

## THE ROLE AND COMPETENCIES OF MANAGERS IN CONTEMPORARY PROCESS-PROJECT ORGANIZATIONS

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**Purpose:** The reason for addressing the issue of the roles and competencies of managers of process-project organizations was the results of literature research. Based on them, it was found that there is a cognitive gap in this area, although it is emphasized that processes and projects are complementary elements of modern organizations. The main objective of the study was to identify the roles and competencies of managers that are important in a process-project organization. Its implementation was carried out within the framework of two sub-objectives: 1) to synthesize theoretical considerations on the roles and competencies of managers in modern organizations, including process-project organizations, 2) to assess the importance of managerial roles and competencies in process-project organizations.

**Design/methodology/approach:** The formulated main objective was achieved in the course of two stages of research. The first step involved a literature study, while the second one consisted of interviewing 152 managers in the process-design organizations.

**Findings:** During the course of the research it was established that so far a lot of theoretical considerations have been presented in the field of traditional and contemporary managerial roles and competencies. Based on the studies of 152 cases, it was concluded that there is knowledge and experience in practice to identify the roles and competencies that managers of process-project organizations should fulfill. As part of the discussion, it should be noted that the assessment of roles and competencies dedicated to managers of process-project organizations varies depending on their process-project maturity and internationalization.

**Research limitations/implications:** The opinion of the research group of 152 internationalized companies from the Silesian Voivodeship may differ from others, especially non-internationalized entities. The survey also did not take into account the respondents' business focus and size.

**Practical implications:** The research results obtained, based on the knowledge and experience of 152 organizations, can provide a basis for determining the roles and competencies of managers for organizations that want to move to a process-project orientation.

**Originality/value:** The scientific value of the publication is to define the roles and competencies of managers of process-project organizations. The addressee of the publication can be both academics and management practitioners.

**Keywords:** process-project organization, managers, role, competence, management.

**Category of the paper:** Research paper.

## 1. Introduction

The art of management is constantly changing, adapting to the ongoing economic, technical and technological and social changes that imply new expectations about the role and competencies of managers. The literature presents many descriptions of traditional and contemporary roles and a set of requirements relating to the competencies that managers should have. This publication, against the background of a synthetic characterization of traditional managerial roles and competencies, presents those that are dedicated to modern organizations, operating under conditions defined by increasing globalization, turbulent changes, the growing importance of knowledge and the psychosocial needs of employees. In the context of these conditions, attention was paid to a feature of modern organizations, which is the focus on processes and projects, implying the emergence of process-project organizations.

The impetus for addressing the issue of the roles and competencies of managers of such organizations came from the results of a literature study. Based on them, it was found that there is a cognitive gap in this area, although it is emphasized that processes and projects are complementary elements of modern organizations, determining their proper functioning and future development (Nowosielski, 2017, 2018; Lichtarski, Osbert-Pociecha, 2019; Bitkowska, 2019; Sliż, 2021). The article presents the results of the research, representing new knowledge about the roles and competencies of managers of process-project organizations, allowing (at least partially) to fill this cognitive gap. The results of this research may be of interest not only to representatives of the scientific community, but also to business practice.

## 2. Objectives and scope of the study and methods used

The main objective of the research was to identify the roles and competencies of managers that are important in process-project organizations. To achieve this goal, the scope of the research included two stages, targeting the formulated sub-objectives, which were carried out using various methods.

The 1st stage of the research was aimed at synthesizing the existing considerations not only in terms of traditional managerial roles and competencies, but especially those of today, including those relating to process and project organizations. Achieving this sub-goal was possible based on the study of the literature on the subject, and especially the application of methods of its analysis and synthesis. The results of this stage are presented in sec. 3.1.

The 2nd stage of the research was aimed at assessing the importance of contemporary managerial roles and competencies in process-project organizations. It was possible to achieve this sub-goal on the basis of interviews (CAPI, CATI) conducted with the chief executives of

152 Polish process-project companies that cooperate with foreign entities. This made it possible to indicate the importance of the roles and competencies that should characterize the managers of process-project organizations. The results of this stage are presented in sec. 3.2.

### **3. Research results and their discussion**

#### **3.1. Traditional and contemporary roles and competencies of managers in management theory**

In the literature, the roles and competencies of modern managers are often considered in terms of the development of management science. It is believed that until the end of the 19th century, during the period known as the entrepreneurial orientation, the roles of managers were limited, and boiled down to helping the entrepreneur hire the right employees, giving them specific tasks based on a prior analysis of industrial operations, or identifying possible problems. The same was true of competencies. They were usually limited to intuition and experience, which was supposed to support management talent (Stańczyk-Hugiet, 2010).

This situation was changed by the effects of the industrial revolutions. From the middle of the 20th century, there was an intense increase in the rate and productivity of labor, the development of industrialization and the diversification of markets on a national and international scale. The conditions of business at the time determined the development of traditional organizations, characterized by hierarchical structures. For such structures, a clear division was adopted between superiors and subordinates, occupying a higher and lower place in the hierarchy, respectively, and the roles and competencies of managers were defined. Noteworthy here, among others, is F.W. Taylor's description of eight roles, divided into two groups (office - four administrative roles of officials and workshop - four roles of production foremen), ordering the directions of issuing orders, taking into account the principle of unity of command. In addition, it is worth distinguishing the roles defined by H. Fayol, relating to the functions of planning, organizing, coordinating, leading and controlling (Kieltyka, 2016). Relevant competencies were defined for the presented roles. It was believed that lower-level managers should be primarily technically skilled, while high-level managers should be conceptually and managerially skilled.

