

MAKING TEAM VIABLY – A CHALLENGE FOR CONTEMPORARY COMPANIES

*Alicja Smolbik-Jęczmień*¹

University of Economics in Wrocław

*Barbara Chomątowska*²

University of Economics in Wrocław

*Iwona Janiak-Rejno*³

University of Economics in Wrocław

*Agnieszka Żarczyńska-Dobiesz*⁴

University of Economics in Wrocław

1. Introduction

Over the last 50 years, teams have become a central element in the functioning of various types of organizations, both in the private and public sectors. The increase in the popularity of the team form of work organization was accompanied by numerous studies that provided evidence for a positive correlation between work based on teams and broadly understood results achieved by enterprises [Mathieu et al., 2008; Kozłowski, Bell, 2003; Katzenbach, Smith, 1993]. At the same time the dynamically changing, highly uncertain and complex environment and the growing need for innovation have given rise to numerous changes within enterprises. Among other things enterprises had to redesign their organizational structures, largely focused so far on individuals, so as to create conditions for necessary changes, including those conducive to teamwork. Many organizations have begun to develop towards TBO – Team Based Organizations [Kennedy, 2003; West, Markiewicz, 2004].

¹ ORCID 0000-0002-1441-5931.

² ORCID 0000-0002-6506-7922.

³ ORCID 0000-0001-8064-8170.

⁴ ORCID 0000-0003-0437-9428.

Over time, as enterprises were gaining experience in the use of teamwork, research projects were conducted that focused on team effectiveness [Goodwin et al., 2009; Sundstrom et al., 1990]. These resulted in the development of a number of models of team effectiveness. It is worth noting that the issue is still valid because, despite numerous studies on this subject, the questions: why some teams are more effective than others and what factors and in what system and with what force determine this effect still remain open [Goodwin et al., 2009; Ilgen, Hollenbeck, Johnson, Jundt, 2005; Mathieu et al., 2008].

As part of the teamwork efficiency models developed over two decades ago, the concept of teams viability was introduced as one of dimensions of team effectiveness. Team viability as a construct has not yet received a unified definition nor has been operationalized and thus requires further work in this scope. Today team viability is understood as “the capacity of a team to be sustainable and continue to succeed in future performance episodes” [Bell, Marentette, 2011]. The main motivation of the paper’s authors to study this problem is that viability becomes significant due to the nature of contemporary teams, which to a large extent are long-term and ongoing.

The main aim of the paper is to show that team viability is a vital component to understanding team effectiveness in modern work environments. This chapter consists of two parts: theoretical and empirical. The aim of the theoretical part is to bring the concept of the team viability construct and show its place in the wider context of the team's efficiency. The authors of the chapter have used here the theoretical achievements of foreign and Polish literature.

The goals of the empirical part are:

- recognizing the extent to which the concept of team viability is known and how it is understood by practitioners - representatives of teams of employees;
- identification of key factors determining the viability of teams.

The paper answers the three research questions:

- How do contemporary domestic and foreign literature address team viability?
- How do the leaders and members of teams define the concept of team viability?
- What factors in their opinion determine team viability?

In order to answer the research questions the paper draws on literature on team effectiveness models and general criteria of team effectiveness. Further summarizes the literature on evolution of team viability’s definition as a relevant dimension of team effectiveness and it indicated the key variables that influence team viability. This paper contributes to the research on the team viability construct in the context of essential dimension of the contemporary team’s efficiency. The authors conducted their own research using a questionnaire and individual in-depth interviews. The research methodology is described in details

in the third chapter of this paper. Finally, the conclusion section includes the summary of research results. Additionally it has shown factors indicated by the respondents deserve special attention in view of the effective functioning of contemporary teams in the aspect of viability. In this context the authors indicate the challenges for HR departments and management and suggestions for future research.

2. Team viability as a relevant dimension of team effectiveness – review of literature

Many models of team effectiveness have been developed to date. They can be hypothetically divided into two basic groups. The first of them are models focused on input elements that, by triggering specific processes, lead to mediation of inputs into the effects at the output, resulting in a specific level of team effectiveness. The second group comprises models referring to the elements conditioning the characteristics of teams and their tasks. They make the effectiveness dependent on skillful utilization of the team's potential in the process that allows to transform resources into specific effects [Pyszka, 2015].

The first group usually indicates the four main models of the team's efficiency, i.e. the Input-Processes-Output (IPO) model, the Input-Output (IO) model, the Input-Mediator-Output-Input (IMOI) model and the ecological model [Rico et al., 2011]. Despite differences between the four, it is worth noting that they derived from the IPO model [McGrath, 1964]. This model assumes a recurrent cycle of input, processes and output. The input conditions, related to the organizational context and characteristics of the teams, influence the group processes, which in turn impact the outputs. Then, the output data impact the inputs in the next period of time.

The IO model does not isolate the process module, which does not mean its omission. The processes part is integrated with the input part of this model and together with other elements directly impacts the final effectiveness of the teams [Campion et al, 1993].

