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Methods of evaluating and motivating an IT project team

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ABSTRACT

The paper describes what a project team is, what are its components, and what skills are required from a project team manager. In addition, most commonly used techniques of team evaluation are described, along with methods used in motivating team members and whole teams. The aim of the paper was to confront literary sources with the real experience of IT project team members. A survey of 100 respondents was conducted. All respondents have worked in an IT department during the last five years. The group of respondents was diverse in terms of age and gender. The questions pertained to methods of evaluating and motivating team members in IT departments.

Keywords: project team, project manager, methods of evaluation, motivation, IT department

1. INTRODUCTION

A team that implements a project is known as a project team. It is created at the project design stage and is led by a project manager, who is also responsible for the conditions under which the team will operate. Before commencing any work, it is important to consider whether a given project team needs a leader or a manager. Both a leader and a manager are responsible for the team, but they differ in how they govern them (Schein, 2010).

The definitions of leadership and management are similar, the difference being the tasks which leaders and managers perform to govern and support members of their team. According to Stan Portny: "Leadership emphasizes defining a vision and encouraging other people to help make that vision a reality; management focuses on creating plans and assessing

performance. Leadership focuses on people; management focuses on systems, procedures, and information” (Portny, 2015). The fundamental task of a project team is to carry out the work according to the project schedule. The team members need to be deeply involved in performing their tasks. To make the team involved, diligent, and responsible, it is important to motivate them constantly. It is important to motivate the team towards reaching their goal but also towards assuming certain attitudes and behaviours deemed desirable by the team leader or manager (Wachowiak, 2004).

2. METHODS OF MOTIVATING AND EVALUATING AN IT PROJECT TEAM

The factor that motivates human actions is the desire to fulfil their needs. Those needs can differ. Some people are motivated by material gain, others by responsibility or sense of belonging to a group. It is very important for a team to have a leader who can reconcile team-members’ ambitions and give them room for self-fulfilment. Another important factor beside continuous motivation is team evaluation and assessment (Sidor-Rzadkowska, 2000). Evaluation makes creating plans and monitoring their realisation easier. It also facilitates clear presentation of what is expected from the team members. An evaluation system should be able to grade a given team-member’s progress and is carried out in the team-member’s and their manager’s presence. Evaluation is the driving force behind effective work.

2. 1. Project team

A team is defined as a group that shares common goals and methods of work and is aware that each member of the team has to contribute in achieving its common goals (Steward, 1994). Some of them are of a temporary nature and are created to solve a particular problem. They are known as task force or project teams and are usually disbanded after their goal is achieved (Stoner, 1995). Those teams are characteristic of organizations with matrix structure.^(b) R.W. Griffin noted that “When interdependence is complex and several groups and/or individuals are involved, a single liaison between them may not be sufficient. Instead, a task force is assembled by drawing one representative from each group. The conflict management function is thus spread across several individuals, each of whom has special information about one of the groups involved. When the project is completed, task force members return to their original positions” (Griffin, 2008).

A project team usually consists of members possessing different skills, work methods, and employed in different areas of their organisation. It is common that a team member is working concurrently on a number of different projects. Task forces are usually created in order to “propose actions, generate ideas, exchange views and information, solve problems, and make decisions binding all members of their team to their original positions.”(Webber, 1979). The warranty of a project’s success is achieved by developing a method allowing for maximum work efficiency with minimum errors and no waste of time. It has to guarantee that every member of the team will fulfil their duties. It is important that each team member as well as its leader know what is required of them and feel capable of performing their role (Portny, 2015).

In addition to the project team itself, it is important to focus on its environment, which includes (Wachowiak, 2004):

- Top management of the parent company - rarely involved in the project, usually when the project is large and relevant to the company as a whole;
- Superiors of the team leader or other team members - decide on working conditions and daily tasks. They can remove unnecessary or ineffective team members;
- Project manager co-workers - they can provide support, for example in the form of additional human resources;
- Managers controlling internal resources;
- Internal customers - individuals or departments for whom tasks are performed internally;
- External customers - they are offered two types of projects: commissioned by them or intended to produce an end product that the client has not ordered, but which can meet his or her expectations;
- Local government and administration, legal regulations;
- Subcontractors - usually involved in construction projects or large projects;
- Suppliers - have an influence on timeliness and quality of the final product of the design team.

Project team members are subordinate to their project manager and to the appropriate function manager (Kerzner, 2013). Each member is responsible for their duties i.e. performing tasks in accordance with the highest standards and within the predetermined budget and deadline. Additionally, team members should possess the knowledge and skills necessary to perform their assigned duties, provide information to the other team members concerning progress, achievements, and encountered obstacles (Portny, 2015).

2. 2. Methods of evaluation

Aiding team members in improving their performance is an important task of a project manager. Assessing performance and training employees is not an easy task. However, it often can prove even more difficult to share this information in a constructive manner, so that the employee can use it to improve in the future (stoner, 1995).

“Employee evaluation is a function that implements the core values that the human resource policy of any organization takes into account (or should take into account). These values are first and foremost: equality and justice (protection of employees against improper conduct by superiors, co-workers or clients; adoption of equal opportunity policy for all employees, understood as equality, equal access and equal participation); respect for the personal dignity of all employees; Every worker's life and ensuring a safe, positive, creativity-friendly working environment (Sidor-Rzȧdkowska, 2000).

There are two main forms of evaluation: continuous evaluation and periodic evaluation. The former is performed during normal work. The employee is provided with information about the results of their work (which allows him or her to keep track of their effectiveness and schedule). Periodic evaluation, also known as summary evaluation is performed in certain intervals. It often comes comprises of extensive forms. The goals of assessment should be judged from the perspective of a manager (who makes predictions about using the current potential to complete future goals) and a team member (who is given information about the current progress, the quality of work, and potential skills and opportunities).

