

ABSTRACT

Osakwe I. Formation of the project team by the criterion of potential subjective well-being of the candidates in the project. – Qualification scientific dissertation manuscript.

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Modern projects environment tendencies are changing the role of personality as human resource of companies and their projects expecting them to dispose competence to be effective still in modern complex environment. It becomes visible in stable statistics of the project failures and crucial role of human factor in these failures. Project management methodologies became more human and competence oriented which led to introduce such new managerial parameter focused on personalities' state as a reason and factor of effective teamwork, as subjective well-being (SWB). This opens another angle of focus from where project team management can be viewed differently, basically as the study of what makes up the life of a person from their perspectives, their approaches, and these determine their reactions to events that take place in their lives, varying from person to person as it is deeply individualistic.

Employees' SWB is a major key player in the effectiveness and results of their performance because it helps the project manager and the stakeholders to understand fully what it takes to get the very best out the project team and get the desired maximum result especially if the organization is project-oriented. The major practical issue with project team forming with organizations is that they recognize the importance of SWB, but are unable to find its units or standards or even anything related directly to the measurement or determination of SWB in the context of forming the project team.

Within the traditional approach, SWB is used to monitor progress and to inform policy, or, rather, ‘ill being’, in terms of depression rates and in the provision of cognitive behavioral therapy. Thus a deep theoretical base to understand, scan,

interpret and propose ways to correct the personal SWB of the project team members are developed in works of Ed Diener, Shigehiro Oishi, Richard E. Lucas, Mihaela MAN, Constantin TICU, Hao Zhang, Jia Tan, Teresa Del Pilar Rojas, Fred Luthans and Bruce J. Avolio, James B. Avey, Steven M. Norman, Jan-Emmanuel De Neve U, Louis Tay and others.

Unlike the traditional approach, utilizing SWB as a selective parameter exposes actual unsolved tasks. First of all, it is interpreting SWB as a factor for the project teamwork, regarding person involved to the particular project as a team member and the team as a whole; based on that grounding the SWB-indicators system, methods to scan every project team candidate and then to configure the most rational team. The most “weak” and theoretically unsolved point of the scanning candidates and further finding the project team combination is the scale. For these two stages, the scale should be common. By today the fact was fixed that SWB scales are subjective, means incomparable, non-adequate for further manipulations when selecting team members. Among selective methods, utilized in the project team management, the closest methods in the context of SWB approach were proposed by Rach V. A., Lysenko D.E., Alatom M. Nevertheless, they contain principal ideas suitable for SWB approach and require further studies. Thus, by now, formation of project teams based on the SWB approach requires is a less developed, and that is why this topic and theoretical task is relevant, vital and can be considered preferable.

Object of a research is processes of managing a project team.

Subject of a research is a process of forming a project team based on SWB parameter.

The dissertation **is aimed** to ground scientific approach to forming of a project team based on the subjective well-being parameter. For that purpose, the following scientific **tasks** were solved:

- to consider SWB as a factor when forming the project team: what it reflects for a team member and what for the team as a whole;

- to propose the system for representing SWB-indicators based on holistic approach reflecting different aspects of a person in a team and in the project;
- to suggest the method of constructing candidate's personal SWB-profile based on ranking the proposed SWB-indicators;
- to propose the method of configuring the project team, which ignores the compliance of the team's integral characteristics with the ideal requirements, but allows to find out the most rational configuration by SWB-indicators;
- to develop the evaluation scale and the method for evaluation of coherence (commonness) of personal profiles of candidates;
- to carry out the experimental verification of the proposed approach.

Implementing mentioned tasks led to achieving a scientific result that is the development of methodological principles for the formation of a project team based on the parameter of subjective well-being. The novelty of the scientific result of the study is following.

SWB is considered as an indicator to construct a project team forming criterion, which reflects the subjective vision of the significance of particular SWB-indicators considering the project value for the candidate, the application of which allows to identify and compare the attitude of the candidates to SWB, the similarity of which determines the comfort of their interaction in the project team.