The ecological model assumes that the team effectiveness is a process, not a state to be strived for and achieved. It contains four dimensions, namely: organizational context (surroundings), boundaries, team development and team effectiveness [Sundstrom et al., 1990].

The IMOI model introduces a mediator and a closed cycle, where the output/result impacts the input by way of feedback [Ilgen et al., 2005]. In this model, teams are perceived as comprehensive, multidimensional systems functioning in time, on tasks and within a specific context [Pyszka, 2015].

The second group of team effectiveness models focuses on internal and external factors that increase or decrease the team's effectiveness. They show the importance of these elements, their hierarchy and context. An interesting picture of factors determining the performance of teamwork is presented by the model created in 1995 by M. Lombardo and R. Eichinger [1995], referred to as the T7 model. It points out the five factors inside the team and two factors outside of it, determining teams performance [De Meuse, 2009].

Apart from the T7 model, the literature on the subject points to other models of team performance. Some of them were proposed over thirty years ago, others have been developed over the last several years. The most frequently cited in the literature are models created by, among others: Rubin et al. [1977], Katzenbach, Smith [1993], Hackman [2002].

The aforementioned models of team performance indicate multiply dimensions of team effectiveness. Team performance is fundamental to understanding team effectiveness; however, currently insufficient. It is worth noting that since the establishment of scientific management effectiveness was identified with efficiency and productivity, therefore the effectiveness of the team was usually associated with "hard" indicators and performance criterion [Kozusznik, 2002]. This approach to the team effectiveness focused on measures of work results and outlays necessary to obtain them (labor costs, time, labor intensity, number of employees). Over time, however, it was pointed out that the effectiveness of the team should be assessed not only through the perspective of team results, but also through the way the results are achieved, and thus through a number of psychosocial elements at the interface between the group and the individual [Sundstrom et al., 1990; Sundstrom, Altman, 1989]. As indicated in the subject literature the team effectiveness can be analyzed through the combination of economic and behavioral elements. For example Hackman [1987] proposed three general criteria of team effectiveness:

1. "The productive output of the work group should meet or exceed the performance standards of the people who receive and/or review the output.
2. The group experience should, on balance, satisfy rather than frustrate the personal needs of group members.
3. The social processes used in carrying out the work should maintain or enhance the capability of members to work together on subsequent team tasks".

The above is of particular importance for contemporary teams. Teams in today's organizations tend to exist for long periods of time, manage bundles of activities rather than one specific task. These teams go through several performance episodes, often managing several tasks simultaneously. Teams today are typically ongoing but are highly adaptive and characterized by continuous change (e.g., in membership, task demands) [Tannenbaum et al., 2012]. Teams that are ongoing differ from short-term teams in terms of team and task duration [Bradley et al., 2003]. Whereas short-term

teams are expected to disband after having worked together for a brief period, ongoing teams execute tasks that involve longer work cycles and are composed of members who expect to be working together on future tasks. Long-term teams that perform repetitive, predictable tasks might not undergo the same type of dynamic change that most ongoing teams face [Cooperstein, 2017].

Due to the nature of contemporary teams performance alone may not be the most appropriate measure of effectiveness of teams. There is a need for a construct, which will enable to evaluate how well a team will perform on subsequent tasks and that a team is capable of future success. Team viability among others is such a construct, which has been treated as significant dimension of team effectiveness in foreign literature on the subject in recent years. Team viability has been defined in several ways over the past few decades. It was first paid attention to by Hackman [1987] though he did not call it directly. He presented three criteria for team effectiveness, one of which captures the essence of viability: “the social processes used in carrying out the work should maintain or enhance the capability of members to work together on subsequent team tasks”. In his considerations on team viability Hackman emphasized social processes.

Three years later Sundstrom et al. [1990] also suggested a broader understanding of team effectiveness beyond performance, and indicated team viability as a potential criterion. However they proposed a wider understanding of viability. In their opinion “a more comprehensive definition of viability might include constructs such as cohesion, norms, intermember coordination, mature communication, and problem solving”.

Later researchers built their definitions of team viability predominantly on the works of Hackman and Sundstrom. Other authors extended the concept by adding further elements. For example Barrick [1998] retained quite consistent with Hackman in the study of how team member personality and ability influence work team effectiveness when they had supervisors rate the team’s capability to maintain itself over time. Other researchers [Resick et al., 2010], basing on Sundstrom’s definition focused mainly on team members satisfaction, participation and willingness of further cooperation. In turn Balkundi and Harrison [2006] as well as Jehn, Greer, Levine and Szulanski [2008] defined team viability as a team’s potential to retain its members through their attachment to the team, and willingness to stay together as a team. Aube and Rousseau [2005] acknowledged Hackman’s approach and added the component of adaptability to internal and external changes to the willingness to work together again, problem-solving, and social integration as important aspects of team viability.