Eugene McKenna and Nic Beech distinguished grade evaluation (also referred to as work evaluation) and developmental evaluation. Work evaluation allows to grade an individual and his or her performance during a given period of time. The results are compared

with previously set goals and planned tasks. This assessment often affects the amount of the employee bonus. The developmental evaluation is based on interviews, which provide open and constructive feedback for creating appropriate motivation (McKenn, 2008). Any system of evaluation should meet several conditions, such as:

- It should be tailored specifically to a given team and its project
- Must be fair and objective;
- It should be planned and prepared before it is implemented;
- Must have well-specified criteria of evaluation,
- All procedures and criteria of evaluation must be known to all team members;
- It should be open and easy to change (Sidor-Rządkowska, 2000).

While creating an evaluation system it should be kept in mind that its goal is to assess the past to arrive at conclusions and improve work performance in the future. This function is presented in Fig. 1.

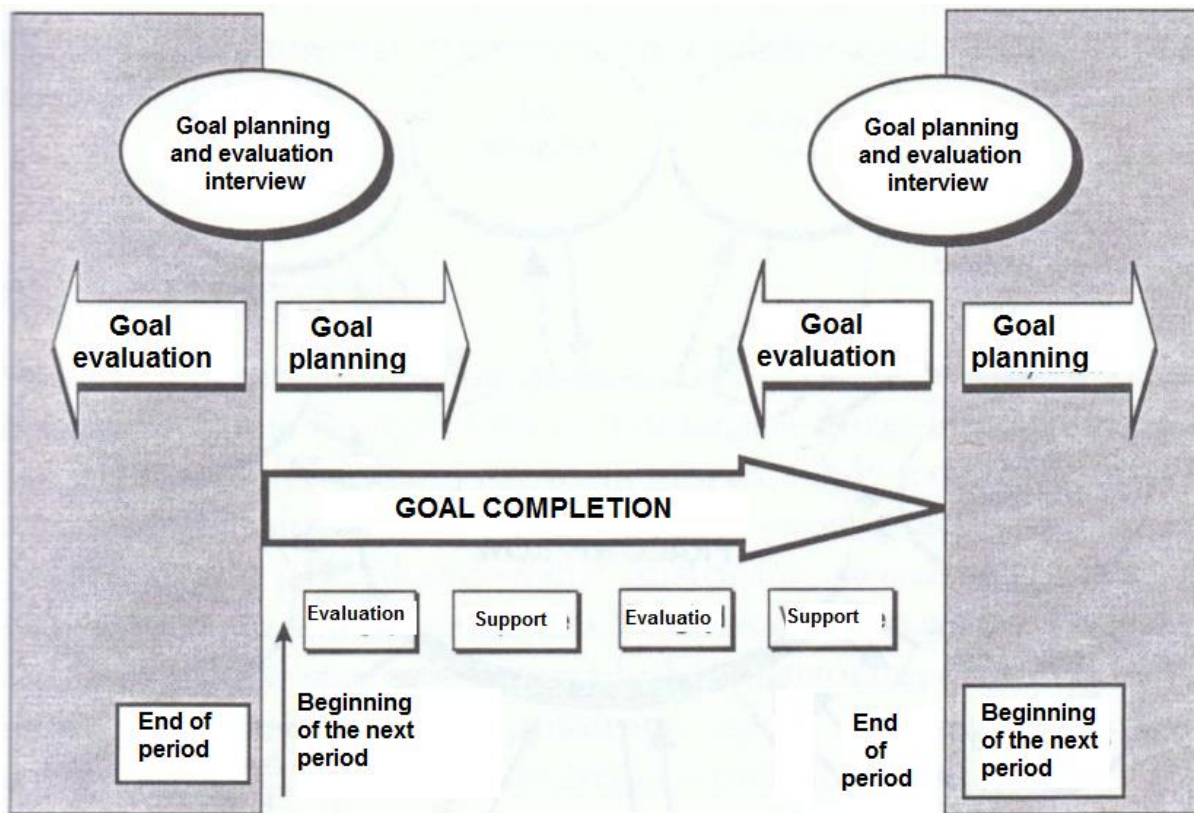


Figure 1. The role of evaluation during project completion
Source: M. Armstrong, Performance Management, Kogan Page, 1994, page 183

The performance evaluation itself is carried out in stages and comprises of: setting goals, work analysis, creating procedures and evaluation tools, assessment of financial compensation according to role in the team, discussing the evaluation outcome with each team member, creating plans of development, and making payment decisions (Kozmiński, 1999).

There are many methods of evaluation. They differ in what results they offer, their costs, strong and weak points, etc. Usually, employees are evaluated on an absolute or relative scale. The former is based on comparing a given team member with pre-existing standards; the latter compares different team members with each other (Munda, 2008).

„Some of the most popular methods of absolute evaluations are:

- Quantitative work standards,
- Point scale scores
- Exams
- Critical Incident Technique (CIT)
- Behaviourally Anchored Rating Scales
- Management by Objectives (MBO)
- Descriptive assessment” (Kostera, 1998).

Formerly, quantitative work standards were the most common form of employee evaluation. It was based on comparing quantitative data of a given team member’s work output with pre-existing norms. These norms were determined on the basis of measurements such as time required to perform an operation on a given work station. The work was partitioned into elemental operations, and each of these operations was measured using a stopwatch. Quantitative work standards are suitable for calculating premiums, as they focus only on quantity and not quality of work (Pryor, 2000).

Point scale scores are quite widespread. They consist of relevant criteria of assessment, with point scores assigned to each. The point scale is usually given in odd numbers, as it requires more thought on the employee’s part, not giving the opportunity to select only average scores. An improvement of this method is based on exchanging point scale for descriptions of extreme behaviour, suggesting the best and the worst possible behaviour.