At the same time, it was assumed that with the transition from small to large enterprises, the importance of technical talents diminishes, while conceptual and managerial skills, necessary for thinking holistically and abstractly about the organization and its future directions, increase. Attention has also been paid to diagnostic competence, defined as a manager's ability to imagine the most appropriate response in a given situation, as well as communication competence (Bednarska-Wnuk, 2012; Skubis et al., 2023a). It is worth noting that the indicated traditional roles were associated with the use of an autocratic style of leadership, which required managers

to maintain a great distance in their dealings with employees, to be assertive, to avoid explaining their actions or decisions independently, and to be disciplined, among other things, in the formulation of orders and strict control of employees.

H. Mintzberg's work "The Nature of Managerial Work" can be considered a breakthrough in the consideration of managerial roles and competencies. It describes the work of managers and the requirements placed on them, while relaxing the rules of the autocratic style of management, mainly by considering the psychosocial needs and creative potential of employees. H. Mintzberg identified ten roles and corresponding managerial competencies, which he divided into three categories (Schermerhorn, 2008). In the category:

- Interpersonal distinguished roles: 1) representational, 2) leadership, and 3) liaison, the performance of which required the ability to interact with the environment, direct, motivate, evaluate employees, and coordinate activities inside and outside the organization,
- information distinguished roles: 4. observer, 5. promoter, 6. advocate, and 7. entrepreneur, the performance of which required the ability to track trends and the doings of competitors and analyze them, gather and disseminate information within the organization, communicate information to the environment and professional groups, and stimulate the development of employees, encourage their initiative or present ideas,
- decision maker distinguished the roles of 8. antidisruptor, 9. resource disposer, 10. negotiator, the performance of which required the ability to prevent and constructively resolve conflicts, manage the organization's resources, conduct discussions, and negotiate inside and outside the organization to find satisfactory solutions.

The roles proposed by H. Mintzberg were the starting point for further considerations, in which they were modified and expanded. Over time, it began to be emphasized that the manager of the 21st century should, first of all, play the role of a professional prepared for his profession (Dąbek, 2002), able to solve complex, non-routine problems, but not on his own but with the participation of employees, which was associated with a gradual transition to a democratic style of management. Such a manager should be characterized by perceptual, organizational, intellectual, forecasting, motivational, decision-making and intuitive competencies (Kieltyka, 2016). At the same time, it should be emphasized that the indicated role is complemented by other roles, resulting from the contemporary conditions of the organization, which mainly include 1) globalization, 2) turbulent changes, 3) meeting the psychosocial needs of employees, 4) the growing importance of knowledge.

Re 1) Progressive globalization implies internationalization of business activities, which is now a basic condition for development that does not apply only to large corporations. The possibilities of modern information and communication technologies mean that even the smallest organizations can become international and operate in the global space. This situation defines another role of a manager - managing in an international environment, which requires new competencies. Such a manager should be characterized not only by good knowledge of at

least one foreign language or new telecommunications technologies, but also by competencies that allow him to effectively and efficiently manage international, multicultural teams, sometimes virtual, which involves distributed leadership (Ancona, Bresman, 2013). Among the competencies that such a manager should be characterized by are understanding and acceptance of the diversity of national cultures, which is related to emotional competence - emotional and social intelligence, which is expressed, among other things, in the ability to create interpersonal bonds and empathy (Kieltyka, 2016; Kuc, Zemigala, 2010; Skubis et al., 2023c). In addition, especially in the aspect of virtual teams, the manager is required to have the ability to motivate employees at a distance, or to exercise control over the effect of the entire team (Stankiewicz-Mróz, 2019). In the context of internationalization, another role of the manager is also pointed out - that of an explorer (Morgan, 2022), who should be characterized by curiosity about people who differ from him in culture and views, as well as the ability to notice and retain outstanding talent in the organization, regardless of their nationality.

Re 2) Today's world of turbulent change is becoming a catalyst for a manager to realize another role - that of a change agent. The importance of this role determines the accuracy of responding to the changes taking place in the environment, by creating the right conditions for accepting their effects on the organization, as well as overcoming the fears and resistance of employees that may arise. This determines managerial competencies, which include the ability to cope with changing conditions (Kotter, 2005), to consult and communicate during the planning and implementation of changes in the organization, as well as to provide adequate support to employees and stimulate them to actively participate in changes (Bednarska-Wnuk, 2012; Skubis et al., 2023b). It is worth emphasizing at this point that the modern manager should also be the initiator of change in the organization, including in crisis situations. Then he should play the role of a rescuer (Kieltyka, 2016), who should be characterized by a defensive attitude, a focus on organizational renewal, as well as the ability to select and implement an appropriate strategy. Initiating change in an organization also refers to its permanent development (Błaszczuk, 2004). This emphasizes the previously defined role of the manager-entrepreneur (Rakowska, 2007), who is now required not only to be able to solve large-scale problems, but also to be highly creative. This competence is the primary vehicle for new ideas and initiatives or the premise for a new look at existing ideas (Błaszczuk, 2004). This means that a modern manager should be open to new things and ready to learn (Stor, 2010), as well as characterized by the ability to stimulate employees to stimulate and develop their own creativity (Hon et al., 2014). In the context of openness to new things, it is worth pointing to the development of artificial intelligence (AI) and machine learning technologies, which will have a very big impact on the functioning of any organization and its members in the near future (Morgan, 2022). Hence, managers are increasingly required, among other things, to have the ability to overcome anxiety (their own and that of their employees) related to, among other things, fears of job loss and general dehumanization, in favor of seeing AI as an ally and learning about areas where it performs better than humans (e.g., making calculations faster and analyzing multiple variables).