Due to the lack of definitional unambiguity further researchers attempted to clarify the construct of viability. [Mathieu et al., 2008]. Basing on the achievements concerning team viability Bell and Marentette [2011] defined it as follows „it is the

capacity of a team to be sustainable and continue to succeed in future performance episodes". By defining teams viability this way they retained the spirit of previous definitions focused on the ability to work together in the future, and continued success over time (e.g., Barrick et al., 1998; Hackman, 1983), emphasizing the team's sustainability, growth, and development. The authors highlight in their study that considering longevity of most organizational teams and the dynamic context within which teams exist resulting in membership and other changes, it is most useful to conceptualize team viability as a holistic property of a dynamic system rather than a property of specific individuals. In other words team viability is a global team property, which characterizes a team as a whole unit and does not necessarily originate from the characteristics of individual team members (e.g. team satisfaction) [Bell, Marentette, 2011; Kozlowski, Chao, 2012].

The subject literature highlights that viability should be considered with no reference to antecedents and outcomes. According to Figure 1 viability is a function of various team inputs and processes. Team viability is therefore a dynamic construct influenced by the most recent performance and other group characteristics such as collective efficacy and cohesion that may change in time [Bell, Marentette, 2011]. Viability can be viewed as an input for the next task to be undertaken or as a result of a current episode. The team viability can contribute to the next task episode by influencing future performance. Viable teams are able to develop successful strategies that can work effectively with one another and maintain task motivation. Such features improve future performance. Viable teams are considered more adaptable, motivated and able to develop better task strategies, hence they will outperform the teams that are not viable. As viable teams are sustainable they require less managerial intervention. Through effective management of their composition and the use of efficient processes they face less failures both the short- and long-term. Viable teams enjoy confidence on the part of the organization which is eager to offer more resources and attention to the teams members. Over time successful teams may also increase member satisfaction and commitment and perhaps attract outside members or groups [Cooperstein, 2017; Costa, Passos, Barata, 2015; Tu, Liu, 2017].

Considering the above it is important to identify how team viability is related to and distinct from constructs: performance, cohesion, satisfaction, resilience, adaptability, and potency. These constructs are highly correlated with team viability, but they don't adequately capture the team's capacity for sustainability and growth required for success in future performance episodes. The constructs in most cases are antecedents or outcomes of team viability [Bell, Marentette, 2011].

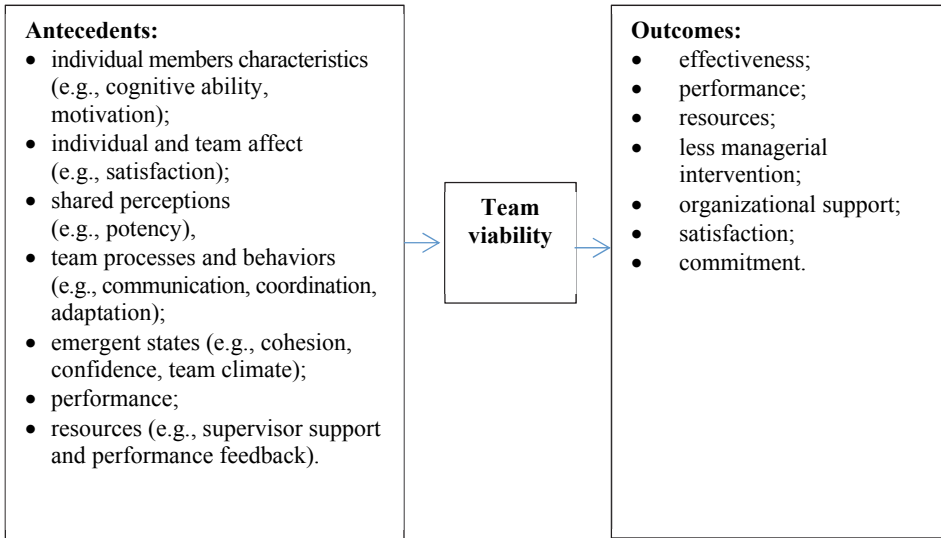


Fig. 1. Key variables that influence team viability

Source: [Cooperstein, 2017, s. 9].

3. Research methods

In the theoretical part the applied method consisted in analyzing Polish and foreign literature on the subject. The literature posed a theoretical foundation for undertaking own empirical research, in order to better understand and grasp the problem. In this part of the chapter the authors put the following research question:

RQ 1. How do contemporary domestic and foreign literature address team viability?

The empirical part used the results of a pilot survey conducted in 2018 among the representatives of teams of employees. The questionnaire consisted of two parts. The first part contained open questions and aimed to identify whether and how the respondents understand the concept of viability, based solely on their knowledge and experience in this area. The second part of the survey was preceded by an explanation to the respondents on how the viability of a team is defined in subject literature. Based on this information, respondents were asked to answer questions aimed at identifying factors that determine team viability. This part of the survey consisted of closed questions with multiple choice of answers.

The survey was complemented by individual in-depth interviews (IDI), conducted with nine senior managers, indicated by HR departments. The interviewees were selected based on a criterion of extensive experience in management of diverse teams.

The research methodology determined its scope in terms of object, subject time and area.

The object scope concerned selected issues related to the viability of contemporary teams and in particular, to indicating critical conditions for their effective functioning. In connection with the above, the following research questions were formulated:

RQ 2. How do the leaders and members of teams define the concept of team viability?

