

IMPLEMENTATION OF RPA DIGITAL ROBOTS ON THE EXAMPLE OF THE WIZLINK PRODUCT

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Abstract. Wizlink tool software is a product designed to automate activities performed in business applications at the workplace. Wizlink belongs to the Robotic Process Automation [RPA] class products. Its first version was developed as part of a research project. The commercialized version has been enriched with functionalities that were needed during the first implementations. For the purposes of its implementation, a proprietary methodology has been developed to support the implementation process, including the selection of a business process for automation and indicating the subsequent actions that are necessary to run the digital robot. The purpose of the article is to discuss key conclusions arising from the analysis of the implementation work carried out in specific applications. Empirical content will be preceded by an analysis of the literature on the subject in order to collate opinions and recommended approaches proposed by specialists dealing with this subject. The article contains recommendations on how to implement RPA digital robots resulting from the conclusions.

Keywords: Digital workforce, Exchange of good practices, Information management, Wizlink software

Introduction

The concept of implementation methodology is considered in the context of an Information Technology System. Using the methodology, the team of contractors increases the chance to provide users with an IT product best suited to their needs. By the concept of implementation methodology, specialists and researchers understand, for example:

- using best project management practices to help the implementation team at all stages of implementation (Gródek-Szostak, et.al. 2020, Ochoa Siguencia et. al. 2019; Gródek-Szostak et.al. 2017; Gródek-Szostak et.al 2019),
- a set of rules, tools and good practices that allow you to effectively implement the implementation (Gródek-Szostak, et.al.2020)
- defining step by step - what work, when and who will have to perform; it must be checked, based on solid foundations and have proven effectiveness (Kunze, 2007)
- "rigorous methodology and social relevance" (Lane, 1983),
- "use of the tools, corresponds with the implementations level" (Kirchmer, 2012),
- defines the problem in the context of socio-economic choice (Maskin, Sjostrom, 2002),
- complex technological, organizational and business venture (Olszak, Billewicz, 2014),
- "the process of implementing intellectual programming products" and "implementing a specific idea to achieve a specific result" (Ubermanowicz, 2014)
- involves the establishment of a team responsible for implementation, scheduling work, training users, it is also a process that requires overcoming the resistance of users

and getting used to different work methods (Porębska-Miąc, 2013).

The key components of the above definitions are the following components: good practices, a set of useful rules and tools, team, socio-business context, business idea / need, implementation result, action plan, business change.

The literature provides information about universal project management methodologies, which in particular can be projects aimed at implementing an IT system, such as PRINCE2 (PRINCE, 2020), PMBOK® Guide PMI (Wyrozębski, 2011) or NCB (National Competence Baseline) IPMA (NCB, 2008), and also indicates implementation methodologies associated with specific IT products such as: ASAP (Baloglu, 2012), IFS (IFS, 2019) or BPSC (Leszczyńska, 2011).

The analysis of the methodologies allows to distinguish several sequentially implemented groups of work. The following typically occur:

- initiation of work,
- developing assumptions for the target solution,
- implementation (including IT system parameterization),
- commissioning (production operation),
- post-implementation assistance.

The appearance and development of IT system implementation methodologies resulted from the needs of practice. It was also a consequence of accumulating experience (good practices) developed by project teams. From the point of view of preparing the implementation of another class of IT systems, which are RPA class systems, it was obvious that it was necessary to develop recommendations, document experience, analyse and modify implementation methodologies taking into account the RPA characteristics.