Tests are easy to complete and often unreliable, as they suggest answers that are extreme, averaged or negative. They suffer from a lack of nuance, and force the person taking them to choose an answer that may not be reflective of the actual state.

Critical Incident Technique requires the manager to continuously monitor his or her subordinates and systematically record critical events such as failures and successes, which are later summed up in a periodic evaluation. This method of assessment is considered to be a diagnostic one, as its results are reliable and relevant. It also helps to avoid averaging or over-strictness (Kostera, 1998).

Behaviourally Anchored Rating Scales are considered the most objective assessment method. A detailed work description is created using behavioural categories. Additionally, the relationship between team-members performance and their pay is analysed. The work quality is evaluated as: very good, good, average, weak, or insufficient. The final step is to test this newly-created scale on a sample of employees and perform a statistical analysis (Griffin, 2008).

Management By Objectives is performed by a team member and his or her supervisor who together set goals for the given team member’s work post. The evaluation itself is to whether and to what extent the goals have been met. The advantage of this method is that all team members are included into decision-making – it is however time-consuming and work-intensive. It requires competence and responsibility from team members as well as their manager (Stoner, 1979).

In many companies, descriptive evaluations are the most common tool used to perform periodic assessment of team members. They take form of a questionnaire with open-ended questions. While creating a questionnaire, it is important to keep ratings consistent. The questionnaire should be treated as a work-sheath which records goals for the next evaluation period agreed upon by team-members and their manager. It should be consulted to monitor progress, signal any problems negatively impacting set goals, and create a final evaluation of project completion. If feasible, goals for the next evaluation period should be set before the previous period ends. If a team-member is involved into setting goals, it is more likely he or she will actively participate in achieving them. For this reason team-members should receive copies of completed forms.

A project manager is required to use multiple methods of evaluation and take into account a multitude of factors. A list of questions, relevant evaluation factors, and scales of rating should be based on the nature of the project and its purpose (Wachowiak, 2004). There are three most popular approaches used in evaluating results. These are:

- Approach favouring the evaluator;
- Balanced approach;
- Employee participation approach

The first approach is the most common. It involves inviting a team member to the office and giving him or her a few minutes to read the assessment form before starting a conversation. The person conducting the evaluation has unlimited time to prepare for the assessment, while the team member can only read the form before answering questions.

The second approach allows team members to better familiarize themselves with the form – they are given two business days for this purpose. This way, employees have time for reflection, have no need to reconstruct their opinions, and are less dissatisfied with potential negative assessment.

The third approach involves providing team-members with a blank form and asking them to perform a self-evaluation. Additionally, they have an opportunity to provide ideas for their future development. Simultaneously, their manager creates his or her own assessment of a given team-member. After some time, the parties exchange their copies of the form and are given two days to reflect – after this time they discuss each point. “This approach has several advantages. First, people tend to be more critical of themselves.” (Furtwengler 2001). This means that the manager will often have an opportunity to inform team-members that they are more capable than they themselves though they are. In conclusion, the balanced approach and the employee participation approach allow for time for reflection. The last method also provides additional information coming from the team members before the evaluation is finalized.

In each evaluation and evaluation method there exists a possibility of error. One of the most common problems is the tendency to overly rely on the latest results because they are easy to remember. Another mistake is to overemphasise one side of the scale (being overly negative, or assessing everybody as average). The halo effect can cause evaluation of one characteristic to be transferred the other ones. An example would be a high rating given for quality of work positively affecting other criteria. Additionally, evaluations can also be influenced by gender, race, or age bias. Therefore, in order to avoid misunderstandings and unfair evaluations, it is important to ensure that a solid assessment system is developed and that team leaders know how to adhere to it properly (Griffin, 2008).

2. 3. Methods of motivation

The fundamental task of a project team is to perform their work in a timely and satisfactory manner. To successfully realise goals, it is important that all team members are involved. It is also important to respond quickly, to be able to perform any additional work, and to find creative solutions for potential problems. For this reason, it is vital to fully utilise all team members' skills and capabilities. Employee behaviour can vary, so it is a project manager's job to motivate others to behave in the most desirable manner for the longest periods of time (Wachowiak, 2004). As Dwight D. Eisenhower said: „Leadership is the art of making someone want to do something you want done”(Chandler, 2004).

Motivating subordinates is a daily responsibility of a manager. “It includes a set of methods designed to shape or modify employee behaviour by motivating and creating organizational and technical conditions” (Wachowiak, 2004). Stoner defines motivation as “a set of factors that trigger, direct, and sustain the behaviour of people”(Stoner, 1979). Bittel claims that it is “the inner state of mind and body – dreams, wishes, needs, things that drive a man – that motivates him to take action” (Bittel, 1964). The process of motivating itself is initiated by a need or a feeling of lack something. An individual looks for ways to satisfy his or her needs, picks one, and acts accordingly. He or she evaluates if the effects of action have satisfied the need and to what extent, then determines future needs and ways to meet them (Griffin, 2008). Figure 2 shows the described motivational scheme.