RQ 3. What factors in their opinion determine team viability?

In terms of time scope the research took place in the second and fourth quarters of 2018, whereas the area scope assumed conducting the research in selected enterprises in Lower Silesia region.

A total of 124 people completed the survey, of which 120 correctly completed questionnaires were qualified for the final analysis⁵. Due to the research area undertaken in this study, the subjective scope concerned both leaders (68 people, which was 56.7% of the research sample) and team members (52 people, 43.3% respectively).

The purposefulness of the subject scope of the research adopted by the authors resulted from the nature of the considered problem, which is team viability and the resulting need to look at it from both, team leaders and team members perspective.

4. Empirical results and discussion

The results of pilot studies corresponding to the subject matter of this work are presented below.

In the first question, respondents were asked to define the concept of team viability. The analysis of the answers led to the conclusion that there were noticeable differences in the understanding of this concept, both among leaders and team members. And so members most often described viability in terms of the length of time of shared and effective work, for example: *"time in which the team works well together, when team is effective, and its members do not think about changing jobs", "willingness of individual team members to take part in its activities", "for how long has the team been working, how long it can last because of the way it is working now", "how long will the team operate", "the way the team functions, whether it can get along and if the team has a lot of problems, and how people try to solve them and work on them", "for how long the team members are able to work with each other", "the period in which the team brings results", "time from the teams set up until its liquidation/disintegration", "long-lasting teamwork, long-term cooperation of*

⁵ The surveyed group consisted of 124 employees – students of six post graduate courses at the University of Economics in Wrocław.

members of a given team". In addition, the members of the teams emphasized the importance of mutual relations and persistence in pursuing the assumed goals, namely: "the team's ability to maintain relations", "team maintenance when it comes to striving for a goal", "Good atmosphere in the team", "maintaining motivation in the team", "achieving goals by the team and common communication", "dealing with problems, well-coordinated team", "cooperation and commitment of team members".

In turn, leaders defined the team viability more in terms of efficiency, pointing to its various dimensions such as: work efficiency, achievement of objectives set by the team, satisfaction and time of the team's functioning together, rather than strictly viability, for example: *"adopting newly acquired knowledge and introducing it to a team that has been working together for a long time. This knowledge improves the performance of such a team", "the ability to constantly develop and increase productivity, efficiency and quality of work", "satisfaction and willingness for further cooperation", "teamwork, cooperation, the number of projects implemented, commitment", "a group that can work together, having common goals and supportive", "people who work within the team, and in principle their attitude, mental condition", "a group of people who work together despite problems and conflicts within the group", "time of the team's functioning together, existence".*

According to the authors, the presented opinions confirm the definitional chaos already noticed at the stage of literature studies. It is worth noting that both groups were in agreement that the main attribute of viability is the duration of the team. The above opinion was also shared by the interviewed managers. They agreed that they had not been familiar with the notion of team's viability, and each of them tried to define viability in his own way, emphasizing its various aspects. It is significant that the respondents expressed a great interest in the construct of team viability and decided that it would be worth taking a closer look at it.

The purpose of the next question was to identify the problems that the teams represented by the respondents had to face. Their task was to identify factors that impair team work. This question assumed the possibility of multiple choice of answers. From the proposed list of several factors, the respondents were supposed to indicate the ones that usually affect them on daily basis. As shown in Figure 2, both team leaders and team members pointed to three such factors. These include:

- internal conflicts in the team (selection frequency by leaders 69.1%, by team members 88.5%);
- time pressure (leaders 85.3%, team members 80.8%);
- excessive fluctuation (leaders 86.8%, team members 73.1%).

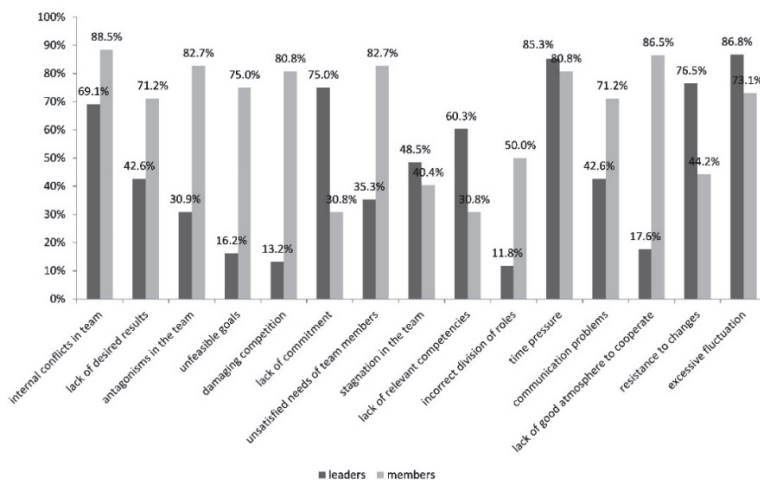


Fig. 2. Indication frequency percentages re factors that impair teamwork by leaders and members

Source: own study based on the conducted own research.