A manager should emphasize the advantages of AI, but at the same time stress that its increasing use will not make humans redundant, as they have many competencies unavailable to AI. This involves the ability to create the right organizational culture, in which the use of empathy, sensitivity, values, as well as unlocking human potential and building mutual trust are important (Brown, 2019).

Re 3) Interest in the psychosocial needs of employees is not new, and it is based on the postulate of providing satisfying conditions conducive to effective work, which originated as a result of E. Mayo's research at Hawthorne, conducted within the framework of the traditional concept of human relations (Bieńkowska, 2013). With the passage of time, there has been a growing realization that energetic, creative, enthusiastic employees are the main source of value creation for an organization and determine competitive advantage to a greater extent than technological or financial factors (Juchnowicz, 2012; Bijańska, Wodarski, 2020). Thus, there has been a shift from personnel administration to management of employees understood as value-creating capital, which has implied new opportunities for motivation, based on psychosocial influence on employees, contributing to an increase in their commitment (Alajlani et al., 2010). With some simplification, it can be said that the essence of this impact is empowerment, consisting of, among other things, delegating responsibility and empowering decision-making, encouraging autonomy in the choice of work methods, building a culture of trust and learning (Grajewski, 2016; Skubis, Wodarski 2023; Zhang, Bartol, 2017, Charbonnier-Voirin, El Akremi, 2011). Empowerment implies a new role of the manager-democrat, also called the role of servant leadership (Grudzewski et al., 2010). This role is not based on a formal managerial position in the organizational hierarchy, but on informal authority, characterized by the respect and trust of employees, which stems from credibility in action and competence relating to the ability to apply a democratic style of leadership and methods supporting it (Bijańska, Wodarski, 2020). Such a manager should also be characterized by a system of values, which he should not only promote, but also initiate (Świątek-Barylska, 2010).

Re 4) The 21st century is identified with the era of knowledge. It is believed, knowledge management in an organization is the primary source of competitive advantage, and knowledge resources are counted among the most valuable assets of an organization (Stańczyk-Hugiet, 2010). Under such conditions, the modern manager is required to acquire, create and use knowledge, which involves the role of knowledge promoter, also called designer, priest, knowledge agent, etc. (Perechuda, 2009), which requires supporting knowledge sharing and learning processes in the organization (Akella, 2006; Roth, 2003). This corresponds with the aforementioned servant leadership, especially in terms of mentoring and coaching. Mentoring defines the relationship between an experienced manager and employees to provide support (e.g., by sharing knowledge and advice), shaping professional development and desirable role models (Hezlett, Gibson, 2007). It requires communication, friendliness and the ability to inspire trust and persuasion. Coaching, on the other hand, is aimed at intensive and systematic training of employees, consequently leading to improved organizational performance (Segers et al.,

2011). It requires the ability to mobilize employees to develop their knowledge and talents along a career path.

It should be noted that the functioning of modern organizations in the conditions presented has influenced their reorientation towards processes and projects. This has led to the development of the fields of process and project management. They have defined project managers and process owners, for whom the desired competencies have been defined. Thus, project managers should be characterized by competencies in the day-to-day management of a project so that it produces outputs at a set time, budget, quality, risk and benefit, which requires the ability to plan, coordinate the schedule, lead the team (including team building, motivating, conflict resolution), and think strategically to ensure that the organization derives maximum benefit from the project outcome (Grzesik, Piwowar-Sulej, 2013; Brajer-Marczak, Piwowar-Sulej, 2017; Podgórska, 2018). In turn, process owners should be characterized by the ability to apply knowledge from the field of process management, for the effective and efficient implementation of a specific process. In particular, this should refer to the ability to define the goal or goals to be pursued by the process, identify the resources necessary for its implementation, design the process (modeling the course and defining the metrics for its evaluation), measure the results and supervise the process to ensure the correctness of its course, respond to extraordinary deviations, as well as motivate the process performers and encourage them to make proposals to improve the process. In addition, the process owner is required to be able to formulate proposals and initiate and carry out changes in the course of the process, communicate with owners of other processes, verify the place of the process in the organization's process structure, and represent the process to the organization's top management (e.g. Grajewski, 2016; Brajer-Marczak, Piwowar-Sulej, 2017).

With the passage of time, it began to be emphasized that processes and projects are complementary elements of any modern organization, which are usually implemented together (Nowosielski 2017, 2018; Lichtarski, Osbert-Pociecha, 2019; Bitkowska, 2019; Sliż, 2021). This has led to the need to integrate process and project management into a single concept of a process-project organization, the importance of which has begun to be emphasized in the context of proper functioning and the development and achievement of competitive advantage in the future.

A review of the literature on the subject allows us to conclude that there is a cognitive gap in the concept of process-project organization. Its partial supplement is provided by considerations in the area of holistic view of processes and projects in management, which are included in the book "Process-Project Organization" (Sliż, 2021), considered by its reviewers to be the first in this area, covering Polish and foreign achievements.

So far (including in this book) little attention has been paid to the roles and competencies of managers of process-project organizations. However, it has been pointed out that in these organizations, the management of a particular process or project is not the responsibility of its owner or manager. Indeed, the "leader" in a process or project can be any employee who, in a particular situation, is the right person for it. Thus, we are talking about the role of a leader

of a process or project team, who at the same time may be a member of his or another team. It is assumed that such a leader operates in an environment oriented towards self-organization and self-control of colleagues, and his leadership is characterized by impermanence and transitivity.