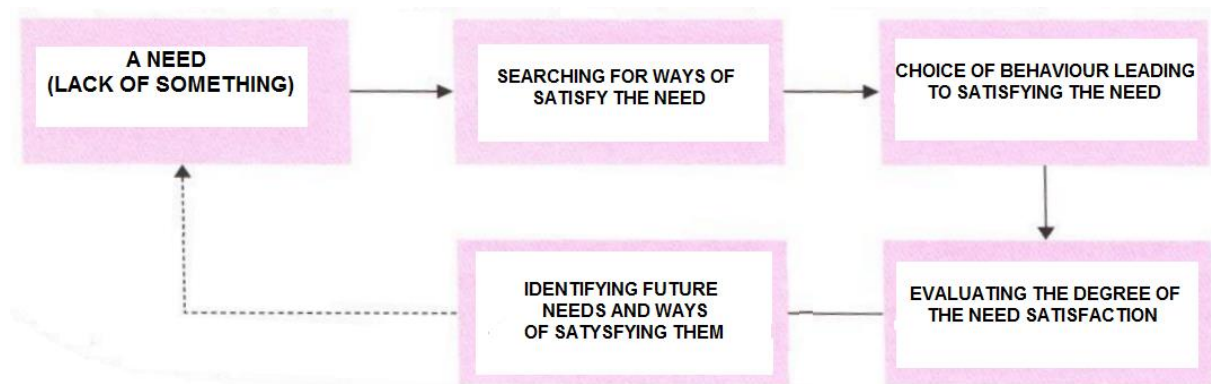


Figure 2. Motivational scheme

Source: R. Griffin, Organizational behaviour, Cengage Learning, 2008, page 458

The degree of motivation, or its strength, influences the behaviour of team members. It determines the degree of competitiveness in pursuit of a goal as it is influenced by fatigue, fear, or other obstacles. The strength of motivation is dependent by how attractive the goal is and if the person thinks it is possible to achieve it. For a team to be well organized, it is necessary to clearly define its task and criteria of evaluation. If an employee does not know the criteria that he or she has to meet, and does not understand the activity, then his or her motivation will be low. It is important to remember that financial factors affect the efficiency and involvement of employees. This is the so called instrumentality theory. The greater the probability of winning a prize for an outstanding achievement, a manifestation of attitudes or behaviour, the greater the motivation will be. Lack of adequate pay results in lack of

satisfaction, frustration and apathy, which in turn can lead to aggression towards the leadership. Performance during completion of a task increases in proportion of motivation, but only to a certain point. After this point, too much motivation can become a stress factor, leading to decrease of performance. “This form of detrimental effect of very strong motivation occurs when motivation is created by fear of punishment. Punishment can have different forms, such as: failure, disappointment, humiliation, ridicule, failure in a competition” (Piotrowski, 2000). Healthy motivation should be based on feelings other than fear, for example: interest, curiosity, sense of duty, ambition, need for recognition, respect for authority, etc. It is also possible for a leader to be so enthusiastic about his or her work, that this enthusiasm attracts attention and wins them supporters. Lee Iacocca said „the greatest satisfaction of a leader should be building people, not manipulating them for personal gain” (Piotrowski, 2000).

There are many models of motivation. The most popular ones are:

- Traditional approach
- Interpersonal relationships model
- Human resources model

The traditional approach has a strong connection with Taylor and his school of scientific organisation. According to him, workers should perform their boring and repetitive tasks as efficiently as possible. This concept is based on the assumption that work is an unpleasant necessity, that type of work is less important than pay, that meeting standards of production is achieved by introducing strict control and maximal simplification of tasks. Work should be divided into simple and easy to learn units. The leader holds strict supervision over subordinates, introduces detailed instruction, training, and extortion (Lepper, 1978).

The human relations model, created by Elton Mayo, assumes that social relations are important at work, and boredom and repetition are constraints. Additionally, satisfying one’s social needs is no less important than payment. The leader should satisfy the social needs of team members and establish the scope of their autonomy. In the human resources model, motivation consists of financial factors, self-fulfilment, but also of the need of accomplishment and feeling of work importance. It is important that team members identify and implement goals. The manager should strive to discover “hidden” potential in subordinates, increase their self-control, and create a work environment that fosters full participation in organizational goals (Jurkowski, 1998).

Motivational theories can be divided into (Griffin, 2008):

- Theories of content – focus on what is a motivation factor;
- Process theories – focus on how motivation is created;
- Reinforcement theory – emphasises the methods of behaviour learning;

The theories of content include: A. Maslow’s hierarchy of needs theory, Herzberg’s two-factor theory of motivation, and McClelland’s achievement motivation theory.

The first group is based on the following assumptions: needs are hierarchical, and motivation is the pursuit of unmet needs (when a need is satisfied, it no longer motivates). After satisfying a need, another need of a higher order appears. The only needs that can appear at any time are physiological needs and the need for safety. They form a basis for higher needs. There also exist the so called meta-needs, or ultimate satisfaction factors. They include the desire for beauty, harmony, goodness, truth, and fullness of life.

The two-factor motivational theory claims that there is a class of work-related factors that give satisfaction and motivation, while other factors cause dissatisfaction and lack of motivation. Motivational factors such as recognition, sense of achievement, responsibility, promotion, and personal development can affect both satisfaction and lack thereof.

McClelland's achievement motivation theory states that the need for power is positive if it leads to gaining power necessary for influencing direction of goals. In addition, according to his theory, managers are motivated mainly by the need of power and accomplishment, while their need for affiliation is less important.

The process theories include the theory of expectation and the theory of justice. The first one suggests that motivation depends on the intensity of a need and the ability to satisfy it. The theory of expectation assumes that people have different needs, goals, and desires, and also that they "choose from alternative plans of behaviour, basing their judgement on perceptions of how given behaviour will lead to the desired goal" (Piotrowski, 2000). It shows that motivation leads to effort, and effort, combined with a team member's skills and environment, leads to achieving goals at work. The theory of justice states that people strive for social justice, for example: rewards for work achievements.

The theory of reinforcement states that behaviour resulting in rewards will be repeated, while behaviour that results in punishment is much less likely to be displayed again. A manager can employ four types of reinforcement, that is: positive reinforcement (reward for desirable behaviour), avoidance (avoiding negative consequences of undesirable behaviour), punishment (discouraging negative behaviour by imposing sanctions), or elimination (discouraging negative behaviour by not noticing it by the manager) (Stoner, 1979).

