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### Manager's compe tence model in the face of new economic challenges – research report

"Customers are the most important. Employees are the most important. If you take care of your employees, They'll take care of the custom".

Richard Branson

#### 1. Introduction

In the 21st century, the changes taking place in the business environment mean that today's managers have to face many problems. Now there is no longer any possibility to build a competitive advantage, only on the basis of material resources and in the face of the fourth industrial revolution. In such a situation, managers must implement the strategy of their organisation, taking into account not only economic but also social goals. This need to adapt to the turbulence of the environment forces companies to search for managers who will not only guarantee the security of financial issues, but will also make optimal use of available human capital.

Therefore, the main aim of this study is to try to determine, on the basis of the conducted research, the optimal competencies and skills that a manager should have in order to effectively manage a team (in the opinion of its members). The author will also point out the connection and differences between the obtained data resulting from the Polish reality

Michał Igielski Ph.D., Gdynia Maritime University, Faculty of Entrepreneurship and Quality Science, Poland, ORCID: 0000-0003-4680-3733. and the contemporary guidelines to the competence model of IPMA Individual Competence Baseline for Project, Programme & Portfolio Management, which in his opinion best reflect the challenges of the contemporary market.

As the literature analysis and empirical research have shown, managing a company is a very complex and difficult skill in contemporary economic conditions. A manager must not only have the right personal qualities, but must be equipped (or acquire them) with a large set of skills (technical, humanistic, conceptual and design) that will bring his or her organisation closer to success. All the more so because this success is now determined primarily by the entrepreneurship, commitment and initiative of employees.

#### 2. The conditions of modern economy

In the 21st century, the economy is perceived by increasing volatility and increasing competition. The environment in which businesses operate is very complex and characterised by permanent change. This makes it absolutely necessary for all economic actors to adapt constantly. On the other hand, apart from a strong connection to the environment, the number of market players (companies and various business environment institutions) who interact with each other is rapidly increasing.

The scope of links between enterprises and the environment is currently not limited to the technical economic sphere, but extends to the sphere of social, political and cultural problems. New challenges force companies to apply innovative solutions in order to constantly develop and increasingly focus on customer needs. This is accompanied by intense globalization processes and broadly defined international interdependencies in economic and social life (Mitek and Miciuła, 2016).

In the new global economic reality, companies - in order to survive and stay on the market - must be able to anticipate and assess their situation accurately. They must have the ability to act effectively and to develop in a constantly changing environment, as well as to constantly make decisions defining: the way, form, pace of implementation, scope, depth and complexity of structural changes. These are current determinants not only of the survival of the company and restoring its balance with the evolving environment, but also of the formulation of expansive (dynamic) intentions which ensure efficient functioning, gaining a competitive advantage and further development. This means that companies have been forced not only to seek and create undertakings that adapt or anticipate to an increasingly turbulent environment, but also to restructure

their systems and change their structure. this will allow them to acquire new features, procedures and actions that are necessary for transformation, expansion and implementation of modern management methods (Borowiecki, 2010, p. 14).

Another feature of the modern economy, we can accept rapid technological progress. For several years now, we have been clearly observing a very rapid development of new technologies with their increased availability, in the professional and private sphere, of more and more people. Importantly, we are in a situation of transformation, transition to a new industrial era. The third industrial revolution, referred to as the information revolution, which was based on knowledge as the main capital of the organization and its key role in economic development, is slowly becoming forgotten. It could not be otherwise in the face of the problems accompanying all organizations, with collecting, storing and processing very large amounts of information. We were all accompanied by an information hype, in which it is difficult to separate valuable knowledge from useless information.

Nowadays, the fourth industrial revolution is becoming a fact, which pays attention to the speed and quality of information transmitted. Information and communication technologies and their universality remain the basis of these changes. This phenomenon is already clear that all industrial changes initiated by new technologies have begun to be referred to as the Industry 4.0 era (in Polish, there is also the term Digitisation 4.0), and government programmes of individual countries call for preparation for these changes and maximum use of their potential (Olender – Skorek, 2017, p. 41).