It should be emphasized that the manager of a process-project organization fulfills different roles and has different competencies from the leaders of process or project teams. As mentioned, there is a cognitive gap in the literature in this regard, but it has been pointed out that the proper functioning of process-project organizations requires ambidextrous leadership (Zacher, Rosing, 2015; Constant et al., 2020; Sliż, 2021). This leadership, which takes into account the use of the executive and intellectual potential of all process and project teams (with appropriate support and motivation), is expressed by the process-project organization manager's desire to achieve balance in two layers:

- 1) operational, which includes the ability to implement incremental changes by expanding knowledge or implementing improvements to enable incremental upgrades over the course of operational processes and reactive projects,
- 2) exploratory, encompassing the ability to refine new knowledge, seeking the novelty needed for radical innovation in the course of exploratory processes and proactive projects.

In addition, it can be assumed that the roles and competencies of managers of process-design organizations should be related to the determinants of the success of these organizations, which can include (Sliż, 2021):

- 1) customer orientation, implying the need to manage processes and projects aimed at generating results (products/services) in line with the expectations of external and internal customers, which is combined with the ability to design processes and projects according to the model called COPCIS, from its components: Customers, Outputs (products/services), Process or Project, Competences, Inputs, Suppliers, as well as the ability to create an organizational culture that emphasizes the functioning of the market mechanism inside the organization, in which the modeling of processes and projects for internal customers should be done in the same way as for external customers,
- 2) operate according to business models appropriate to the goals of the exploitation and exploration layers, which is combined with the ability to select, as well as modify, these models to stay ahead of the competition,
- 3) participation and empowerment of employees in the space of exploitative and exploratory layers, which is combined with the ability to create an environment conducive to the expansion of employees' competencies and their generation of initiatives, as well as the implementation of an "employee competency market" in the organization.



### 3.2. Roles and competencies of managers of process-project organizations in practice

In order to identify the most important roles and competencies of managers of process-project organizations, targeted free interviews were conducted with executives of selected companies operating in Poland. Due to access to respondents, it was assumed that the primary condition for their selection for the study would be their headquarters in the Silesian region and internationalization. The sample for the study was selected in a non-random manner - based on the subjective assessment of the researcher, quota - from the population of the quota of representative units (Miszczyk, Walasek, 2013). According to the latest available statistics (Analizy statystyczne GUS, 2024), at the end of 2022, 248 entities in the Silesian province showed involvement in 418 foreign units. Taking this into account, using the sampling calculator (<https://www.naukowiec.org/dobor.html>), taking into account the 95% confidence level, 5% fractional size and 5% maximum error, the research sample size was calculated to be 151. To obtain it, 203 companies were asked to participate in the research. Of these, 175 declared their willingness to participate in the research.

The first step was to assess the level of process-project maturity of these enterprises, based on the corresponding model (Sliż, 2021), which included five levels and was based on the PMMM (project maturity assessment) and MPPM2 (process maturity assessment) models. It was assumed that the survey results would include the responses of managers of companies that are at levels 3, 4 and 5 of process-project maturity. Thus, of the 175 entities assessed, managers of 152 of them participated in the research, specifically:

- 1) 66 entities located at Level 5, defined as “Process-Project Organization” (Sliż, 2021, p. 2011), which means that their:
  - The organizational structure is characterized by a process-project arrangement.
  - Projects are implemented in a process convention.
  - The maturity level of process and project management is high in the space of operational and exploratory layers.
- 2) 45 entities at Level 4, defined as a “Process organization with a high level of project management maturity” (Sliż, 2021, p. 2011), meaning that their:
  - The organizational structure is characterized by a matrix arrangement.
  - Activities aim to implement a pure process structure with project organization or a process-project structure.
  - Executives consciously take advantage of the benefits of implementing process and design solutions, and recognize the need to group and integrate them in the space of operational and exploratory layers.

- 3) 41 entities that are at Level 3, defined as a "Process and Project Oriented Organization" (Sliż, 2021, p. 2010), which means that their:
- Activities are aimed at implementing a matrix organizational structure.
  - The system of measuring the performance of processes and projects is the basis for making management decisions.
  - The operational layer is clearly outlined and management activities are aimed at improving the efficiency and quality of process results.
  - Projects in the exploratory layer are implemented based on formalized process documentation.

Subsequently, the 152 entities selected for the study were evaluated in terms of their degree of internationalization based on the DOI model<sub>INTS</sub><sup>1</sup> (Sullivan, 1994), on a three-point scale (1 - small, 2 - medium, 3 - large degree). In the sample, 39 entities had a high degree of internationalization, 67 had a medium degree, and 46 had a low degree.

To conduct the research, an interview questionnaire was developed that included all of the roles and competencies outlined in para. 3.1, roles and competencies of managers of modern organizations, as it was assumed that they also apply to process-project organizations. The interview questionnaire was sent to the managers of process-project organizations, who are referred to as respondents hereafter. The purpose of sending the questionnaire in advance was to allow the respondents to familiarize themselves with the subject of the interview and to think about whether all the important roles and competencies of the managers of the process-project organization were included. Managers of 7 organizations sent their suggestions for supplementing or changing managerial competencies, which were included in the final version of the questionnaire (Table 1). No comments were made on the defined roles.