The analysis of the other factors, however, showed a relatively large discrepancy of opinions. According to the majority of leaders, in comparison to the opinions of members, the factors that impair teamwork include:

- lack of commitment, which was indicated by up to 3/4 of leaders (75.0%) against only 1/3 of indications by team members (30.8%);
- resistance to changes on the part of employees, where the respondents' disagreement amounted to as much as 32.3 percentage points (leaders 76.5% leaders, members 44.2%);
- lack of competencies to perform tasks, which was noticed by as many as 60.3% of leaders and only 30.8% of members.

Members of teams, in contrast to leaders, indicated as many as eight factors that impair teamwork (Table 1).

Table 1. Differences in opinions between leaders and members re factors that impair teamwork in percent points

Factors	Percent point difference
1. lack of good atmosphere to cooperate	68.9
2. antagonisms in the team	51.8
3. unfeasible goals	58.8
4. unhealthy / damaging competition	67.6
5. unsatisfied needs of team members	47.4
6. incorrect division of roles within the team	38.2
7. communication problems	28.6
8. lack of desired results	28.6

Source: own study based on the conducted own research.

In the analyzed question, the respondents also had the opportunity to use the "other" category. They pointed here to many important factors. Leaders mentioned: *"professional burnout of team members"*, *"existing differences regarding the age of team members"*, *"cultural differences existing in the team"*. On the other hand, team members pointed to: *"professional burnout of the leader"*, *"wrong person as a leader"*, *"unsatisfied needs of members"*, *"lack of development prospects"*, *"team managed by many informal leaders at the same time"*, *"new members in the team"*, *"no time to introduce new employees"*, *"lack of cooperation"*, *"blurred responsibility"*, *"bad division of labor"*, *"lack of mutual respect"*, *"domination of one sex in a team"*, *"lack of training, motivation"*, *"lack of 'rejuvenation' of the team"*, *"excessive reliance on others"*, *"self-interest"*.

The factors indicated by the respondents, which affect the work of teams, show potential threats to their viability. It is difficult to secure it, if the team operates under time pressure, when team composition is changing dynamically, when team members show poor involvement, stay in conflict with each other, have problems with adaptation to changes, or do not have the desired competences. At the same time, the number, frequency and diversity of the problems reported by the respondents is worrying, regardless of their role in the team. This means that the identified problems become potential challenges which raises an urgent need to develop ways to deal with them. Viable teams must have strategies to recover from emerging problems and the responsibility for viability should be shared by leaders as well as team members.

Another important question concerned factors that, in the respondents' opinion, could condition the team's viability. As shown in Figure 3, both team leaders and team members have recognized the following eight factors as very important:

- leadership (leaders – 92.6%, team members – 88.5%);
- motivating employees (85.3%, 96.2%, respectively);
- employees' expectations (80.9%, 94.2% respectively);
- multigenerational team (75.0%, 71.2%, respectively);
- employee involvement (97.1%, 65.4%, respectively);
- atmosphere in the team (60.3%, 94.2% respectively);
- knowledge sharing (72.1%, 78.8%, respectively);
- multiculturalism of the team (72.1%, 59.6%, respectively).

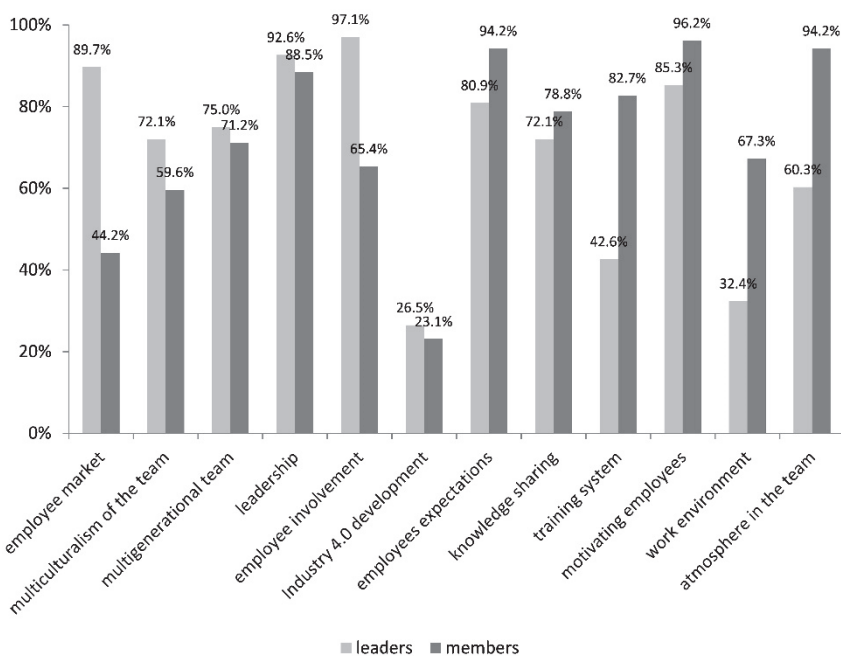


Fig. 3. Indication frequency percentages re factors that condition team viability by leaders and members

Source: own study based on the conducted own research.

