

TANGIBLE AND INTANGIBLE MOTIVATIONAL FACTORS IN IT PROJECTS: REMOTE COLLABORATION ENVIRONMENT

Marzena PODGÓRSKA^{1*}, Damian HERZOG²

¹ Silesian University of Technology, Faculty of Organization and Management; marzena.podgorska@polsl.pl,
ORCID: 0000-0001-7549-7320

² Silesian University of Technology; damiher697@student.polsl.pl, ORCID: 0009-0004-3591-7238

* Correspondence author

Purpose: This study aimed to identify critical motivational factors in remote teams in the IT industry.

Design/methodology/approach: 72 members of project teams from different organizations in the IT industry that provided work in a remote environment participated in the research. Using a survey questionnaire, we examined which of the proposed 29 motivational factors (15 tangible and 16 intangible) are used by IT companies and experienced by their employees, and which are of the greatest importance to their employees (members of project teams).

Findings: Based on the results obtained using the survey questionnaire, 5 critical motivating factors from the tangible group were specified (adequate base rate for the position and experience, access to modern technologies and equipment, annual discretionary bonuses, additional training or paid extramural studies, paid overtime) and 6 critical incentives from the intangible group (opportunity to reconcile professional duties with private life, job security, learning opportunities, flexible working hours, working in a "good" team, autonomy in decision-making). This analysis revealed that intangible motivators are as important as tangible ones, because in most cases the respondents indicated that intangible factors are also very important to them.

Originality/value: The paper presents the first analysis of motivators relevant to project team members working remotely within the IT industry.

Keywords: motivators in project management, remote working, IT projects, tangible and intangible motivational factors, project teams.

Category of the paper: research paper, case study.

1. Introduction

Current changes in the labor market have caused a radical change in the perception of employment by employees. It turns out that work can be done at home as effectively as in the employer's office. This is confirmed by recent research, which shows that about 56% of

companies work remotely, and 52% of employees work from home at least once a week (Labs, 2018). These changes are also strongly visible in the IT industry, which has rapidly adapted to the recent transformations in the labor market and is facing the growing importance of digital and hyper-competitive business environments (Bitzer et al., 2020). It should be emphasized that a significant part of these companies, adapting to these changes, uses a project approach in their activities and the possibilities of remote cooperation. This is related to the widespread agreement among scientists and practitioners that cooperation in teams generates positive work results, especially in the context of innovative projects (Walker et al., 2017) which are certainly projects implemented in the IT industry. Effective cooperation between team members is seen here as a key success factor in projects (Vaaland, 2004) and is associated with effective coordination and communication, which result from a common understanding of the context and assumptions of the innovation project (Chiocchio et al., 2011).

Hence, people working in project teams need appropriate skills, motivation and opportunities to work effectively (Dasí et al., 2021), especially if this work takes place in a remote environment and concerns IT projects which are often highly innovative and modern. As it is emphasized in the research (Schmidt et al., 2001), the lack of required knowledge and skills among project personnel is one of the five greatest threats that may affect the success of an IT project.

However, as indicated by researchers (e.g. Dasí et al., 2021) in the literature on project management, a limited number of studies take into account issues related to Human Resources Management, including issues of motivation (Sharp et al., 2007). In addition, although there is a fairly rich literature on remote projects, the literature related to the implementation of remote projects in specific industries is still small (Dybå, Dingsøy, 2008; Hossain et al., 2011). There are studies in the literature on the possibility of working in a remote environment in individual industries (e.g. Adams-Prassl et al., 2022), but they do not directly relate to project management and project implementation. In the work, these strands are combined, and this gap in the literature is filled by providing the first analysis of motivators relevant to project team members working remotely within the IT industry. To identify critical motivators (tangible and intangible) in remote project teams, respondents are asked in the survey to indicate what motivators they expect, whether they are used in their workplaces and how important they are to them. We conducted the research from April to May 2022 on a sample of 72 members of project teams from the IT industry working remotely in Poland.

The article is organized as follows. The first part describes project work in a remote environment and motivations in project management. Chapter 3 describes the methodology of empirical research. The results are presented in Chapter 4, and the Discussion in Chapter 5. The summary includes theoretical and practical implications.

2. Theoretical background

2.1. Remote project work

Dynamically developing ICT technologies affect the type and nature of performed work, which is why more and more often in various areas it can be seen that work is provided in locations other than the office (Hoeven, Zoonen, 2015; Ratti, Claudel, 2016; Stiles, Smart, 2021; Zdonek et al., 2017) which is interchangeably called remote work, telework or distributed work (Allen et al., 2015). Remote work can be treated as a special case of flexible work where the employer is primarily interested in the effects of work, and not on detailed control of its course. When working remotely, employees work remotely and are connected to the company's organizational structure via ICT (Battisti et al., 2022). In conclusion, it can be said that remote work is a flexible work organization that allows an employee to work from a remote location outside of corporate offices or production plants, without personal contact with colleagues, but with the possibility of communicating with them using information and communication technologies.