**Table 1.**

*Interview questionnaire*

Roles	Assessment of significance*	Role-specific competencies	Assessment of significance*
Professional		Perceptive abilities	
		Organizational abilities	
		Intellectual abilities	
		Predictive abilities	
		Motivational abilities	
		Decision-making abilities	
		Intuitive abilities	

<sup>1</sup> DOI<sub>INTS</sub> = Foreign Sales to Total Sales, Foreign Assets to Total Assets, Overseas Subsidiaries to Total Subsidiaries, Top Managers' International Experience, Psychic Dispersion of International Operations.

Cont. table 1.

Manager in an international environment	Communication skills, including good knowledge of at least one foreign language	
	Good knowledge of new telecommunications technologies	
	Understanding and acceptance of the differences in national cultures	
	Emotional and social intelligence	
	Ability to lead teams, including virtual teams	
	Ability to exercise control over the results of process and project teams	
Discoverer	Curiosity about people, including those who differ from culture and views	
	Ability to spot and retain outstanding talent in the organization, regardless of their nationality	
Change agent	Ability to create conditions in the organization to accept the effects of changes in the environment	
	Ability to deal with changing conditions	
	Ability to communicate while planning and implementing change	
	Ability to stimulate employees to participate in change	
	Seeing change as an ally	
Rescue	Ability to build trust and overcome resistance to change	
	Defensive posture	
	Strong focus on organizational renewal	
Entrepreneur	Ability to select and implement an anti-crisis strategy	
	Ability to solve large-scale problems	
	Creativity, broad-mindedness	
	Openness to new things and willingness to learn them	
Democrat - servant leader	Ability to stimulate employees to develop their creativity	
	Ability to use a democratic leadership style	
	Ability to promote and initiate organizational values	
Knowledge promoter	Ability to create a friendly organizational environment for good work results	
	Ability to acquire, create and use knowledge	
Ambidextrous leader	Supporting knowledge sharing and learning processes	
	Ability to leverage the executive and intellectual potential of all process and project teams	
	Focus on effective and efficient implementation of operational processes and reactive projects, as well as exploratory processes and proactive projects	
Success creator	Strive to achieve a balance in the implementation of operational processes and reactive projects, as well as exploratory processes and proactive projects	
	Ability to see through the interests of the entire organization, rather than just focusing on individual processes and projects	
	Ability to see processes and projects holistically according to the COPCIS model	
	Ability to create an organizational culture that emphasizes the functioning of the market mechanism within the organization	
	Ability to select and modify business models appropriate to the exploitation and exploration layers	
	Ability to create an environment conducive to expanding employees' competencies and generating initiatives by them	
	Ability to implement a "market for employee competence"	

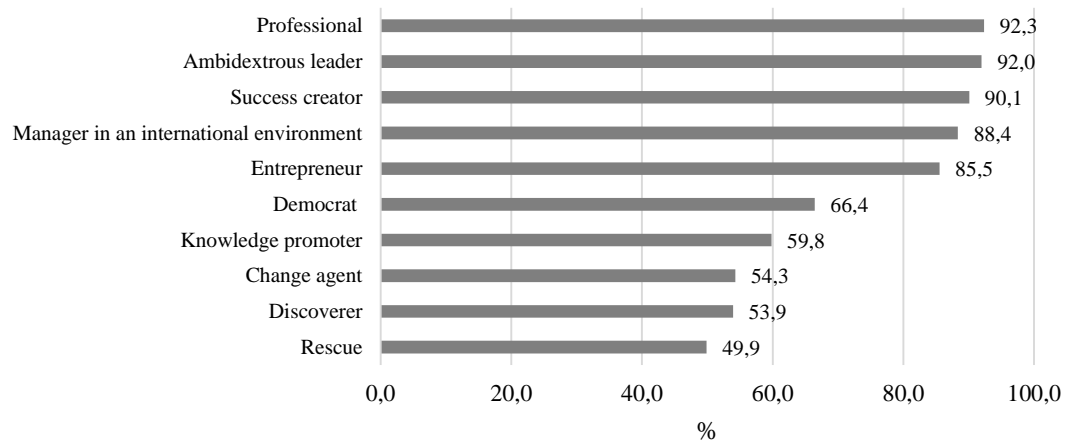
\* Role and competency importance rating scale: 3. high importance; 2. medium importance; 1. low importance; 0. no importance for the organization.

Source: own study.

Interviews were then conducted:

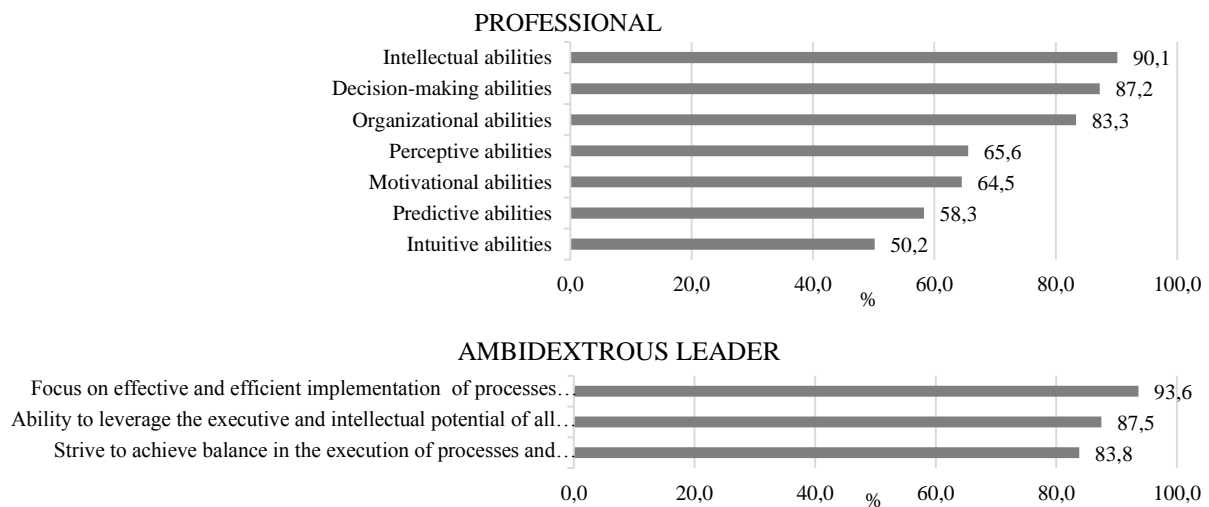
- 1) CAPI (Computer Assisted Personal Interview) with 131 managers, asking them the questions in the questionnaire in a face-to-face meeting,
- 2) CATI (Computer Assisted Telephone Interview) with 21 managers, asking them questions in a questionnaire during a telephone interview.