There exists a model of motivational spectrum that allows to understand the experience from an encountering or performing a task. Six perspectives create a continuum in which one perspective can be chosen after another. These are:

- Disinterested perspective – feeling of loss of time and of being overwhelmed by additional responsibilities;
- External perspective – a chance to display one's position;
- Imposed perspective – feeling pressure, performing work involuntarily to avoid guilt or shame;
- Aligned perspective – opportunities to learn from other team members;
- Integrated perspective – linking the task at hand to a life or work goal;
- Inherent perspective – a chance to have fun (Flower, 2014).

All motivational perspectives are shown in Fig. 3.

It is worth noting that the disinterested, external, and imposed perspectives are considered suboptimal, while aligned, integrated, and inherent perspectives are optimal. Optimal perspectives are considered to be the most motivating. "To take full advantage of the motivational spectrum model, we must appreciate different effects the optimal and suboptimal perspectives have a person's short- and long-term well-being." (Flower, 2014). At the core of motivational methods lies encouraging people to reach their goals by working with their desires, needs, and aspirations. Therefore, in order for an employee to work efficiently, two conditions need to be met: the result of his work has to be beneficial to him, and he has to believe that his efforts affect the result of work.

Management through rewarding and punishing assumes that managers who practice this technique have interdisciplinary knowledge about roles of members of the organisation, as

well as structure, conflicts, power, incentives, communication and involvement of team members in decision-making. To achieve the desired behaviour, the manager applies negative (penalties) and positive (rewards) incentives. The use of negative incentives is quite simple, while application of positive incentives requires more time and effort to create proper perspectives and encouragement for the team members (Ferreira, 2009). It can happen that by motivating employees by rising wages, the manager can disincentivize exceptional team members. This happens when the manager rewards employees who used to under-perform, while forgetting about the employees who continuously performed well. The choice and use of stimuli alone is quite complex, therefore for them to be an effective tool of motivation, the manager needs to create a system tailored to employees it will affect.

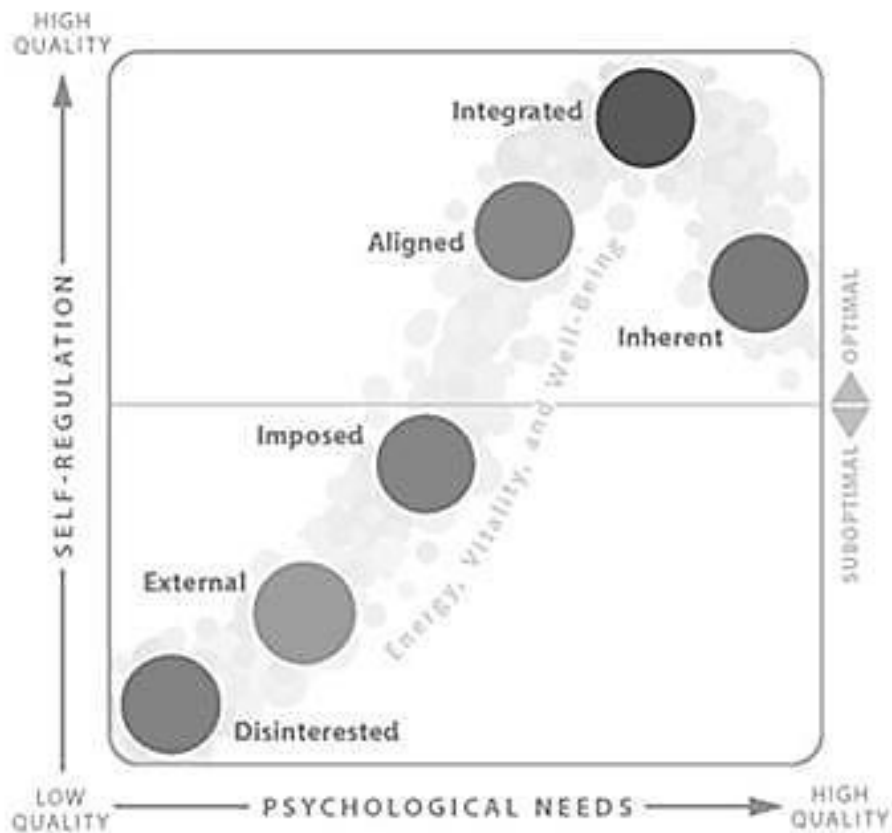


Figure 3. Motivational spectrum

Source: S. Flower, *Why motivating people doesn't work and what does*, Berrett-Koehler Publisher, 2014, page 32

Participatory management aims to reduce disparities in power by involving the executive staff in strategic and on-going decision-making. Decisions are made collectively, while the manager's role is to incentivize participation in the management. This technique is intended to involve employees and satisfy their higher needs, such as: the need to belong, self-fulfilment, and recognition. Influencing, interaction and information are all components of participatory

management. The disadvantages of this technique are the lack of responsibility for the decisions made, and the fact that it is very time-intensive.

Management through communication contributes to increased performance of the organization, better interpersonal understanding, incentivizes team-work, and facilitates identifying with the organization. For this technique to be possible, an atmosphere of trust is needed to avoid conflict and unhealthy emotion while expressing one's opinions. Information should be objective and trustworthy. The role of the manager is: to be open to others, to use appropriate body language, to create an environment encouraging communication, and meeting and spontaneous conversation with team members (Wilson, 2013).

Management through conflict aims to present opposing and conflicting goals. This approach often triggers activity and innovative thinking, as well as motivates the people who are in conflict. This form of management also contributes to increased awareness and revision of one's own attitudes, differences and similarities between different views. This method will have a negative impact if the organization is not proficient at identifying and suppressing conflicts. In the management process, conflict can be used as:

- a convenient opportunity for formulating innovative ideas;
- a moment in which the manager influences behaviour for the conflicted parties;
- a situation requiring arbitration which both strengthens the manager's position and allows him or her to direct team members' behaviour;
- a situation that allows emotions of both parties to be manipulated;

According to this technique, a failure to reach the goal or reaching it in an untimely manner is caused by lack or insufficient management (Parker, 2003).