At the very end, one of the most important, according to the author, determinant of the modern economy, i.e. knowledge, which is understood as a result of the intellectual potential of an enterprise. The knowledge-based economy, which has been the result of this phenomenon for many years, is a consequence of competition mechanisms in the most developed and saturated global markets. Wherever the key to success was (and still is) differentiation - offering the customer a new product that has unique characteristics, creativity, imagination and innovation should continue to be considered as key components of the economy. As the basis for the adaptation of companies to this condition, we have to take the intellectual capital that is created on the basis of the knowledge, skills, innovation and internal abilities of the employed staff, including managers (Walczak, 2016).

To sum up, each of the global changes (industrial revolutions) to date has led to breakthrough changes in production processes (service provision too). It also made it possible, above all, to produce goods and services more massively and, what is important, more efficiently. Therefore, there also had to be changes in the management of enterprises, both in relation to their material resources and those in the 21st century, more and more importantly, intangible.

#### 3. Essence of competence

The concept of competence has developed mainly in the field of human resource management (HRM), where it is understood as the ability of employees to perform the job. According to the author of the study, it is therefore closely related to the activities of people in the organization. It is worth noting at this point that the competences in the case of a business entity refer e.g. to meeting needs, providing products or the highest quality services. In the case of people/employees, it is the person who is competent e.g. while performing a given activity.

Organisations which manage competences correctly in time have noticed that by employing competent, well-prepared people and creating conditions for their development, they improve the economic condition and market position and create a new quality of the organisation culture. Managers in companies also recognize the value of competence. This is because more and more often one can come across various initiatives concerning competence management in Polish business organisations (Hysa and Kowalczyk, 2014).

Observed from the level of terminology, the term competence is a multidimensional concept, which causes difficulties in defining it, and refers to specific people and their behaviour in the workplace. This concept appeared in the literature on the subject at the beginning of the eighties (Załoga, 2013, p. 452). Of course, at the turn of nearly 50 years, many researchers tried to find the best possible approach to this concept. For example, M. Sloman (1997, p. 118), considered it to be an ability to perform activities within a task area, striving for the levels of work performance expected in employees. In turn, D. Thierryi Ch. Sauret and N. Monod (1994, p. 6) considered that competence is the ability of an employee to act in order to achieve the desired objective under the circumstances by means of specific measures. Another interesting definition, perhaps more contemporary in the opinion of the author of the study, refers to a set of characteristics of a given person, which contains elements characteristic of that person, such as: personality traits, motivation, self-esteem related to group work, skills and knowledge that that person has and uses (Tyrańska, 2012). In a similar tone, B. Mikuła (2006, p. 210) speaks about competences, claiming that this is the

entirety of knowledge, ability to act and attitudes forming a whole depending on the purpose and conditions of action. He also draws attention to the ambiguity of the concept of competence in Polish. He believes that in practice, competences are most often treated as the power to act in a specific scope, including decision-making (Mikuła, 2001, p. 50). In a different way, competence is defined by Cz. Nosal (2001), who believes that competence is a complex mental disposition, exposed by the ability, which requires continuous training.

A similar lack of clarity can be encountered when following the English literature, where two very similar concepts of competence often occur. The author refers here to competence and competency. However, following M. Armstrong (2000), it can be assumed that the term competence is characterized by so-called hard competences that allow to perform correctly defined duties, while the term competency, in turn, illustrates the soft competences needed to determine the right way to perform this work.

As you can see, competence is a very complex term, which it evaluates as economic life changes. Therefore, according to the author, it is difficult to create a complete list of competences, but it is worthwhile, following T. Rostowski (2004, pp. 78-79), to try to make at least a partial categorisation of this notion:

- 1. Competences related to abilities concern the potential of employees, development opportunities, use of abilities to acquire new competences.
- 2. Competencies related to skills and abilities are essential for success in a specific task. These competences include: communicative, mental, interpersonal, technical, business, organizational, etc.
- 3. Competencies related to knowledge a group of competencies that prepare you to perform specific tasks within a profession or positions.
- 4. Physical competence all competences related to the physical requirements of the workplace, i.e.: physical fitness, sensory awareness, psychophysical abilities.
- 5. Action Style Competence refers to the way in which goals are defined, what is planning and organisational skills.
- 6. Personality related competencies these are complex skills that determine the effectiveness of dealing with certain types of social situations. These competences result from personality traits and influence the quality and manner of performing tasks.
- 7. Competences related to principles and values refer to values, beliefs, principles.
- 8. Competences related to interests these are competences that indicate preferences for tasks, type of work and working environment. They influence

the effectiveness of work, especially when the type of work is fully compatible with the type of interests.