Further development has come to the system for representing SWB-indicators, due to taking into account the three contexts of their consideration (social, psychological, workplace) and the application of system quartile model within the each context, the grouping of SWB-indicators by the elements of the model, which allowed by identifying the relationships between individual SWB-indicators in the elements of the quartile model are justified to reduce the number of known SWB-indicators from 42 to 27 and to develop check templates based on three system models to determine the attitude of the candidates to the SWB and further usage when constructing personal SWB-profiles of the team candidates.

The method of constructing candidate's personal SWB-profile is improved, that, unlike the known methods of forming the profile as a result of direct ranking

of the indicators, provides multi-stage (iteration) ranking: in the first stage - ranking of three quartile models; on the second - ranking of elements in the model with the highest rank; on the third - ranking of indicators in each element of the model with the highest rank by the degree of their importance for the candidate. Indicators from the ranked lists are integrated based on the rule, according to which the first indicator of an element with a lower rank is less important than the indicator k , and more important than the indicator with the number $k+1$ of the element of the model with a higher rank. The integration procedure continues until a single list of 27 indicators is designed. This makes it possible to match the candidates' profiles to determine their similarity.

The method of configuring the project team, which, unlike the known methods of forming teams based on the compliance of the team's integral characteristics with the ideal requirements, involves a pairwise comparison of the SWB profiles of the applicants with the profile of the base applicant, which each candidate alternates. For each pair comparison, the sum of the total rank for the first five (the final rank of zone 1) and the next eight (the final rank of zone 2) of the profile indicators are calculated. The overall rank of the profile is determined by the higher value of the two ranks, provided that the difference between them is 2 and 3 ranges in zones 1 and 2, respectively, otherwise it is equal to zero. For each base applicant, combinations of theoretically possible teams with a defined number of members are determined. For each conditional team, the coefficient of coherence is calculated as the average normalized value of the weighted sum of the total ranks. The weighting is based on the Pareto principle. Of all the conditioned teams, the team with the highest value of the coefficient of co-ordination is selected. This allows to configure the team with the maximum possible consistency from the existing candidates, taking into account the greatest impact on the consistency of the team more significant for the contenders of profiles.

The estimation scale of coordination of the members of the project team, depending on their number, was constructed based on the results of the pilot experiment on the basis of the formed 288 theoretically possible teams of 2 to 10

people, for each of them the maximum and minimum values of the coefficient of coherence were determined. This allowed the determination of the limits of the coherence coefficient, within which there were five uniform zones (high, high enough, acceptable, undesirable, dangerous coherence), and beyond them, two zones (ideal and unacceptable coherence), and to assess the level of consistency configured project teams from existing applicants.

Practical value. Utilizing of the research findings and recommendations provides forming a project team from a limited number of candidates with the maximum possible degree of compatibility, thus to identify its strengths and weaknesses by subjective well-being parameter prior to the beginning of the teamwork. Due to the invariance, they are applicable in projects of any classes, types, kinds, and other contextual features. The most significant practical result of the research is the methodic of the project team forming based on the SWB parameter, which introduces developed approach, models and methods.

The research findings and recommendations were introduced in practical activities within the educational master program on project management for English speaking students in “KROK” University. Personal students’ SWB-profiles were built as a base to configure their teams for small, medium and large educational projects. Basic findings became a part of the educational courses “Leadership, communications and knowledge management”, “Human resources and team management”.

Structure and scope of work. The dissertation consists of introduction, three chapters, conclusions, list of references and attachments, placed on 152 pages. The text body is presented on 117 pages, it contains 21 tables and 20 figures. The list of references includes 137 sources and placed on 14 pages, 10 attachments placed on 22 pages

Key words: project team formation, personal profile, subjective well-being, team coherence coefficient, evaluation scale.

List of candidate's publications

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