The growing interest in remote teamwork met with the interest of many researchers, who in particular tried to answer the question of how remote work can be carried out in an optimal way for employees and the organization itself (Messenger, Gschwind, 2016). Moreover, the researchers' analyzes were also associated with the effects of such cooperation indicated in the literature, including increased productivity (Choudhury et al., 2021) and employee engagement (Perry, 2019), as well as work-life balance (Lattemann et al., 2017). In particular, the fact how the transition to remote work affects productivity has long been in the practical interest of organizations considering increasing the use of remote work (Karnowski, White, 2002), or human-computer interaction (Olson, Olson, 2000), IT and engineering (Neufeld, Fang, 2005), management (Choudhury et al., 2021), economics (Bloom et al., 2015), and more. Research results in this area often indicate that the opportunities for employees to engage in remote work largely increase productivity and efficiency (Gajendran et al., 2015). It should also be noted that despite the benefits of remote work, it can also bring a wide variety of personal challenges for individuals, such as blurred lines between home and work life, reduced support and feedback, feelings of isolation and struggles with detachment from work (Charalampous et al., 2019; Eddleston, Mulki, 2017). Moreover, working in a remote environment requires from employees personal skills that allow them to organize and perform work without any form of direct supervision and an appropriate approach from the organization itself, which would have a culture that supports and encourages remote work (Baruch, 2000).

As (Desilver, 2020) noted, knowledge-intensive jobs are particularly well suited to remote work. Computer and math jobs, for example, have a high share of home-based jobs, as do jobs in the information and communications industry, where programmers, for example, can do about 89% of their tasks remotely (Adams-Prassl et al., 2022). This can also justify the growing

popularity of remote work during the implementation of IT projects that require highly specialized competences and the ability to manage their own work from the teams that create them. In addition, remote IT projects are mostly implemented using agile practices that are considered lightweight, flexible and self-organizing, but also facing challenges related to maintaining the continuous interaction between team members required in IT projects (Dorairaj et al., 2010). This is because an agile approach allows IT project teams to respond to emerging needs in a timely manner (Dreesen et al., 2020; Hennel, Rosenkranz, 2021; Recker et al., 2017), and meet rapidly changing customer preferences and available technologies (Podgórska, 2022), but precisely at the price of continuous and effective communication between members of the entire project team.

Howe and Menges (2021) suggest that the future of remote work should include careful consideration of the psychological factors associated with the experiences of remote workers. Understanding beliefs about remote work and their role in adapting can help organize remote work and support employees to maximize employee well-being and productivity. It can also help ensure that technological progress which enables employees to work from anywhere will benefit both employees and organizations.

2.2. Motivational factors in project management

Motivation can be defined as the reason an individual works to achieve a goal (Robbins, 1993). One may be motivated by work, pay, promotion, relationships with colleagues and other factors that can influence the attitudes and behavior of individuals, as well as determine their level of commitment, passion, participation or concentration (Crossman, Abou-Zaki, 2003). In other words, motivation is a factor that creates reasons for action, motivates people to work actively and efficiently, and helps them be as creative as possible (Phan et al., 2020).

Motivation is one of the key factors influencing the effective work of teams, and thus the success of the project (Schmid, Adams, 2008). Clark (2003) emphasizes that motivation and commitment to the project influence process efficiency as strongly as hard project management practices. Whereas (Collins, Smith, 2006) indicate that a high level of team motivation affects its trust and cooperative behavior and causes individuals to strive to achieve joint results. In turn, (Liang et al., 2007; Liu et al., 2011) point out that a low level of motivation is associated with the fact that team members trust each other less or are not committed to the project's goals, causing conflicts in relationships and poorer results.

According to (Peterson, 2007): four key elements that can strengthen team motivation and are related to the area of project management are: authority of a team member, planning and allocation of qualified resources, dissemination of correct information, and responsibility for completing the task. The literature also presents a division into tangible and intangible motivational factors, e.g. (Meder et al., 2018). Tangible factors refer to those that have specific, visible and easy to measure characteristics, such as financial remuneration and promotions. Intangible awards are relatively less observable and measurable, and mostly come from other

subjects in the social environment. Intangible factors include social approval, verbal praise and recognition from co-workers or management (Yoon et al., 2015).

In this context, it should be noted that research on motivational factors (Carnahan et al., 2017) shows that intangible factors that refer to employees' preferences in intellectual challenges, recognition, work-life balance, and opportunities to contribute to society can motivate action and positively impact work outcomes. Researchers emphasize here that the key theoretical mechanism explaining better work performance through intangible factors is the existence and fulfillment of "motives", i.e. individual preferences similar to the characteristics of employees in relation to these intangible benefits. (Sauermann, Cohen, 2010) treat "motive" as "employee's preference for incentives", and "incentive" as "conditional benefits provided by the company". In addition, research results indicate that different types of intangible benefits have a different impact on individual employees, depending on their motives (Agarwal, Ohyama, 2013; Sauermann, 2018), and stronger preferences for a specific intangible benefit increase the marginal utility of the benefit, leading to increased effort (Sauermann, Cohen, 2010).

Moreover, it should be noted here that, the very character of the project team differs from the "traditional" team, which will also require the use of different motivational factors than in the case of traditional teams. Project teams consist of employees with diverse competences, i.e. knowledge, experience and skills, who work together throughout the project to achieve a common goal (Chiocchio, 2015). What makes project management different from management in general is that it evolves around a temporary team under the guidance of temporary project manager. However, the temporary and intermittent nature of projects may become a barrier to effective collaboration if skills, capabilities and motivations are not properly managed (Bartsch et al., 2013). Therefore, understanding the motivators which have the greatest impact on team members is particularly important, especially given the increasing performance pressures faced by project managers (Zimmerer, Yasin, 1998). It is worth adding here that motivation is equally influenced by the project manager and the entire organization. That is why it is so important that both the project manager and the organization create a culture of high motivation for project teams.

Taking into account the above considerations, the following research questions were formulated in the paper:

RD1: What motivators do employees of remote IT project teams consider important?