On the other hand, when analysing the distinguished definitions and the above categorisation, it can be pointed out that the basic and most important components of competences include (Matysik, 2016, pp. 18-19):

- ability to work in teams ability to cooperate with people,
- ability to search for and process information,
- ability to organize the work of others, negotiate goals, set directions, look for compromises, control and analyze the results obtained,
- ability to organise one's own work, set goals, create an action plan,
- ability to function in complex organisations, i.e. the ability to formulate a problem and find a solution, reacting in unpredictable situations.

To sum up, after analysing all the above mentioned definitions and competences, we can see that they complement each other. They also have, in the author's opinion, the most important in the XXI century, a huge impact on the functioning of the company and achieving and maintaining, by them, a lasting competitive advantage in such a turbulent market. This is the whole of employees' abilities, which translates into the realization of business goals set by the companies. Why the whole thing? Because employee competence should be seen as a set, because an individual employee will never gain such knowledge as the whole team. It is the key employees, who often also include managers, that make up every organization today and directly influence its market position.

### 4. Model of managerial competence

The current Polish manager is a person who can manage the entire enterprise, in the case of most often small entities, with a smaller or larger power of attorney of the owners or some of its separate areas. The manager may also be, which is a frequent phenomenon in the economy saturated with small enterprises, the owner and the employer in one person. However, this is not important from a practical point of view, but only the fact that it has to be a person who, using the resources and actions of others, is able to achieve the assumed goals.

From a theoretical point of view, a manager is a person who realizes the management process by fulfilling managerial functions, planning and controlling and making decisions. To put it simply, it can be said that the work of a manager comes down to: making decisions, managing human teams, constant improvement and adjusting the organization to changes taking place in the environment (Nogalski and Śniadecki, 2001, p. 81).

The performance of particular management functions depends on the predisposition of the manager, namely on general and detailed knowledge, erudition, reading, width of horizons of seeing problems, experience, ability to translate theoretical solutions into practice, active attitude and happiness (Antoszkiewicz, 2007). Examples of such a person's competences appearing in the literature on the subject are shown in table 1.

**Table 1. Selected managerial competences** 

A. Rakowska, A. Sitko-Lutek	Teamwork skills; ability to make changes; technical skills; self-improvement; stress management; interpersonal skills; conceptual skills; ability to influence; authority; ability to manage conflicts;
D. Thierry, Ch. Sauret, N. Monod	Ability to organise work for oneself and others; ability to seek, process and share information; ability to work in a group; ability to formulate a problem and seek solutions; ability to focus on objectives and priorities; ability to make decisions and seek compromises.
M. Armstrong	Flexibility in action; adaptive skills; communication; performance orientation; ability to work in a group; leadership skills; ability to focus on the client; analytical and diagonal skills; commercial awareness; stimulating the development of others.

**Source:** own studies based on: (Rakowska and Sitko-Lutek, 2000, pp. 35–36; Thierry at all, 1994, pp. 174-175; Armstrong, 2000, pp. 247-248)

On the other hand, there are many models of managerial competence in the literature that can help us determine whether a person meets our expectations. Interesting models include PMCD (Project Manager Competence Development) and ICB (Project Excellence Baseline) competence guidelines. In the first case we can distinguish three categories of competences - knowledge, effective management skills and personal competences. In the second one, these are: technical, contextual and behavioural categories (Marek-Kołodziej, Łapuńka & Jagoda-Sobalak, 2018, p. 263).

However, the author of the study was particularly interested in the new guidelines for the IPMA Individual Competence Baseline for Project, Programme & Portfolio Management competence model, which were divided into three groups: human, practical and prospective (table 2). Each competence element has been assigned the appropriate knowledge and skills that a manager should have. To assess the level of competence of a project manager are used Key Compentence Indicators (KCI). They provide

information whether a given person in a managerial position has adequate knowledge and skills to effectively achieve the assumed objectives (IPMA, 2018, p. 24).