The choice of the quantitative data collection methods indicated was based on their characteristics, which include rapid acquisition of high-quality information and satisfactory response rates. During the interviews, any doubts of the respondents were clarified, for a clear interpretation of the roles and competencies evaluated. The obtained ratings of the importance of roles and competencies (in points from 0 to 3) were multiplied by the managers' competency factor, related to the level of process-project maturity of the organization they represented (1.0, 0.95, 0.9 sequentially for maturity levels 5, 4, 3), and then summed and converted into percentages. This made it possible to present the importance of the roles (Fig. 1) and the corresponding competencies (Fig. 2).

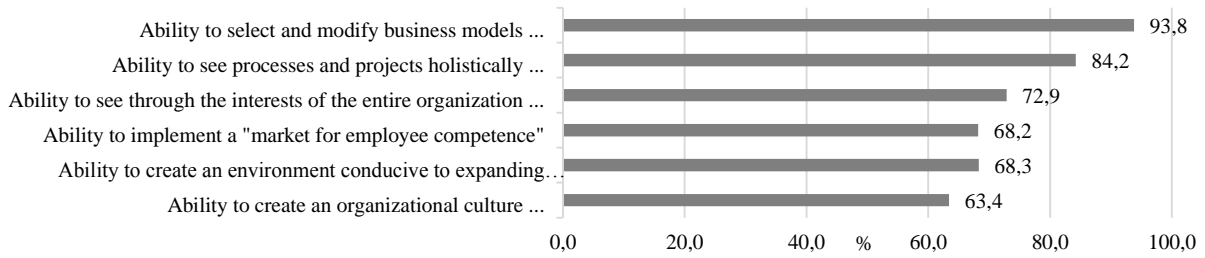


**Figure 1.** Results of the evaluation of the importance of the roles of managers in the process-project organization. 100%=maximum role importance.

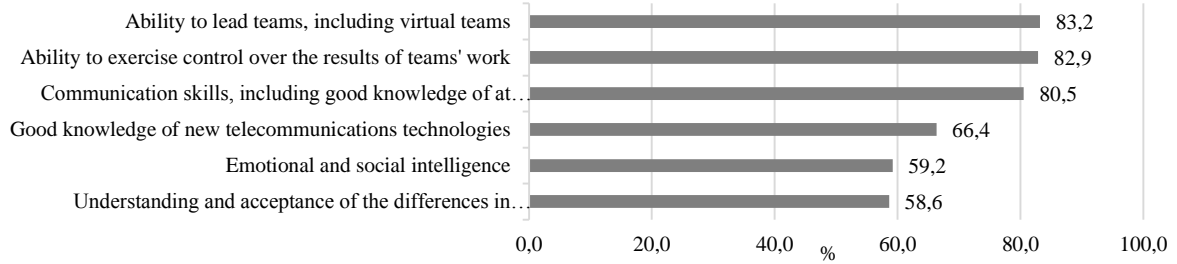
Source: own study.



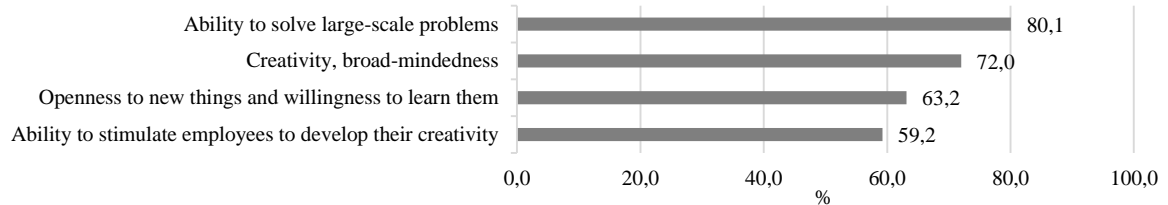
**SUCCESS CREATOR**



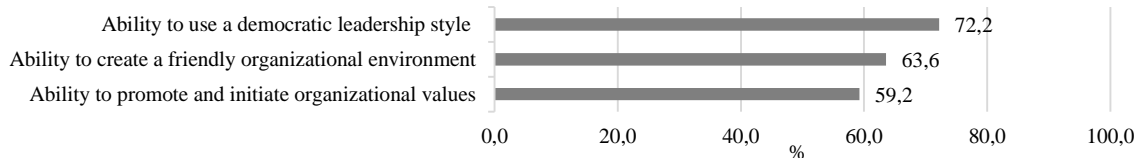
**MANAGER IN AN INTERNATIONAL ENVIRONMENT**