Management by exception assumes that a manager should be able to use time as a valuable resource. A manager has to think strategically, be open to their his or her environment, create contacts with customers, shareholders, etc. A manager will only "join the action" when an unusual situation occurs, requiring the managers intervention due to special difficulty or opportunity. In addition to saving time and simplifying work, management by exception has motivational value. It allows to involve employees into matters of their organization and to develop their personal ambitions. A higher degree of autonomy allows for a greater level of job satisfaction, better pay, and more frequent promotions.

The author of management by objectives is Peter Drucker. His technique assumes that management should focus on goals of the organization, not the way of achieving them. Additionally, knowing the organization's goals allows for greater employee identification and likelihood of reaching those goals. A manager using this technique should organize and support teamwork, create criteria of evaluation, promotion and payment, as well as motivate through participation of low-level management into planning their organization's development.

Management by delegation of authority is well described by words of J. D. Rockefeller "Never do something that someone can do. Choose the best people from your employees, give them the proper education, give them your daily tasks, and sit back and think how Standard Oil can make more money." (Piotrowski, 2000) According to this theory, development of an organization causes managers to lose control over all of its activities, therefore delegation of authority is a necessity (ceding formal authority and responsibility for chosen tasks to another employee). The benefits are: relieving the manager of his or her workload, allowing him or her to concentrate on the most important issues; motivating subordinates to be more

productive and responsible. The delegation of power itself is linked to decision-making. Delegation of power is only satisfactory if it fully utilizes the skills of low-level management. It is only possible after carefully assessing capabilities and shortcomings of team members, evaluating the possible risk of not reaching goals, and when the manager believes it is strictly necessary. Delegated tasks should be routine, and the degree of delegated authority should increase along with growth of the organization. It is important to not delegate tasks to whole teams, as group liability is limited (Piotrowski, 2000).

2. 4. Motivation and evaluation practices of IT project teams in Poland

To investigate whether the literary sources are consistent with current practices in IT departments in Poland, a survey was conducted. The people who participated in the study all worked in an IT department in Poland during the last five years. The questionnaire consisted of seven questions and metrics including, among others, age (<18, 19-25, 26-30, 31-36, 37-40, 41-45, 46-50, >55) and gender (male, female).

The first question is what the main motivator of a project team is. From a list of possible answers, up to five could be chosen. The possible answers were: adequate payment, attractiveness of the project, clearly defined goals, clearly defined evaluation criteria, clearly defined tasks, possibility of achieving the project goal, personal development, entertainment value, commitment of the whole team, and “other factors”. The dependencies are shown in Figure 4. For the majority of respondents (69%) adequate compensation for their work is the biggest motivator for a project team. The next answer (60.3%) was the possibility of personal development, then the attractiveness of the project (55.2%), clearly defined goals (53.4%), and entertainment value (50%). The most common “other factor” was “an opportunity to share knowledge and mutual learning.

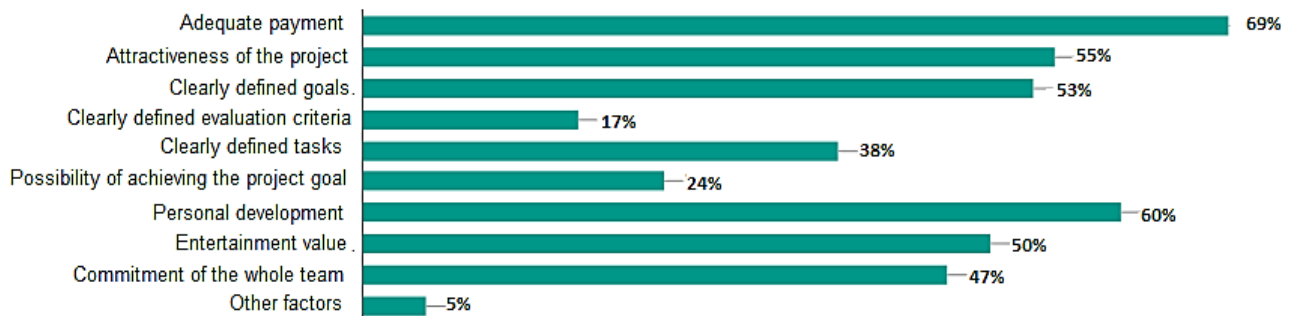


Figure 4. What is the main motivator for a project team

The second question asked which answer from the previous question was the most important (Figure 5). The tendency is that women are most motivated by adequate payment. For women of all ages this was the most important aspect, while for men aged 36-40 and 51-55 it was not the most important motivator. The majority of respondents’ opinion is that there is no greater motivator than financial gain. Another important consideration was the attractiveness of the project. It was important for women ages 18-25 and men aged 18-36. The rationale for this answer was willingness to follow innovative fields, personal development opportunities, and prestige coming from participation in such a project. Clearly set goals were the third most popular answer – it was chosen by women aged 18-25 and men aged 18-30, 36-

40 and 51-55. Only women over 55 are strongly motivated by clearly defined evaluation criteria.