RD2: Which of the tangible factors are the most important for remote IT project teams?

RD3: Which intangible factors are the most important for remote IT project teams?

RD4: Are tangible factors more important to members of remote project teams than intangible ones?

3. Methodology

The research sample was an industry target group in the field of motivation in project management. It was a "transitional" sample, which is defined as a set of people over 30 and under 100. The research is an introduction to further in-depth research on the motivation of remote project teams from the IT industry from the perspective of success achieved by these teams. At the beginning, pre-pilot activities were carried out and a questionnaire was sent to 3 people for critical analysis from the perspective of different individuals. This allowed for the optimization of the survey in terms of layout and content, as well as for the appropriate clarification of questions and the addition of missing ones, listed by the respondents, and a reference to the surveyed population.

The respondents were employees from the broadly understood IT industry sector - people who mainly use information technologies in their daily work and carry out their tasks based on them, but also employees who work remotely. People referred to as remote workers are employees who mostly work outside the company's offices, using mostly home space. The respondents were searched to be employees of various companies from the IT sector. This made it possible to reduce the error caused by the tendency of employees of one company to specific motivators. The research was conducted over a period of two months; from the beginning of April to the end of May 2022. The survey was constructed in such a way that the time to complete it oscillated between 15 and 20 minutes. The appropriately short time of completing the questionnaire was to ensure the credibility of the answers and that the respondents would not feel discouraged to make well-thought-out answers after too long time required to complete the questionnaire.

The group of surveyed people included 13 project managers/executives, 41 members of the project team, 7 business specialists and 11 people holding other posts. 46 men and 26 women joined the study.

The respondents included 23 people aged 18-25, 22 people aged 26-30, 16 people aged 31-40, 8 people aged 41-50 and 3 people aged 50+.

The form of employment of the surveyed persons is: 53 persons employed under an employment contract, 10 persons employed under a B2B form, 8 persons under a contract of mandate, 1 person employed in a different form and no persons employed under a contract for specific work.

The current approach of the respondents to project management is the Scrum approach for 40 people, extreme programming for 3 people, Kanban for 7 people, waterfall for 10 people, and other forms of project management for 12 people.

As for the experience of the respondents, 11 respondents had experience in the range of 0-1 years, 17 people in the range of 2-3 years, 13 people 4-5 years, 15 people 6-10 years and 16 people had experience of over 11 years.

The research was conducted online, and the survey was carried out using the Microsoft Forms application. The survey was divided into three groups in order to properly determine the tangible and intangible motivational factors as well as basic information about the respondents. The surveys were mostly sent directly to the respondents after initial verification of their form of work on social networking sites, i.e. LinkedIn, in order to properly fit into the form of remote work and the IT industry. They were also sent to Project Management associations, such as the Silesian Regional Group IPMA.

The obtained results of the survey were developed in order to obtain appropriate statistical results which will allow to identify the key tangible and intangible motivational factors. An analysis was carried out to properly determine the specific deviations of the respondents depending on gender, age, experience and form of employment.

The first group of questions regarding tangible motivators involved determining whether the given motivators are used in the current workplace, whether the person has experienced a given motivator, and what is the significance of a given motivator. There is also a gap for entering particularly important tangible motivators not presented in the list.

For the group of questions related to intangible motivators, the question of their application to individual employers was also provided, and the question was whether the employee had experienced the motivator and how they assessed the importance of individual motivators. The survey included sixteen questions about intangible motivators. There is also a gap for entering particularly important intangible motivators not presented in the list.

For questions regarding the use of a given motivator, simple answers on a 3-point scale are provided, i.e. "Yes", "No" and "I don't know". For questions related to the importance of a given motivator, a 5-point Likert scale was used, i.e. "Very important", "High importance", "Medium importance", "Low importance" and "Irrelevant".

The survey also includes the metrics of the surveyed people, detailing the position in which the surveyed person works, the currently used approach to project management, form of employment, gender, age, and education.

The prepared survey allowed to obtain relevant information from the survey respondents in order to specify key motivational factors in remote teams from the IT industry.

4. Results

First, the results of the use by employers and the experience by members of project teams from the IT industry of tangible motivational factors were presented (Figure 1). Next, the most important tangible factors for the respondents were presented (Figure 2). Sequentially, the intangible motivating factors used by employers and experienced by project team members (Figure 3) and their importance for the respondents (Figure 4) are presented.