Both leaders and members shared the opinion that the development of Industry 4.0 had relatively the weakest influence on team viability (the smallest percentage of responses). This factor was indicated by almost every fourth respondent (leaders 26.5% and members 23.1%). Alternatively the factors which divided the leaders' and the team members' opinions most were:

- training system – this factor was considered important by more than 4/5 team members (82.7%), with almost a half smaller indication by leaders, amounting to only (42.6%);
- work environment – the difference of reported opinions amounted to 34.9 percentage points, this factor was considered valid only by 32.4% of leaders, with 67.3% of indications by team members.

In the context of the above-mentioned differences in opinions, it is worth emphasizing that another factor that significantly divided the opinions of respondents was the "employee market", considered important by 89.7% of leaders, compared to 44.2% of indications by team members.

In the received answers the respondents pointed to a number of different factors which determine team viability. Relatively high indication frequencies prove that respondents recognize the importance and the impact of both internal as well as external factors. Especially external factors such as: multiculturalism,

multigenerational nature, employee market, should be considered important from the point of view of the functioning of contemporary teams. Decreasing the significance of unavoidable challenges that arise on this ground can lead to negative consequences in terms of team's sustainability, growth and development, which are so crucial for their viability.

5. Summary and conclusions

The undertaken literature research enabled the authors not only to bring up the notion of viability but first and foremost notice that, given the nature of the majority of contemporary teams, team viability is an important construct for studying and managing the effects of organizational teams.

Team performance is fundamental to understanding team effectiveness; however, ensuring that a team is capable of future success (team viability) is also important today. Understanding a team's viability can inform persons of interest of the potential the team has for sustaining itself and adapting to future performance demands [Bell, Marentette, 2011].

As emphasized above the empirical research confirmed the definitional chaos exhibited in literature and concerning the construct of team viability. It turned out that the concept is not well-known to the researched practitioners. They usually defined it in a subjective and intuitive manner, based on their professional experience. It should be emphasized that the respondents showed not only a great interest in acquiring knowledge in this area, but above all in applying the knowledge for development of viable teams. The surveyed team representatives showed a high level of awareness of various factors which affect their teams. The necessity to face these factors makes the need to think and act in terms of team viability even more important and urgent.

Among the factors determining team viability, external factors indicated by the respondents deserve special attention. According to the authors, they should be considered as significant determinants of the effective functioning of contemporary teams in the aspect of viability. The factors are:

1. Changes in the labor market – at the end of 2017, the registered unemployment rate fell to 6.6%, and the latest data indicate an even lower unemployment rate, amounting to 5.7% [<http://stat.gov.pl>]. Thus, the still-recent employer market has changed towards the employee's market. In addition, this situation is compounded by the negative population growth and changes in the age structure of the population, which entail a decrease in the supply of employees in the productive age. It is also worth emphasizing that in 2030 employers will have significant problems with filling every fifth job [OECD, 2018]. The relatively low level of unemployment and the

galloping process of population aging result in challenges for management teams and team leaders of not only attracting new employees to the organization, but above all, retaining the existing workforce. Thus, having the competence to create viable teams is the key determinant of effective leadership.

2. Multiculturalism – the employment of immigrants becomes a necessity in the modern labor market. As research results show, employers acquire employees from more and more distant countries, which results in employing members from different cultures [Kopertyńska, 2018]. The need for coexistence of groups representing different cultural traditions in a specific social space means the need to develop a new leadership model that promotes and supports viability of culturally diverse teams. This means that leaders must have knowledge about the cultures of other countries and must exhibit understanding and tolerance for their differences.
3. Multigenerationism – is related on the one hand to the entry of the youngest generation "Z" on the market, and on the other hand, in the absence of professionals, to the retention of "Baby Boomers" in some organizations. As a consequence, representatives of up to four generations co-exist on the modern labor market: "Baby Boomers" (BB) – people born between 1945-1964, "X" – people born between 1965-1980, "Y" – people born after 1980 and "Z" – people born after 1995 [cf. Miś, 2011; Smolbik-Jęczmień, 2017]. Such diversity of employees (age difference can reach up to 40 years) significantly complicates management processes and urges searching for answers to questions of how to ensure the long-term viability of multigenerational teams, what HR practices and processes determine viability and what challenges face team leaders in this context. The prospect of co-existence of four generations of employees in a team can be a source of both potential opportunities and threats to the team viability. Opportunities can be seen in the use of knowledge and experience of older employees, and in openness to technological innovations of younger employees. Threats for the effective and long-term operation of teams often result from stereotypical perception of each other and disrespect. In view of the above, the development of competencies in the management of multigenerational teams by leaders on the one hand and the willingness to share knowledge and mutual openness of team members on the other hand, become an important guarantor that sustains viability and a challenge that both parties must take.