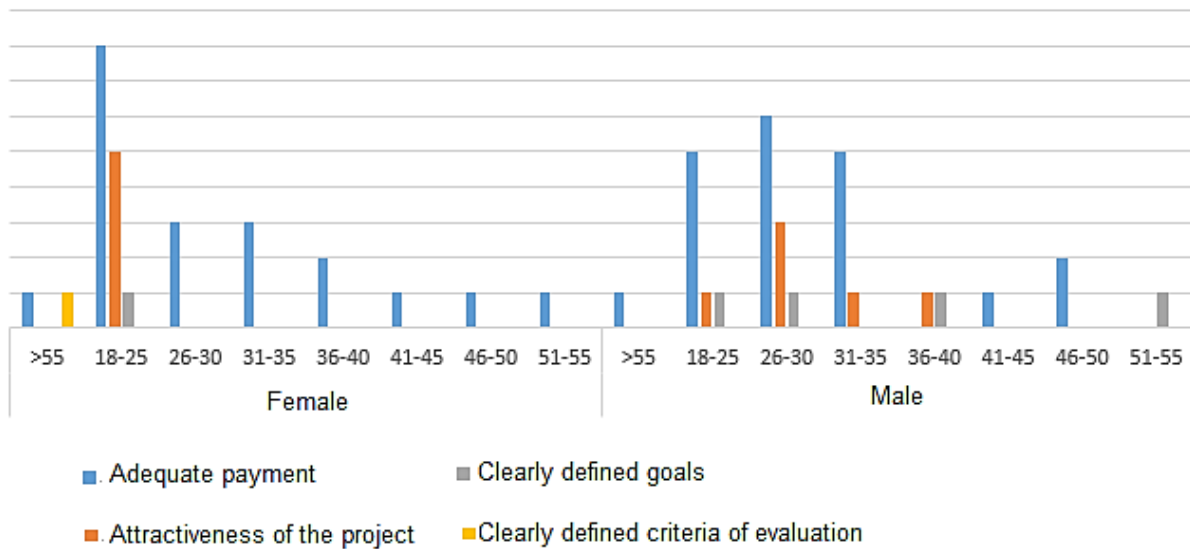


Figure 5. What is the strongest motivator

The third question asked what factors contribute to effective evaluation method. Respondents could choose up to three answers: matched to team specifics, open and possible to change, evaluation criteria known to all team members, fair and objective, planned and prepared prior to implementation, clearly defined evaluation criteria, and “other factors”. The results are shown in Figure 6. The most common response was „fair and objective” (65.5%), followed by „evaluation criteria known to all team members” (56.2%) and „clearly defined evaluation criteria (50%).

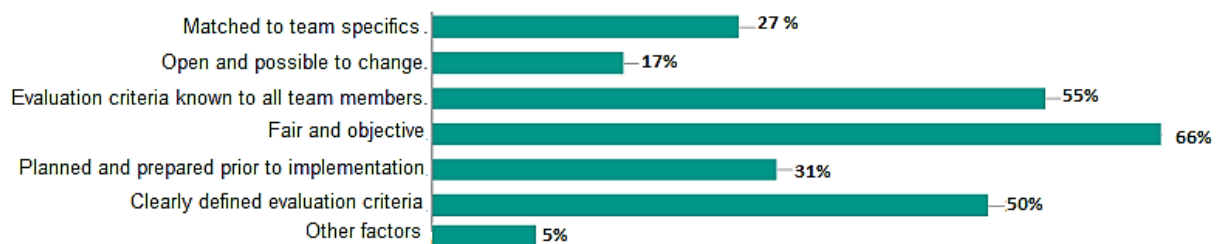


Figure 6. Elements of an efficient evaluation method

The fourth question asked which answer from the previous question is the most important. In Figure 7 it can be seen that women aged 18-45 and those over 55 believe “fair and objective method of evaluation” to be the most important. Men aged 18-30 and 45-50 also chose this option as the most important. For both women aged 46-50 and men 41-45 and 51-

55 the most important are “clearly defined evaluation criteria”. The answer “open and possible to change” was selected by respondents aged 18-25.

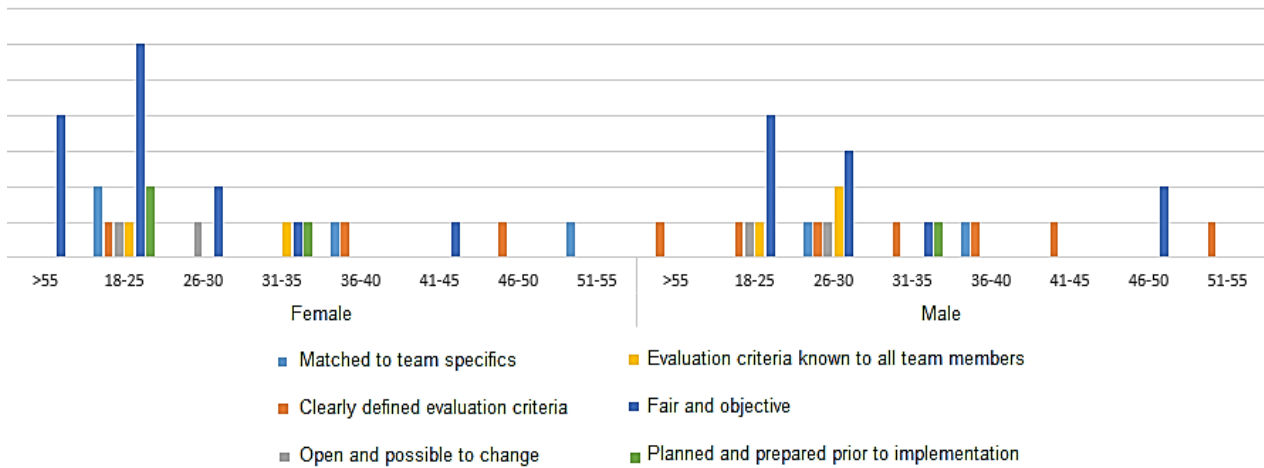


Figure 7. The most important elements of evaluation methods

In question 5, the respondents were asked which evaluation methods they encountered in their work (quantitative work standards, Critical Incident Technique, descriptive assessment, point scale scores, Behaviourally Anchored Rating Scales, exams, Management by Objectives, and others). Figure 8 shows that point scale score (71.2%) is the most commonly used tool. The next in order was Descriptive Evaluation (61%) and quantitative work standards (42.2%). The least common methods are Critical Incident Technique (15.3%) and behavioural scales (16.9%).