Human competencies  Practical competencies	Result orientation Self-improvement Interpersonal communication Leadership and commitment Conflict management Teamwork Negotiation skills Creativity and entrepreneurship Time management Resource planning and control Organizing communication in a team Financial and quality management Change and risk management Ability to define target	KEY COMPENTENCE INDICATORS
Competence in perspective	<ul> <li>Management supervision</li> <li>Strategy</li> <li>Knowledge of standards and regulations</li> <li>Operational activities</li> <li>Creating an organisational culture</li> <li>Understanding of the balance of power</li> </ul>	KEY

Figure 1. Model of managerial competence

Source: own studies based on IPMA, 2018, s. 27-31

All the above mentioned competences create a specific system of dependencies/characteristics/competences, which, in the opinion of the author of the article, is not only necessary to manage a project, but is also, theoretically speaking, a necessary condition to effectively manage a company or its formally separated part. Managers equipped with human, practical and prospective competences, which are of course consistent with the strategy of a given company, have the opportunity to obtain optimal results. However, does it have 100% coverage with practical reality? After all, the number, specialization or importance of individual managers is very different in every organization. The first condition is usually the organization itself, i.e. the industry in which it operates, its organizational structure combined with culture or finally the size. Another, no less important condition is undoubtedly the human capital management system, which in Polish conditions leaves much to be desired. The author will attempt to answer this question in the next part of the study.

#### 5. Analysis of research results

In order to identify the key competencies of business managers in Poland, according to their subordinates, the author of the study carried out empirical research in 2019, which covered 14 purposefully selected large companies based in Poland - a total of 200 employees took part in the research (characteristics of the group of respondents in table 2). The subject matter presented in the study is only a part of the conducted research. Its second area was to determine the determinants of managing the competences of key employees in the context of threats, but also, of course, opportunities that accompany the fourth industrial revolution.

Table 2. Characteristics of the group of respondents

Number of respon- dents	Gender		Age				eeship ii company	n the	]	Education	ı
	F	M	up to 30 years old	30-50 years old	over 50 years old	up to 5 years	5 - 10 years	over 10 years	profes- sional	me- dium	higher
200	121	79	36	111	53	41	89	70	0	33	167

Source: own studies based on IPMA, 2018, s. 27-31

At the stage of planning the research process, the author intended to use a deliberate and random sample selection based on information about the size of the company from the GUS data for 2018 (3674 business entities meeting the size criterion). However, due to limited resources, the author decided on the principle of selection on the basis of his own declaration of participation (he sent inquiries to 64 entities - 4 in each province - whether they are interested in participating in such an undertaking). Unfortunately, the research sample did not reflect the assumed characteristics of the whole group for the country. Therefore, the presented research results cannot be a complete set for Poland - they constitute a basis for expanding the research process in the future, and for now we can only treat them as a pilot study.

In the presented research, the author used his own questionnaire - the assessment of managers by their subordinates. This choice was dictated by the

fact that it is the employees working in a given position who have the greatest knowledge of the nature of their work, as well as their superiors - in this way we can obtain information most suited to the objectives of the survey, ask questions regarding strictly managerial competences and their use. On the other hand, it is difficult to find optimal research methods that would be simple enough to induce the respondents to take part in the research, as well as to allow the consent of the main management board of the examined entity. Statistica version 12 and a Microsoft Excel spreadsheet were used for statistical calculations. In this presentation, a quartile stretch of research was used, which allowed to determine which of the examined phenomena are the most important in the opinion of the respondents and what was the diversity of their opinions.

The starting point for the research process was the model of competences of project managers described in figure 1 and the definition of competences as individual dispositions in the area of knowledge, skills and attitudes that allow to perform professional duties at the expected level.

At the beginning of the research, the respondents indicated the competences that they considered necessary in their superiors' work. Twenty competences (table 3) were assessed as: very necessary (assigned assessment - 3), medium (assigned assessment - 2), unnecessary (assigned assessment - 1).