According to the authors, it is surprising that the respondents considered the concept of Industry 4.0 as not important in the context of building the team's viability. This may indicate low awareness of the respondents regarding the importance of Industry 4.0 development, which is associated with three phenomena [Paprocki, 2016]:

- common digitization and ensuring constant communication between people themselves, people and devices and between devices themselves;
- more and more frequently implemented disruptive innovations, which allow for a stepwise increase in efficiency and effectiveness of the operation of the socio-economic system;
- the achievement of such development of machines that they gain the ability for autonomous behavior through the use of artificial intelligence in the process of their control.

The above will generate questions about where and in what role the employee will appear, e.g. in a human-machine configuration. Hence the need to think in terms of ensuring team's viability will become even more urgent.

The remaining factors conditioning the viability indicated by the respondents are internal in nature. These include: leadership, atmosphere at work, employee involvement and expectations, knowledge sharing, training system, motivating system and work environment. These should be seen in terms of challenges for HR departments and management. Work on the effectiveness of teams requires them to undertake parallel activities regarding the current and future perspectives. It is worth noting that team viability is forward thinking in nature as it emphasizes the capability of a team's success for future endeavors beyond the current situation. With an understanding of a given team's viability, managers can take a proactive approach to guide ongoing teams to successful performance. Team viability can provide information as to whether or not a team needs to improve upon their current behaviors as well as if they will work well together in the future [Bell, Marentette, 2011].

Due to the limitations of the research sample it is important to underline that generalizing the research results must be done with caution.

Identified factors open the wider space for in-depth research on their influence on team viability. In future the authors plan to broaden the research scope in terms of object (ex.: human-machine configuration, the role of leadership, multiculturalism and multigenerations, etc.), sample size, area scope and issues related to challenges for management and HR departments.

Bibliography

- [1] **Aube C., Rousseau V.** (2005). *Team goal commitment and team effectiveness: The role of task interdependence and supportive behaviors*, "Group Dynamics: Theory, Research and Practice", 9, pp. 189-204.
- [2] **Balkundi P., Harrison D.A.** (2006). *Ties, leaders, and time in teams: Strong inference about network structure's effects on team viability and performance*, "Academy of Management Journal", 49, pp. 49-68.
- [3] **Barrick M.R., Stewart G.L., Neubert M.J., Mount M.K.** (1998). *Relating member ability and personality to work-team processes and team effectiveness*, "Journal of Applied Psychology", 83, pp. 377-391.
- [4] **Bell S.T., Marentette B.J.** (2011). *Team viability for long-term and ongoing organizational teams*, "Organizational Psychology Review", Vol. 1, No. 4, pp. 275-292.
- [5] **Bradley J., White B.J., Mennecke B.E.** (2003). *Teams and tasks: A temporal framework for the effects of interpersonal interventions on team performance*, "Small Group Research", 34, pp. 353-387.
- [6] **Campbell D.J., Campbell K.M.** (2001). *Why individuals voluntarily leave: perceptions of human resource managers versus employees*, "Asia Pacific Journal of Human Resource".
- [7] **Campion M.A., Medsker G.J., Higgs A.C.** (1993). *Relations Between Work Groups Characteristics and Effectiveness: Implications for Designing Effective Work Groups*, "Personnel Psychology", 46, pp. 823-847.
- [8] **Costa P.L., Passos A.M., Barata, M.C.** (2015). *Multilevel influences of team viability perceptions*. Team Performance Management, 21(1/2), pp. 19-36.
- [9] **Gibson C.B., Porath C.L., Benson G.S., Lawler E.E.** (2007). *What results when firms implement practices: The differential relationship between specific practices, firm financial performance, customer service, and quality*, "Journal of Applied Psychology", 92, pp. 1467-1480.
- [10] **Goodwin G.F., Burke C.S., Wildman J.L., Salas E.** (2009). *Team effectiveness in complex organizations: An overview* [in:] E. Salas, G.F. Goodwin, & C.S. Burke (eds.), Team Effectiveness in Complex Organizations. Cross-Disciplinary Perspectives and Approaches, Psychology Press, pp. 3-16.
- [11] **Hackman J.R.** (1983). *A Normative Model of Work Team Effectiveness. Technical Report*, No. 2, Research Project on Group Effectiveness, Office of Naval Research, Code 442, CT: Yale School of Organizational Management.
- [12] **Hackman J.R.** (1987). *The design of work teams*, [w:] J.L. Lorsch (ed.), Handbook of organizational behavior Englewood Cliffs, NJ: Prentice-Hall., pp. 315-342.
- [13] **Hackman J.R.** (2002). *Leading teams: Setting the stage for great performances*, Boston: Harvard Business School Press.
- [14] **Ilgen D.R., Hollenbeck J.R., Johnson M., Jundt D.** (2005). *Teams in organizations: From I-P-O models to IMOI models*, "Annual Review of Psychology", 56, pp. 517-544.
- [15] **Jehn K.A., Greer L., Levine S., Szulanski G.** (2008). *The effects of conflict types, dimensions, and emergent states on group outcomes*, "Group Decision and Negotiation", 17, pp. 465-495.
- [16] **Katzenbach J.R., Smith D.K.** (1993). *The Wisdom of Teams: Creating the High-performance Organisation*, Harvard Business School, Boston.