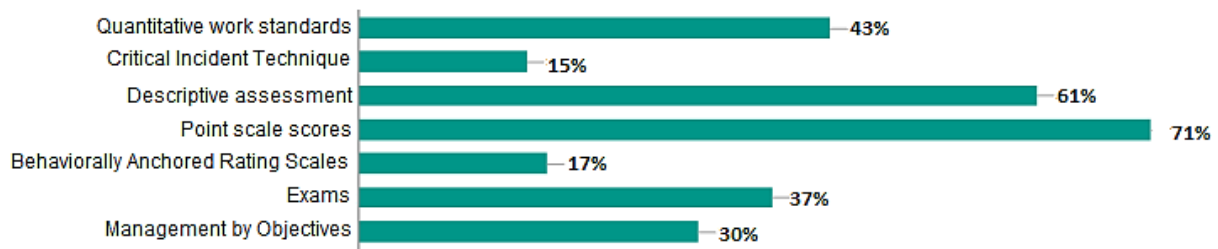


Figure 8. Evaluation methods

The sixth question asked the respondents if they are usually the ones performing evaluation or the ones who are being evaluated. Figure 9 shows that only men aged 26-40 performed evaluations exclusively. As many as 50% of respondents answered that sometimes they are being evaluated and sometimes they perform evaluation.

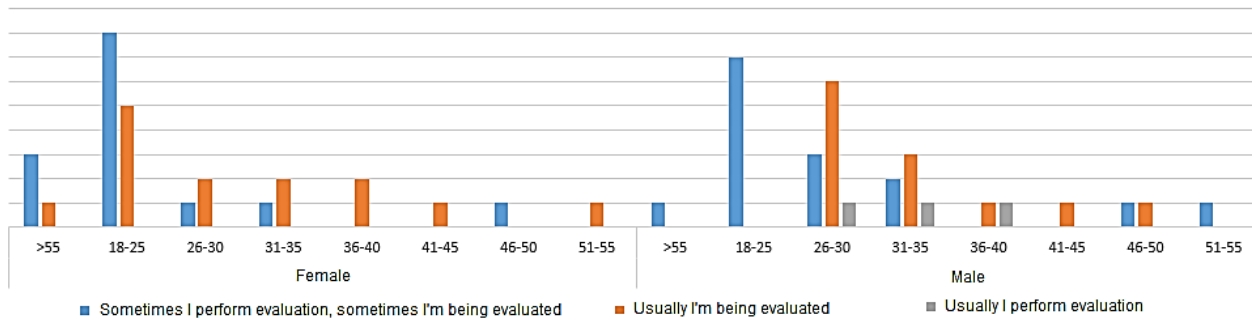


Figure 9. Performing evaluation vs. being evaluated

The last question asked whether respondents are more motivated by continuous or periodic evaluation. As Figure 10 shows, as many as 67.8% of respondents are motivated by periodic evaluation, and only 10.2% are motivated by continuous evaluation. 22% of respondents answered that none of the above motivates them.

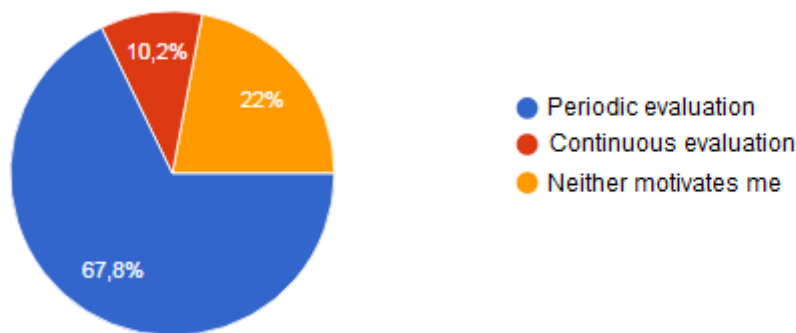


Figure 10. Continuous evaluation vs. periodic evaluation

3. CONCLUSIONS

The presented aspects of methods of evaluation and team motivation indicate that success of a single team member is conducive to the whole project. A team manager, in addition to creating a successful team, should also create an efficient system of evaluation to influence his or her subordinates' motivation. The financial gain often shapes employee attitudes as well as their motivation and behaviour. The impact of a reward system is closely related to expectation-based motivation theory. It is worth noting that an employee is willing to perform better, knowing that his or her efforts are measured, evaluated, and appropriately rewarded. In addition, according to the theory of expectation, each type of reward can have different value for each team member.

The article presents methods of evaluating and motivating a project team. After respondents' answers were confronted with data available in the literature, it can be noted that literary data has found confirmation in real life scenarios. Respondents believe that the most important evaluation factors are fairness and objectivity. According to the respondents, clearly defined criteria of evaluation and openness and susceptibility to change are also very

important. In their work place, most respondents were evaluated using point score scales and descriptive evaluation.

Although, as the saying goes, money is not everything, most respondents still think that an adequate payment is the best work motivator. Project attractiveness placed as the second most important factor, followed by clearly defined goals. It is worth noting that evaluation in itself is often not enough to motivate employees. From among different types of evaluation, periodic evaluation was found to be the most motivating, as it shows an employee's progress through time and how he or she is perceived as a team member.

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(a) **Matrix design** - „The matrix design combines two different designs to gain the benefits of each; typically combined are a product or project departmentalization scheme and a functional structure.” – R. Griffin, *Organizational behaviour*, Cengage Learning, 2008 page 380

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