As can be seen from Figure 1, in the case of the first motivator (TF1) - **the basic rate adequate to the position and experience** is used in 79% of cases, in 14% of cases it is not used, and only 7% of respondents do not know whether it is used. As for the experience of this factor by the respondents, 78% of the respondents have experienced it. It can therefore be indicated that the application of an adequate base rate to the position and experience is both used by employers and experienced by team members. As regards **access to private medical care (TF2)**, it can be seen that it is used by as many as 86% of employers and 13% do not use it. When it comes to experiencing this motivator by the respondents, 75% of the respondents experienced it, while 25% did not. The third motivator (TF3), i.e. **additional training fully paid by the employer, access to training platforms or paid extramural studies**, are used in 79% of the companies surveyed, and in the case of 17% it is not used. Taking into account the experience of this motivator by the respondents, 67% of people answered that they had experienced this motivator. Another analyzed motivator was **the possibility to participate in conferences during working time (TF4)**. In this case, the vast majority of surveyed companies (79% of respondents) use the given motivator and 64% of the respondents answered that they had experienced this motivator. Another motivator - **additional insurance (TF5)** is used by 75% of employers of the surveyed persons, by 17% it is not used, and 8% do not know whether the company uses it. When it comes to the respondents' experiences, only 58% have experienced this motivator. The next motivational factor examined were **integration meetings with team members and company employees paid for by the company (TF6)**. In 76% of cases, this motivator is used by their enterprises and as many as 78% of the respondents have experienced this motivator. Another intangible motivator is **free access to sports facilities (TF7)**. In this case, it is used by 58% of employers, 31% do not use it, and 11% do not know whether it is used in their company. In turn, 49% of the respondents have experienced this motivator. **The opportunity to learn foreign languages funded by the employer is TF8**. Figure 1 shows that in 69% of cases this motivator is used by the surveyed companies. In addition, 51% of the respondents have experienced the given motivator. Another intangible factor examined were **additional privileges, e.g. a company car, a mobile phone (TF9)**. In this case, 52% of the enterprises in which the respondents work do not use the given motivator, 40% do, and 8% do not know whether it is used. What is more, 65% have not experienced using this motivator. The tenth motivator examined was **the use of annual discretionary bonuses (TF10)**. The motivator is used in 61% of enterprises, but as many as 50% of respondents have not experienced the use of annual discretionary bonuses. The next examined motivator was **access to modern technologies and equipment (TF11)**. In 76% of cases, this motivator is used by the surveyed enterprises. In turn, 69% of respondents have experienced this motivator, and 31% stated that they had not experience it. Using a motivator in the form of **additional social benefits, e.g. vacation, getaways, cultural events** is **TF12**. This motivator is not used in 45% of the enterprises of the surveyed team members. Figure 1 also shows that 63% of the respondents have not experienced TF12. Another

factor, **additionally paid overtime (TF13)** is used by 61% of the surveyed enterprises, 29% of employers do not use it, and 10% of respondents do not know whether it is used. In terms of experiencing TF13 by respondents, 50% have experienced it. Another examined motivator were **material rewards (TF14)**. In this case, 58% of companies where project team members worked do not use this factor. In turn, 76% of respondents have not experienced this motivator. The last examined motivator in the group of tangible factors were **pension programs (TF15)**. In the case of 38% of the respondents, the motivator is not used in their company. In turn, as many as 78% of respondents have never experienced this motivator.

The importance of tangible motivational factors for the respondents is shown in Figure 2. And so, it can be noticed that out of all 15 analyzed factors, the surveyed members of remote teams in the IT industry considered the following to be of key importance to them: (1) adequate base rate for the position and experience – TF1, (2) annual discretionary bonuses – TF10, (3) access to modern technologies and equipment – TF11, (4) additional training paid in full by the employer, access to training platforms or paid extramural studies – TF3, (5) additionally paid overtime – TF13. In the field with additional motivators, the respondents also specified the possibility of paying extra for additional days off and the use of "workation", i.e. the possibility of going on vacation and simultaneously working and resting during free time. In addition, the possibility of using cafeteria bonuses as thanks to other employees of the company, who are not members of a given team and are not subordinate to project managers, was specified.

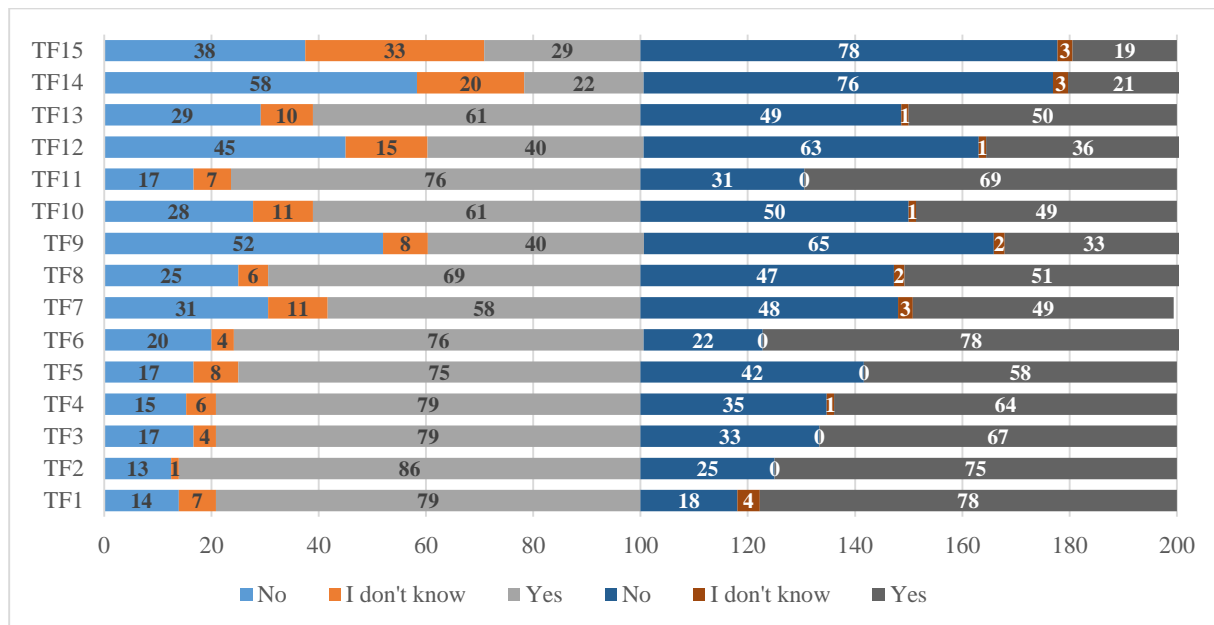


Figure 1. The use of tangible motivational factors by employer vs. The respondent's experience in applying given tangible motivational factors.