- [17] **Kennedy F.** (2003). *Managing a team-based organization: a proposed strategic model*, "Team-Based Organizing", Vol. 9, pp. 91-111.
- [18] **Kopertyńska M.W.** (2018). *Funkcjonowanie zespołów wielokulturowych w przedsiębiorstwach – doświadczenia badawcze* [w:] Management Forum, Vol. 6, 2.
- [19] **Kozłowski S.W.J., Bell B.F.** (2003). *Work Groups and Teams in Organizations*, [in:] Handbook of psychology, Vol. 12: Industrial and Organizational Psychology. Eds. W.C. Borman, D.R. Ilgen, R.J. Klimoski. Wiley, New York, pp. 333-375.
- [20] **Kozłowski S.W.J., Chao, G.T.** (2012). *The dynamics of emergence: cognition and cohesion in work teams*, "Managerial and Decision Economics", Vol. 33 No. 5, pp. 335-354.
- [21] **Kożusznik B.** (2002). *Zachowania człowieka w organizacji*, PWE, Warszawa, p. 108.
- [22] **Lombardo M.M., Eichinger R.W.** (1995). *The Team Architect User's Manual*, MN Lominger Limited, Minneapolis.
- [23] **Marks M.A., Mathieu J.E., Alonso A., DeChurch L., Panzer F.J.** (2005). *Teamwork in multiteam systems*, "Journal of Applied Psychology", 90, pp. 964-971.
- [24] McGrath J.E. (1964). *Social psychology: A brief introduction*, New York: Holt, Rinehart & Winston.
- [25] **Mathieu J., Maynard M.T., Rapp T., Gilson L.** (2008). *Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future*, "Journal of Management", 34(3), pp. 410-476.
- [26] **Miś A.** (2011). *Generational identity in organizations. Challenges for Human Resources Management*, Prace Naukowe UE we Wrocławiu, nr 224, Wyd. UE we Wrocławiu, Wrocław.
- [27] **Paprocki W.** (2016). *Koncepcja Przemysł 4.0 i jej zastosowanie w warunkach gospodarki rynkowej*, [w:] Gajewski J., Paprocki W., Pieriegud J. (red.), Cyfryzacja gospodarki i społeczeństwa. Szanse i wyzwania dla sektorów infrastrukturalnych, Publikacja Europejskiego Kongresu Finansowego, Gdańsk.
- [28] **Pyszka A.** (2015). *Modele i determinanty efektywności zespołu*, Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach nr 230, Katowice.
- [29] **Resick C.J., Dickson M.W., Mitchelson J.K., Allison L.K., Clark M.A.** (2010). *Team composition, cognition, and effectiveness: Examining mental model similarity and accuracy*, „Group Dynamics”, 14, pp. 174-191.
- [30] **Rico R., Alcover de la Hera C.M., Tabernerero C.** (2011). *Work team effectiveness, a review of research from the last decade (1999-2009)*, "Psychology in Spain", Vol. 15, No 1, 5, pp. 7-79.
- [31] **Rubin I.M., Plovnick M.S., Fry R.E.** (1977). *Task oriented team development*, McGraw-Hill. New York.
- [32] **Smolbik-Jęczmień A.** (2017). *Kształtowanie własnej kariery zawodowej w kontekście wielopokoleniowości*, Wyd. UE we Wrocławiu, Wrocław.
- [33] **Sundstrom E., Altman I.** (1989). *Physical Environments and Work-Group Effectiveness*, "Research in Organizational Behaviour", Vol. 11, pp. 175-209.
- [34] **Sundstrom E., De Meuse K.P., Futrell D.** (1990). *Work Teams. Applications and Effectiveness*, "American Psychologist", Vol. 45, No. 2, pp. 120-133.
- [35] **Tannenbaum S.I., Mathieu J.E., Salas E., Cohen D.** (2012). *Teams are changing: Are research and practice evolving fast enough?* "Industrial and Organizational Psychology", 5(1), pp. 2-24.

- [36] **Tu C.-K., Liu Z.-H.** (2017). *Employee Creativity and Team Viability- The Moderating Effects of Transformational Leadership and Team Social Capital*, "International Journal of Management and Applied Science" (IJMAS), Vol. 3, Issue 7, pp. 90-95.
- [37] **West M.A., Markiewicz L.** (2004). *Building teambased working. A practical guide to organizational transformation*, Oxford: BPS / Blackwell.

Internet sources

- [38] **Cooperstein J.N.** (2017). *Initial Development of a Team Viability Measure*, College of Science and Health Theses and Dissertations. 202,
- [39] https://via.library.depaul.edu/csh_etd/202 (access: 15.12.2018).
- [40] **De Meuse K.P.** (2009). *Driving Team Effectiveness*. Korn/Ferry Institute White Paper, http://www.kornferry.com/media/lominger_pdf/teamswhitepaper080409.pdf (access: 04.11.2018).
- [41] <http://stat.gov.pl> (access: 07.11.2018).
- [42] OECD, Economic Surveys: Poland, <http://www.oecd.org/eco/surveys/economic-surveys-poland.htm>.2018 (access: 15.11.2018).