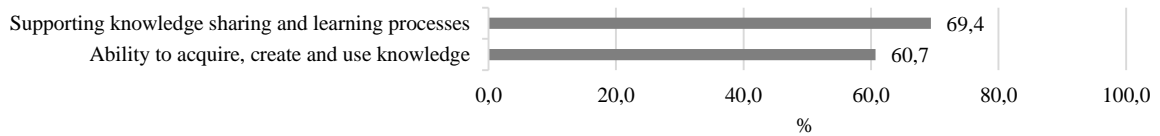
**ENTREPRENEUR**



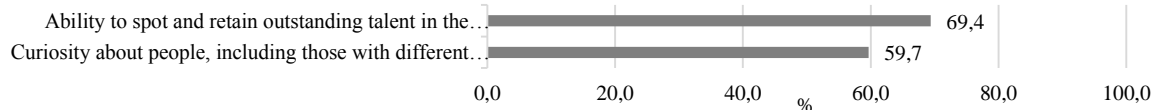
**DEMOCRAT**

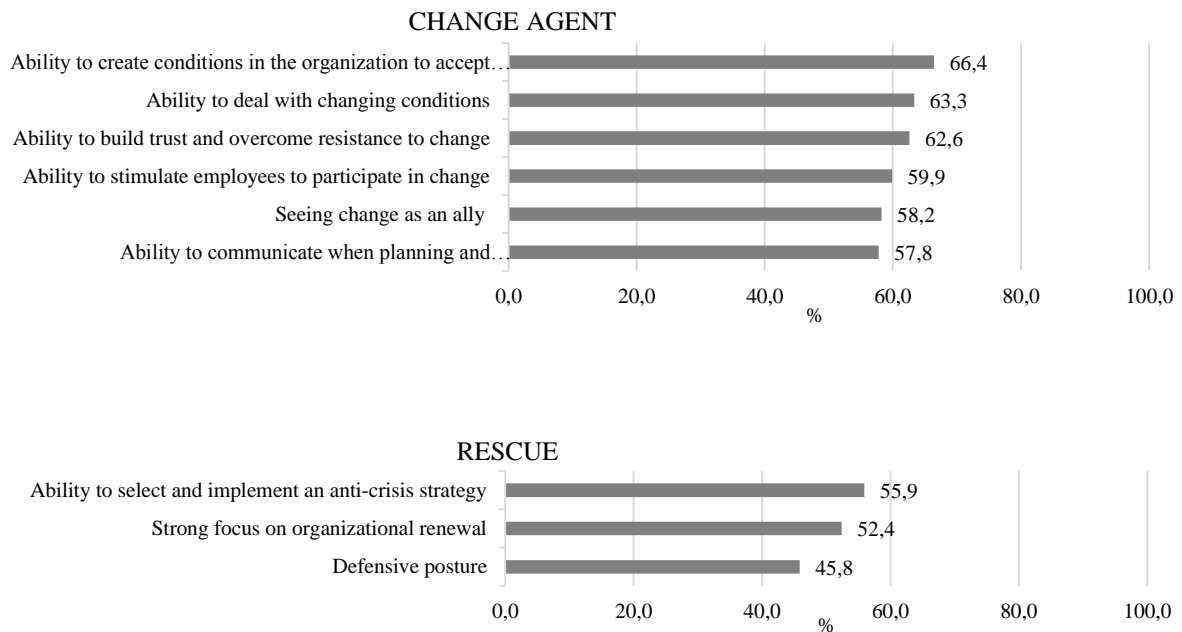


**KNOWLEDGE PROMOTER**



**DISCOVERER**





**Figure 2.** Results of the evaluation of the importance of the competencies of the managers of the process-project organization, in order of the importance of the roles; 100%=maximum importance of the competencies.

Source: own study.

The responses of the respondents show that the roles of professional, ambidextrous leader and success creator are the most important in a process-project organization, followed by the role of manager in an international environment and entrepreneur.

An analysis of the responses shows that the high importance of the role of the ambidextrous leader was indicated by almost 88% of respondents with the highest level of process-project maturity (58 out of 66), and the role of the manager in the international environment by almost 77% of respondents with a high degree of internationalization (30 out of 39).

With regard to competencies, it is worth noting that the importance of many of them does not correlate with the order of importance of the role, e.g., the most important competency of a success creator or ambidextrous leader is more important than the most important competency in the professional role. This is because the high importance of these competencies was indicated by respondents from organizations with the highest level of process-project maturity.

To address the issue of inconsistency in the perceived importance of certain roles and competencies, a ranking was developed to identify the most critical competencies that managers in process-project organizations should possess, independent of their roles (Fig. 3).



**Figure 3.** Results of assessing the importance of managers' competencies in a process-project organization, without considering the related role; 100% = maximum importance of competencies.

Source: own study.

Based on the results of the interviews, it can be concluded that the most important managerial competencies in a process-project organization, as indicated by the majority of respondents, include the following:

- ability to select and modify business models appropriate to the exploitation and exploration layers,
- focus on the effective and efficient implementation of operational processes and reactive projects, as well as exploratory processes and proactive projects,
- intellectual abilities.

According to respondents, the following competencies are also important in process-project organizations:

- ability to leverage the executive and intellectual potential of all process and project teams,
- decision-making abilities,
- ability to see processes and projects holistically according to the COPCIS model,
- strive for a balance in the implementation of operational processes and reactive projects, as well as exploratory processes and proactive projects,
- organizational skills,
- ability to lead teams, including virtual teams,
- ability to exercise control over the results of process and project teams,
- communication skills, including good knowledge of at least one foreign language,
- ability to solve large-scale problems.