Table 3. Competence of managers in order of priority

No.	Competence	Rank	Number of indications	
1.	Leadership and commitment	20	198	
2.	Creativity and entrepreneurship	19	179	
3.	Teamwork	18	165	
4.	Result-orientation	16,5	131	
5.	Interpersonal communication	16,5	121	
6.	Organisation of communication in the team	15	121	
7.	Resource planning and control	13,5	89	
8.	Ability to define target	13,5	89	
9.	Self-improvement	12	75	
10.	Conflict management	11	68	

11.	Financial and quality management	10	60
12.	Negotiating skills	9	57
13.	Business	8	51
14.	Creation of an organisational culture	7	49
15.	Time management	5,5	46
16.	Change and risk management	5,5	198
17.	Strategy	4	179
18.	Knowledge of standards and regulations	3	165
19.	Understanding of the balance of power	2	131
20.	Management supervision	1	121

Source: own studies

It turned out that the respondents rarely assessed the competence as very necessary. This forced the author to correct further part of the research. However, one interesting conclusion emerged concerning the difference in perception of this area in the Polish reality. The necessary competences were indicated as leadership and commitment, creativity and entrepreneurship as well as the ability to work in a team. The least important (or even not needed, looking at the number of indications) were considered to be the knowledge of norms and regulations, understanding of the balance of power and management supervision. Competences are divided by quartiles (Q) and are called very important when  $R \ge Q3$  (grades reach a value greater than or equal to a third quartile), important, when  $Q1 < R \le Q2$  (ratings achieve a value less than or equal to the second quartile and are simultaneously greater than the first quartile) and  $Q3 > R \ge Q2$  (ratings achieve a value greater than or equal to the second quartile and are simultaneously smaller than the third quartile) and less important when  $R \le Q1$  (ratings achieve a value less than or equal to the first quartile) - the value of the quartile: Q1 = 21, Q2 = 23, Q3 = 25.

Taking into account the suggestions of the respondents, in the following questions, the author decided to give them a "free hand" in determining important skills that their superior should have. The task of the next group of questions was to get to know the respondents' opinions on the education of a person in a managerial position, their professional experience and the optimal management style (figure 2).

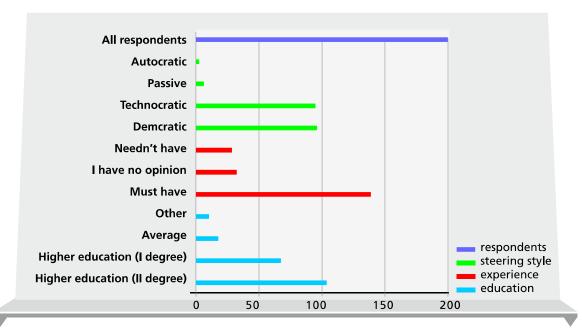


Figure 2. Education and experience of the manager and the management style preferred by employees

Source: own studies

The above data show that the vast majority of the persons questioned consider that people with higher education should be recruited for managerial positions (more than half even consider that they should have a second degree) and indicate experience in the industry as a condition for effective management. However, as far as the style of management is concerned, these opinions were more divided - the respondents found it difficult to decide between the democratic and technocratic style (both answers received by far the largest number of indications, oscillating around 50%).

In the last group of questions, the author asked the respondents to indicate in their opinion the 5 most important leadership qualities a manager should have (nothing was imposed on them). In addition, given that in the 21st century motivational systems are very important, which are supposed to help in greater involvement of the employed staff, the respondents were also asked about optimal methods of motivating, which should be used by the superior (figure 3).

More than 2/3 of the respondents (167 people) believe that a manager should be a good organiser above all. The second most important feature, according to them, is full commitment to the work they do (136 indications). Next in order, but

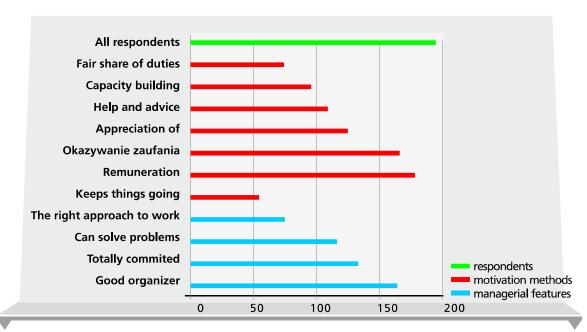


Figure 3. Managerial competence and the best way to motivate employees

Source: own studies

also with a very large number of indications, were: the ability to solve problems, a model approach to work and creating a good atmosphere around it. In addition, but much less popular (up to 20 indications) was uncompromising. Apart from the answers presented above, the respondents also indicated their authority and vision of development. In turn, for almost all employees, which should hardly surprise anyone, the best motivation to work is adequate remuneration. On the other hand, it may come as a surprise that they received many more than half of the votes, i.e.: showing trust, appreciation or help in work - in a word, support. Since direct superiors are most often responsible for them, another area of competence is being drawn up, which can be considered crucial in the Polish reality.