Source: Own elaboration.

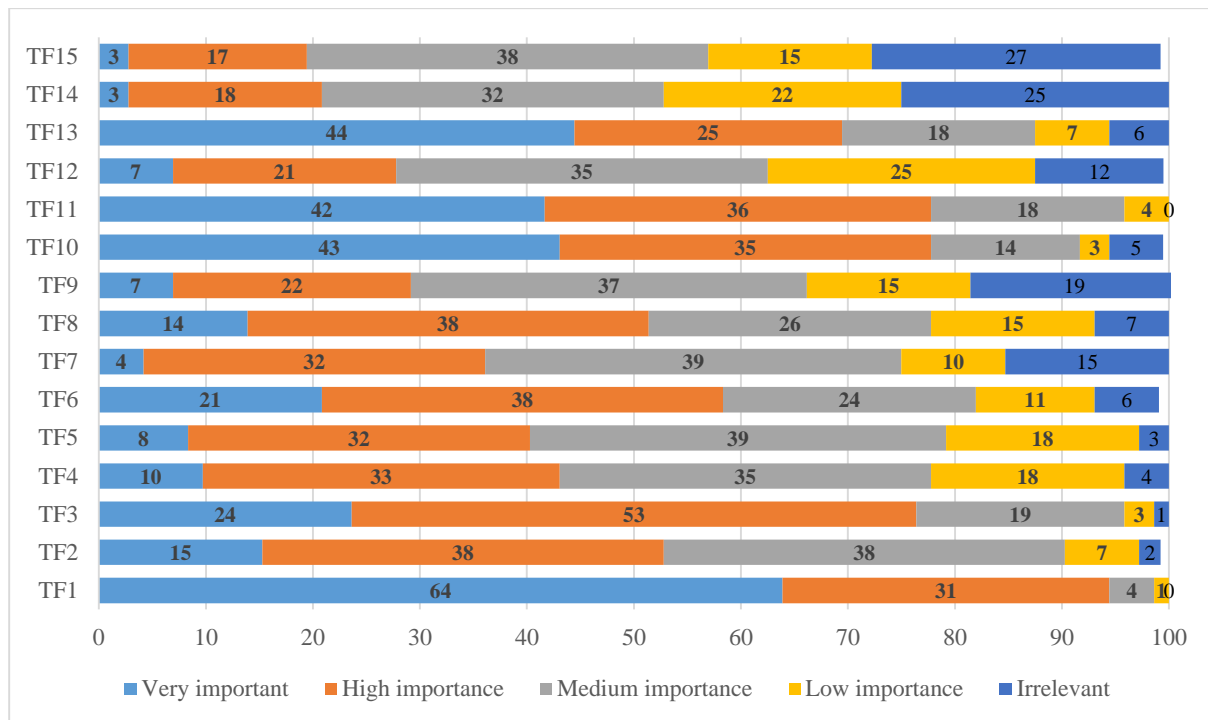


Figure 2. Results regarding the importance of tangible motivators.

Source: Own elaboration.

Figure 3 refers to the use of intangible motivation factors by the surveyed companies and their experience by project team members. As shown in Figure 3, in the case of the first motivator - **implementation independence and decision-making autonomy (IF1)** - 78% of employers use the given motivator, 18% do not use it, and 4% do not know whether the company uses it. As for the experience of this factor by the respondents, 81% of team members experience the above motivator. As far as **the possibility of reconciling professional duties with private life (IF2)** is concerned, it can be noted that it is used by as many as 90% of employers, 4% do not use it, and 6% of respondents did not know whether the employer uses it. When it comes to experiencing this motivator by the respondents, 92% of the respondents have experienced it. The third motivator, i.e. **having a mentor supporting career development (IF3)**, is used in 50% of the surveyed companies, in 39% it is not used, and 11% do not know whether the company uses it. Taking into account the experience of this motivator by the respondents, 53% of people answered that they had experienced the use of this motivator. Another analyzed motivator was **the freedom to express opinions and views (IF4)**. In this case, the vast majority of surveyed companies (93% of respondents) use the given motivator. When it comes to the experience of the respondents in this regard, the results here are consistent with the use of this motivator by enterprises. Another motivator - **clearly defined goals and a competency development plan (IF5)** is used by 63% of employers of the surveyed persons. As far as the respondents' experiences are concerned, only 60% have experienced this motivator. The next intangible factor examined was **the lack of discrimination by colleagues (IF6)**. In as many as 92% of cases, this motivator is used by their enterprises. In terms of experiencing this motivator by the respondents, as many as 90% of the respondents have

experienced this motivator. **IF7** means **no discrimination by superiors**. In this case, 90% of employers use the selected motivator, and as many as 94% respondents have experienced this factor. The eighth intangible motivating factor is **the principles of employee evaluation based on quantitative criteria - criteria with a specific score (IF8)**. In this case, it is used by only 40% of employers, 38% do not use it, and 22% do not know whether it is used in their company. In turn, only 35% of the respondents have experienced this motivator. **The principles of employee evaluation based on qualitative criteria (descriptive evaluation prepared by the immediate supervisor) are IF9**. Figure 3 shows that 31% of employers do not use it, 47% use the selected motivator, and 22% do not know whether the company uses it. In addition, 44% of the respondents have experienced the given...