Next, respondents indicated the importance of the following competencies:

- ability to look through the interests of the entire organization, rather than just focusing on individual processes and projects,
- ability to apply a democratic leadership style,
- creativity, broad-mindedness,
- ability to spot and retain outstanding talent in the organization, regardless of their nationality,
- supporting knowledge sharing and learning processes,
- ability to create an environment conducive to expanding employees' competencies and generating initiatives by them,
- ability to implement an "employee competency market",
- ability to create conditions in the organization to accept the effects of changes in the environment,
- good knowledge of new telecommunications technologies,
- perceptual abilities,
- motivational skills,
- ability to create a friendly organizational environment for achieving good work results,



- ability to create an organizational culture that emphasizes the functioning of the market mechanism within the organization,
- seeing change as an ally,
- openness to new things and willingness to learn them,
- ability to build trust and overcome resistance to change,
- ability to acquire, create and use knowledge.

According to respondents, competencies of medium importance in process-project organizations included, in turn:

- ability to stimulate employees to participate in change,
- curiosity about people, including those who differ from the culture and views,
- ability to promote and initiate organizational values,
- ability to stimulate employees to develop their creativity,
- emotional and social intelligence,
- understanding and acceptance of the differences in national cultures,
- predictive abilities,
- ability to cope with changing conditions,
- communication skills when planning and implementing change,
- ability to select and implement an anti-crisis strategy,
- strong focus on organizational renewal,
- intuitive abilities,
- defensive posture.

As part of the discussion, it is worth noting that the results obtained do not confirm the opinion of many authors of contemporary research, which emphasizes the vital and often most important importance of the role of the democrat. According to the respondents, it is only in 6th place in the order of importance in a process-project organization (fig. 1). Also, managerial competencies relating to this role were not considered most important, with the ability to apply a democratic leadership style ranked only 14th (fig. 3). It should also be noted that the importance of none of the roles was rated as low (the lowest, slightly below average, was assigned to the role of rescuer). The same was true of competencies - of these, only one (defensive posture), has a slightly lower than average importance. Of course, in the discussion of the results obtained, one can ask about their reliability. The authors of the publication realize that the opinion of a research group that includes only internationalized companies may differ from other, especially non-internationalized entities, for which the managerial roles or competencies related to this aspect of operation have a different meaning. Differences in opinions may also be caused by the respondents' residence in the Silesian province, the Upper Silesian and Zagłębie Metropolitan Area, which includes 41 cities and municipalities with 240,000 companies and enterprises. In other provinces, especially smaller and not so heavily industrialized, opinions may be different. So, it would be worthwhile to conduct research on a larger scale, such as the entire

country, with a properly selected sample, using other research methods, such as CAWI (Computer Assisted Web Interview). The survey also did not take into account the respondents' business focus and size, which may have influenced the answers given. It was only noted that most of them were operating in the industrial processing and services sections of the SME sector.

## Summary

The article presents the results of research, relating to contemporary managerial roles and competencies. It is noted that the current conditions of the functioning of organizations, such as globalization, turbulent changes, the growing importance of knowledge and the psychosocial needs of employees, among others, determine new managerial roles and competencies, different from the traditional ones. It has been noted that the functioning of modern organizations in the conditions presented has influenced their reorientation towards processes and projects, which has affected the emergence of process-project organizations. Since there is a cognitive gap regarding managerial roles and competencies for these organizations, the research process drew a representative sample from the population of organizations working with foreign entities, based in Poland, in the Silesia region.

Then, after assessing the process-project maturity of this sample, 152 entities were selected for further research. CAPI and CATI interviews were conducted with their managers, which made it possible to identify the managerial roles that are most important in process-project organizations. These include, in turn, the roles of professional, ambidextrous leader and success creator, followed by international manager and entrepreneur. On the other hand, managerial competencies of greatest importance in a process-project organization include, in turn, the ability to select and modify business models appropriate to the exploitation and exploration layers, focus on the effective and efficient implementation of exploitation processes and reactive projects, as well as exploratory processes and proactive projects, intellectual capacity, and the ability to use the executive and intellectual potential of all process and project teams, decision-making abilities, the ability to see processes and projects holistically according to the COPCIS model, striving for balance in the implementation of exploitative processes and reactive projects, as well as exploratory processes and proactive projects, organizational abilities, the ability to lead teams, including virtual teams, the ability to exercise control over the results of process and project teams, communication skills, including good knowledge of at least one foreign language, the ability to solve large-scale problems.

As discussed, the opinions of the sample of 152 managers working in internationalized companies may differ from those in non-internationalized entities, where the roles or managerial competencies related to this aspect of operation hold a different significance. Differences in opinions may also be caused by the respondents' residence in Poland, within the Silesian

Voivodeship. Opinions may vary abroad or in other provinces, especially smaller and less industrialized ones. Additionally, the survey did not consider the respondents' business focus and size, which could have affected their answers. The authors plan to conduct further research on a larger scale, including studies outside Poland.

The obtained results bring new knowledge about managerial roles and competencies in modern process-project organizations, which can be valuable for both academic research and management practice. For academics, this publication offers a basis for further exploration of the evolution of managerial roles and competencies, particularly in process-project organizations. For practitioners, on the other hand, the knowledge can be useful, among other things, in the context of competence management, to identify the competence gap or competence profiles of managers of process-project organizations.

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