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SUCCESS FACTORS OF AUTOMATION PROJECT MANAGEMENT

Sogomonyan V.V.
scientific adviser: candidate of economic Sciences Sokolova E.L.
Siberian State Aerospace University named after academician M. F. Reshetnev

Automation of any activity from engineering industry to wholesale trading and rendering public services is a laborious process, which effectiveness is not always obvious, and even more not always quantifiable. However, humanity has made great strides in the future, every day facilitating their lives and trying to save tenfold "accelerated" time. People create information systems and implement software for the purpose of their business development, reduction of costs and time, achieving a new level of planning and making managerial decisions and of course increasing their efficiency. Automated control system is not only the basis for stable functioning, but also an asset that can be profitable if used wisely.

It is rare to find a specific and scientific definition of automation projects in the literature. More often these concepts are found in the Internet, but their definitions are unclear and not always meet scientific requirements. There were analyzed the definitions of "project" and "automation" obtained from various literature sources, so we brought out our version which is we consider the most complete definition of automation projects.

The automation project is a comprehensive, non-recurring, one-time event, limited in time, budget, resources and clear guidance on implementation, developed under the customer's needs, the result of which is an information system that decrease labour-intensiveness of information's receiving, processing, transferring and use.

There is a commonly known fact that all projects in the IT sector have the highest risk and most of them are completed with exceeded time and budget. Moreover, many of the automation projects do not achieve their goals. "Panorama Consulting" company's research provides the following data:
- 35.5% of the projects took longer than expected;
- 51.4% of the projects exceeded the planned budget;
- 67.0% of the projects achieved less than half of the planned results.

The popular online journal "Computer Weekly" offers to get acquainted with the following data: 84% of the projects failed or were questioned, and according to estimates, the commercial cost of failed or private information projects in the USA amount to hundreds of billions dollars. IT leader "Standish Group" submits the following information:
- only 44% of projects are usually completed on time;
- on average, the projects take 222% of the originally planned duration and 189% of the initial budget;
- 70% of the projects reduce the initial amount of the project works.

At first sight such negative indicators of automation projects implementation unite project managers in their efforts to identify factors that minimize the risks of setbacks in the field of automation. The so-called "success factors" in the management of such projects are mentioned in numerous articles and scientific journals. Some tips and tutorials we can find in project management books. In this paper we try to systemize all suggestions and mark out the most versatile and popular success factors of automation projects also based on our own experience in this field.

Vivek Kale considers such factors project success: top-managers' direct participation; precisely delineated scope of the project; full coverage of the functions of the planned automation; standardization of business processes; transparency and seamless exchange of data at all project stages; allocation of the necessary funds and resources; timely infrastructure

creation and its accessibility; development of a plan for management change in the entire organization, training of the project team members; training of future users.

Ksenia Voitsekhovich which is a practicing project manager speaks about the necessity of the following positions for the successful implementation of the project:

– interest of a company's top-managers and their willingness to change;
– project leader among top-managers;
– availability of qualified specialist for implementation;
– formulating goals and priorities of the company;
– regulations of business processes and accounting;
– motivated management staff, encouraging employees for participation in automation;
– participation of specialists (experts) in methodological development and testing.

Anton Levikov focuses on the formulation of the business requirements to the automated system; project charter development and creation of a working group; competition among external contractors; important points which should be specified in the contract.

Ilya Harmats in his presentation reflected the following criteria: proper goal setting; overcoming resistance to change; top management support; motivation. Margarita Chernenko especially mark out formalized description of the company's activity; availability of corporate standards; customers' qualified personnel.

Employees of "Soft-Balance" company group highlights the following success criteria of the automation project:

– project manager's appointment from the customer side;
– empowering the project manager with the necessary competences;
– considering interests of all company subdivisions;
– structuring of business processes or patchwork automation;
– realistic expectations from the project sponsor.

John Avellanet which is a professional website expert compiled a list of success factors: use the Occam's razor, have permanent reserves, communicate to ensure accountability, apply the Pareto criterion, use multiple testing of beta version.

Thus, after ranking factors of success based on studied literature and our own experience of similar projects realization (e.g. "Easy payment" project for the automation of a noncommercial organization's activity), we can single out the most important and universal recommendations for automation projects managers: the project manager is a top-manager of the customer company, as well as the active involvement of the customer in the project, structuring and detailed description of the processes of the organization that need automation; formulated goals, specific objectives (SMART), the development of the project charter; motivated management and overcoming resistance to change in organizations; experts for implementation, external performers contest; the need to conduct an expert evaluation of the future adoption.

In our opinion, the criteria of success will contribute to the successful implementation of the project within the fixed deadline and budget.

At the same time we should not forget that there are more useful factors for automation projects as detailed structuring of the project into stages; fixing time reserves in a draft; high level of communication between the project team members and between the team and customers; a two-step beta versions' testing of projects of information systems adoption; taking into account the interests of all the company's subdivisions and structural peculiarities of organization; the existence of corporate standards; qualified customer's personnel (training of basic management disciplines to the management staff), as well as compulsory registration of the project implementation's important aspects in the contract.