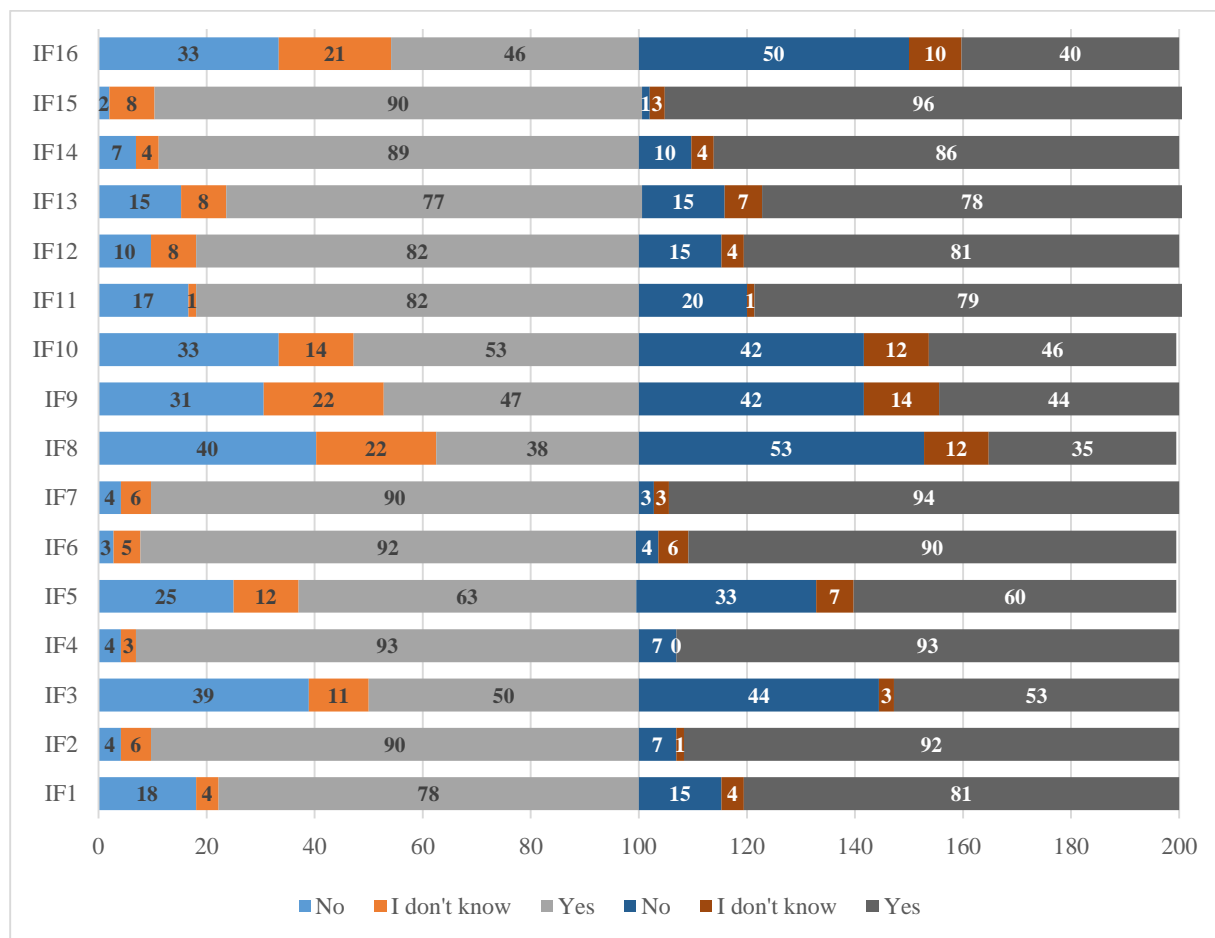


Figure 3. The use of intangible motivational factors by employer vs. The respondent's experience in applying given intangible motivational factors.

Source: Own elaboration.

Another examined intangible motivator was **the opportunity to work in a project that solves significant problems in the context of social development, the environment and solving complex problems (IF10)**. In this case, it can be seen that 53% of the surveyed employers use the given motivator. However, 46% of respondents have experienced it and 42% have not experienced it. The next examined motivator from the group of intangible ones was **flexible working hours (IF11)**. And so, it is used in 82% of the surveyed enterprises, 17% do not use this motivator, and 1% do not know whether it is used. The experience of this motivator

by the respondents is similar. The twelfth intangible motivator (**IF12**) was **the opportunity to experiment and learn**. 82% of the surveyed employers use it, 10% do not use it, and 8% of the respondents do not know whether it is used in their company. The results in terms of experiencing it are almost identical. Another factor, **the use of praise and recognition (IF13)** is used in 77% of the surveyed enterprises, in 15% of employers they are not used, and 8% of the respondents do not know whether they are used. The experience of this motivator by the respondents is similar. Another examined motivator was **working in a "good" team (IF14)**. 89% of respondents answered that it is used in their company. In turn, 86% of people have experienced this motivator, 10% have not experienced its use, and 4% do not know if it is used. The fifteenth examined motivator from the intangible group was **job security (IF15)**. In this case, 90% of the respondents answered that their company uses IF15. In terms of experiencing this factor, 96% of people claimed that their employment was certain. The last examined motivator in the group of intangible factors was **the possibility of choosing the project in which they wanted to participate (IF16)**. According to the respondents, 46% of employers provide such an opportunity, 33% do not provide such an opportunity, and 21% do not know whether the employer uses the given motivator. In turn, when it comes to experiencing this motivator, 50% had no choice.

