitative survey does not rank the organization to a certain level.

5. Conclusions

5.1. Research contribution

Functional approach, based on multi-segment, hierarchical structure, focused on employee's proficiency in fulfilment of strictly defined assigned tasks and responsibilities appears to be an overwhelming majority due to secondary

research on the implementation of process approach in Polish organizations (Cyfert, 2009, p. 168). For both researchers and practitioners, it can indicate necessity of modern solutions' and tools' in process approach monitoring from the broader perspective, as regards creating new organizations. This leads to the conclusion that businesses, which undertook attempt of their internal structures' transformation, had to manage the structure referred to as two-speed structure perceived as the co-existence of process and functional sections. The foregoing statement applies to assumption, according to which studied units have been developed on the basis of classical approach of management. At the time of transformation from organization at the first, second and third level of process into process organizations at level fourth and fifth, deactivation of two parallel organizational structures is required. Therefore, implementation of the process approach in management requires simultaneous decline of functional approach components. Herein, it should be stressed that knowledge on both approaches in management and forms that combines them, so called indirect forms in use of multidimensional maturity assessment model, may pre-eminently initiate creation of new knowledge concerning organization's operation in the transitional phase. Therefore, evaluation of the broader scope of issues, that means both analysis of the organization's operating direction in a long-term and management decisions' review, is required apart from the evaluation of current (short-term) process approach implementation phase. Precise determination of organization's maturity process may also provide knowledge on type and increase of tensions arising between two different management concepts: functional and process-based.

5.2. Research implication

The proposed MMPM, in addition to the possibility of evaluating a selected organization or a specific population of subjects, may prove to be a helpful tool for practitioners in the awareness of both the current state of implementation of process elements, as well as the search for alternatives to the functional approach to the solutions proposed in this article. This means that it performs the evaluation, comparative and improvement functions.

Considering the problem of the strategy of adaptation of elements of the process approach in management based on the presented multicriteria MMPM, the key areas, from the perspective of the long-term evaluation, are the dimensions indicating the organization's development towards achieving higher levels. The construction of the MMPM allows its replication after the prior adjustment of the selected areas of the study to the specifics of the studied area. In addition,

organizations that want to discount conclusions from their own research and the assumptions of the proposed model, may use the formulated assessment criteria to select the appropriate organization strategy in the implementation of elements of the process approach, which atrophying the functional management elements. Then, in an independent manner, they will be able to identify the current level of process maturity and determine the intensification of process elements in a long-term perspective.

5.3. Research limitation and future works

Assessment of process maturity using the MPPM presented in the article assumes the use of the opinion poll method. Bearing in mind the above, it is necessary to emphasize the limitations resulting from its use and the presented model. They are related to the risks associated with the technique of sampling and random or non-random errors. In addition, it should be noted that in order to accurately assess the level of implementation of process solutions in the organization or group of objects under study, the research questionnaire should be adapted to the specifics of the organization sector under examination. The presented concept of a multicriteria model of process maturity will be used by the author during the implementation of empirical research on process maturity of the organization. To this end, the author attempted to evaluate the degree of implementation of process solutions, using the model presented in this article, on the example of a random sample of 350 contemporary organizations in Poland.

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