#### 6. Conclusion

To sum up, we can certainly say that managerial competence will remain a permanent element of management, as will physical assets, organizational structures, strategies, processes, systems, financial and information resources. On the other hand, looking at the permanent changes that are constantly taking place in the economy, the determinants related to management - the most important value for organizations in the XXI century - will change. In this situation, the management of a company has become a much more creative process, which favours the development of employees. This process aims at effective and optimal use of their possibilities. This means focusing, not only on resources management, but also on directing people to use the energy they possess and stimulate them to their own inventions in achieving their goals. This is the main task for today's managers, who are thus faced with specific requirements for their competences.

The research results described above show that employees value well-educated and experienced managers who are not afraid to cooperate on the basis of democratic and technocratic management style. It is also important for people in these positions to have competences that will help to make better use of the employees' potential and motivate them to get more involved in their tasks. Support, appreciation, help or good organisation of work are just not numerous, but extremely important for employees, which their managers should be equipped with.

Moreover, by changing the managers' approach to their subordinates (this obviously requires specific competences), it is possible to introduce a partnership atmosphere at work, change ossified organisational cultures and ways of motivating not adapted to modern conditions. All this will lead to the development of the company in the near future.

#### **Summary**

## Manager's competence model in view of new economic challenges – research report

The main aim of the article is to try to determine, on the basis of the conducted research, the optimal competencies and skills that a manager should have in order to effectively manage the team (in the opinion of its members). The author will also indicate the connection and differences between the obtained data resulting from the Polish reality and the contemporary guidelines for the IPMA competence model. Apart from literature analysis, the author chose a diagnostic survey (research technique questionnaire) as another research method. The respondents were, in 2019, employees (who agreed to take part in the survey) from 14 deliberately selected large enterprises based in Poland (200 people in total took part in the research process). After the analysis of the literature and the results of the conducted research, of course bearing in mind its pilot character, we can see that the

perception of the competencies and skills of a manager, in Poland, is not fundamentally different from the model of competencies presented in the content. The only question that remains is whether this will be enough to bridge the gap between Poland and developed countries, especially in the face of new economic challenges.

**Keywords:** the fourth industrial revolution, competence, managerial competence.

#### Streszczenie

# Model kompetencji kierownika w obliczu nowych wyzwań gospodarczych – raport z badań

Głównym celem artykułu jest próba określenia, na podstawie przeprowadzonych badań, optymalnych kompetencji i umiejętności, jakie powinien posiadać kierownik w celu skutecznego zarządzania zespołem (w opinii jego członków). Autor wskaże również powiązanie i różnice uzyskanych danych wynikających z polskich realiów ze współczesnymi wytycznymi do modelu kompetencji IPMA. Poza analiza literatury, autor jako kolejną metodę badawczą wybrał sondaż diagnostyczny (technika badawcza – ankieta). Respondentami byli, w 2019 roku, pracownicy (którzy wyrazili zgodę na udział w badaniu) w 14 celowo dobranych dużych przedsiębiorstwach, mających swoją siedzibę na terenie Polski (w sumie w procesie badawczym wzięło udział 200 osób). Po analizie literatury i wyników prowadzonego badania, oczywiście mając na uwadze jego pilotażowy charakter, można zauważyć, że poostrzeganie kompetencji i umiejętności kierownika, w Polsce, nie różni się zasadniczo od przedstawionego w treści modelu kompetencji. Pozostaje tylko pytanie, czy to wystarczy by niwelować dystans Polski do państw rozwiniętych, tym bardziej w obliczu nowych wyzwań gospodarczych.

Słowa

**kluczowe:** *czwarta rewolucja przemysłowe, kompetencje, kompetencje kierownicze.* 

**JEL** 

Classification: F02,L 22, M12, M54

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