The importance of intangible motivational factors for the respondents is shown in Figure 4. And so, it can be noticed that out of all 16 analyzed factors, the surveyed members of remote teams in the IT industry considered the following to be of key importance to them: (1) the ability to reconcile professional duties with private life – IF2, (2) job security – IF15, (3) the ability to experiment and learn – IF12, (4) flexible working hours – IF11, (5) working in a "good" team – IF14, and (6) independence in implementation and autonomy in decision-making – IF1. In the field concerning other intangible motivators, the respondents also indicated the possibility of horizontal promotion, i.e. changing the career path within the same organization, as important.

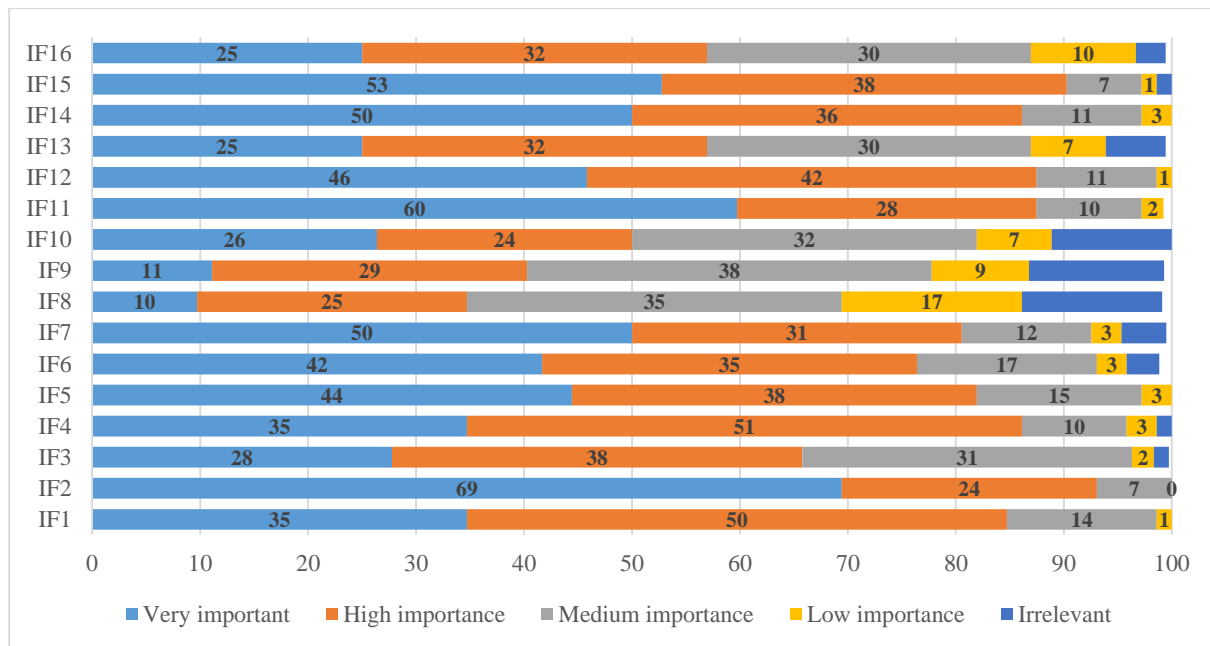


Figure 4. Results regarding the importance of intangible motivators.

Source: Own elaboration.

5. Discussion

The article poses four research questions related to the importance of motivational factors for members of remote teams from the IT industry. Referring to the first research question, it can be stated that the members of remote teams from the IT industry as the most important motivational factors out of all 31 factors surveyed considered: (1) the ability to reconcile professional duties with private life, (2) an adequate base rate for the position and experience, (3) flexible working hours, (4) job security, (5) working in a "good" team, and (6) the opportunity to experiment and learn. It can therefore be concluded that among the most important motivational factors for the respondents were both tangible and intangible ones, i.e., answering the fourth research question, tangible motivators are not more important than intangible ones, on the contrary - intangible factors are equally important for the respondents. This is in line with other previous studies presented in the literature, e.g. (Daniel, Metcalf, 2005; Silverman, 2005) emphasizing that organizations that use both tangible and intangible motivators will perform better, and thus the effectiveness of their teams will be better. Admittedly, the results of some studies, e.g. (Al-Nsour, 2011) show that tangible motivators have a greater impact on motivation compared to intangible ones, but the same research shows a significant relationship between tangible and intangible factors and team performance. In addition, it should be noted that tangible motivators require additional financial outlays and

intervention at the level of senior management, while intangible motivators are most often used at the level of lower management.

Furthermore, the division of motivational factors into tangible and intangible ones allows for their balanced selection and adjustment to the needs of project team members. This is also confirmed by other researchers, e.g. (Lawler, 2003) pointing out that employee motivation can be increased by offering better and more tailored reward and recognition programs that will increase the effectiveness of undertaken projects.

In addition, the research revealed that the respondents considered the base rate adequate to the position and experience as the most important tangible motivating factor. This result is not surprising, because in research conducted in this area, (Baddoo et al., 2006) it is indicated that financial remuneration is one of the most valuable factors for employees. Annual discretionary bonuses also turned out to be an important factor in this group. In this context (Amstrong, 2003) emphasizes that if financial rewards are related to the performance of individual team members, they provide a form of feedback on their performance. Moreover, it indicates that employees are motivated only when performance is linked to rewards. In the group of tangible factors, the respondents also indicated additional training paid in full by the employer, access to training platforms or paid extramural studies. The importance of this factor is also confirmed by research (Seiler et al., 2012), although their authors emphasize that motivational factors related to learning opportunities are more important for younger than older employees.

In turn, taking into account intangible motivating factors, the most important in this area turned out to be the ability to reconcile professional duties with private life, job security and the opportunity to experiment and learn. Regarding job security, (Dwivedula, Bredillet, 2010) note that until recently, organizations have not focused on ensuring the continuity of employment for their project employees. This resulted in a high turnover rate in some industries, in particular in the IT industry. Therefore, organizations wanting to retain their employees had to change their strategies in this area. In the context of opportunities for experimentation and learning, (Dwivedula, Bredillet, 2010) emphasize that project-based organizations, due to their structure and requirements, should create a culture conducive to taking up challenges and experimenting. Employees of remote teams in the IT industry have also shown flexible working hours as a leading motivator. This is consistent with previous research, e.g. (Fuller, Hirsh, 2019; Jonek-Kowalska et al., 2020) in which it was emphasized that flexible working time is a key resource that helps to cope with competing requirements in various industries. In addition, independence in implementation and autonomy in decision-making turned out to be important for the respondents. The importance of this factor is also emphasized by (Dwivedula, Bredillet, 2010) according to which the project team should be granted autonomy at the stages of project implementation, and this effort should be rewarded for results. They add that ensuring autonomy in action along with meeting the needs respect of the project staff, will lead to further good team performance.

The most serious limitation of our study was the relatively small sample size. It should be noted, however, that there were both industry restrictions - (IT industry), as well as the nature of work (remote work), which limited the surveyed population quite strongly. The continuation of this research may be its repetition in different contexts, in organizations from other industries and from other countries. Research on motivational factors in teams implementing projects in non-profit or production organizations could be cognitively interesting. This would allow for a comparison of motivators in project teams from different industries, and shed more light on the clear challenges and prospects associated with working in remote teams. This study may also be limited by not separating motivators into those that the team expects from the organization, and which are expected from the supervisor, i.e. the project manager. Approaching this issue from such a perspective would allow organizations to target their activities in the area of team motivation even more. It would also be worth paying attention to the issue of intrinsic motivation in future research, which also seems to be important in this case.

6. Conclusions

The results of this study have implications for both research and practice. While previous research looked at the different skills required from IT professionals, little attention was paid to the motivation of project team members, including those working remotely. This study is one of the first to address this issue, thus contributing to management science in the field of project management and human resource management from the perspective of the motivation of remote project teams from the IT industry and raising the argument for focusing more attention on building motivation systems based on tangible and intangible factors, tailored to the needs of a specific group of employees.

For practitioners, the results of the study can be immediately used in many ways. First, organizations in the IT industry increasingly need to take various types of actions to properly maintain the motivation of members of their organization's project teams. Their offer must be attractive to draw new employees' attention. The results of this study show the key motivational factors that are worth adjusting to the expectations of current and future members of remote project teams in the IT industry.

With regard to the first key tangible motivation factor - an adequate base rate for the position and experience, organizations should ensure that the remuneration received is adjusted to the role performed in the team, responsibility and competences that a given team member represents. They should also provide an additional budget to adjust the base rate to the current role. In terms of guaranteeing modern equipment and technology for remote team members in the IT industry, it is worth introducing a specific process of replacing equipment at a certain

fixed period of time so that employees do not feel neglected and do not leave for competition due to negligence in this area. In terms of the annual bonus system - it is worth preparing an appropriate plan for monitoring the involvement of team members and a strategy that will be the basis for calculating the bonus. The annual bonus system can also encourage constant commitment throughout the year of work and guarantee motivation for the next years of work on the project. Enabling team members to develop competences through training, access to training platforms or extramural studies will allow members for constant development tailored to the needs of projects implemented in the organization, and ensuring an overtime remuneration system clearly defining the benefits that result from performing additional work, will allow to ensure the continuity of work "in difficult periods" in the project, requiring additional work.

In the case of intangible motivators, organizations should show greater interest in this group of factors and use them in their incentive systems. In this case, the respondents put the possibility of reconciling professional duties with private life in the first place. Therefore, duties for team members should be selected so that they do not have to work in their free time and beyond their capabilities. The right scope of duties will make employees much more motivated, which can result in more effective work, increased quality and greater commitment. Job security ranked second. It is therefore worth guaranteeing employees the right type of contract during the recruitment process, as well as bearing in mind that team members are often sensitive to situations that may suggest problems in the organization. In terms of the opportunity to experiment and learn, team members who will be given the opportunity to try and perform experiments, resulting in a reduction in the time required to perform tasks or an increase in the quality of the final product, will be more likely to be involved in the daily life cycle of the project. Defining the scope and opportunities for experimenting and learning can have a positive impact on the entire project team, which is focused on innovation, especially in this industry. As for flexible working hours organizations should guarantee such an opportunity and define the appropriate scope of tasks without detailed planning of the time in which they will be performed, in order to allow individual employees to perform work at the most convenient time for them, taking into account the fixed daily schedule team work. In the context of working in a "good" team it should be pointed out that the selection of members according to their personality types is crucial in this matter. Identical personalities should not be selected for the team, but it is worth monitoring the attitude of its individual members towards each other. It is worth pointing out here that organizations during the team recruitment process should use popular personality tests that allow to identify the roles that best suit the given employees and select the team in a complementary way. In the case of the last key IF, i.e. implementation independence and autonomy in decision-making, project team members should be gradually granted freedom in performing tasks and making decisions, monitoring the effects of their work so as to ensure good results.

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