Implementation methodologies for RPA class systems

Compared to integrated ERP systems, RPA class systems seem to be simple tools. There should be no problems with their implementation and thus the development of dedicated implementation methodologies should not be particularly justified. The basic difference that the user notices is due to the scale of the phenomenon. Modern IT systems in business applications (such as CRM domain systems or MRPII / ERP integrated systems) are dedicated to a larger group of users and their implementation introduces changes in the functioning of a significant part or the entire organization. In accordance with the recommendations, business processes are remodelled and finally instructions for using the implemented software should be developed for individual positions. RPA class systems (software for developing and launching digital robots) were built as a way to improve work in a single position. As for the assumption, they were not intended to affect the entire business process. The purpose of the robot improvement was to replace human activity in the user's existing digital environment. The first implementation experiments negatively verified the hypothesis that it is possible to build and run South African digital robots without methodological guidelines. At present, it can be said that the methodologies offered on the RPA software market include:

- a) developers of RPA tool software,
- b) companies providing implementation services of someone else's RPA products.

RPA Implementation Methodology from UiPath is worth mentioning among the leading RPA tool software vendors. It indicates the legitimacy of performing the following tasks: Onboarding and COE enablement, RPA Preparation, Opportunity assessment, Design, Build & Test and Sustain RPA (Dunareanu, 2017). It is worth paying attention to the first group of tasks. It emphasizes the need for the organization COE (Center of Excellence). It should be an internal group of specialists who will participate in all gathering experience from the entire organization, developing standards and consulting subsequent implementations. The UiPath company gathers knowledge on various aspects related to the use of South Africa tools under the slogan UiPath Academy (UiPath, 2020).

The Blue Prism product supplier recommends implementing the robot broken down into the following steps: Automation Strategy, Mobilize, Realize, Operate & Grow. It is recommended to start work by defining the vision, adjusting expectations, determining the target state and Roadmap.

Companies that do not have their own South African products and provide implementation services or analyze implementation problems include: KPMG (RPA, 2018), Accenture (Whatling, Johnson, 2016), Capgemini Consulting (RPA, 2016), PWC (RPA, 2020).

Commonly in South Africa robots building and operating methodologies there are: planning, building, testing, supervision and maintenance. The scope of these concepts includes content adequate to the conditions typical of most organizations. They are meeting the implementation of South Africa for the first time, they have neither experience nor robots in the digital environment of the organization. The first version of the Wizlink RPA implementation methodology (FB-SMART) was developed in 2015. It consisted of the following steps:

- 1) identifying the user's situation,
- 2) selecting a fragment of the business process for pilot implementation,
- 3) reviewing the applications,
- 4) developing the business process support scenario,
- 5) launching and testing of the scenario,
- 6) user training,
- 7) post-implementation assistance.

Implementations carried out in companies from various industries allowed to gather experience and formulate new recommendations. The current version of the methodology includes concurrent activities at the strategic and operational level. Great importance was given to cooperation with the client's internal team to build own competences in the client's organization.

Conclusions

Observations on the course of Wizlink implementation work, the results obtained as well as problems and challenges that organizations have to face, which use Wizlink robots, allow to pay attention to several aspects. Most specialists agree that the processes that best suit RPA should be identified first. Wizlink team experience suggests that process typing should be done along with an assessment of the impact of RPA -induced change on the organization. Actions undertaken should be strongly linked to the organization's strategic plans and support its implementation. The improvement in work efficiency achieved in a single position is a temporary success that can easily turn into a bottleneck in other positions.

Linking RPA to the goals of the organization should be measurable. It is worth developing a standardized measurement of effects (benefits) in the organization from the first implemented robot. Optimizing the benefits of RPA locally can lead to conflicts and conflicting activities throughout the organization.

Organizations that have invested in human resources from the beginning with the competence to plan and run robots independently are more competitive. It is important to perceive uniformly in the organization that RPA is not a tool but a constant search for opportunities and implementation of changes in the organization thanks to RPA. This is a fundamental change in the optics of the perception of the role of IT tools in the organization and all decisions and actions should result from the vision of

the entire organization, business processes implementing this vision and the definition of the value provided to clients. This is a project that does not end with the implementation of the planned batch of robots. This is a project that should be continued and implemented in conjunction with planned changes in strategy and external requirements. Continuous change management has an impact on employees. It can stimulate their creativity and willingness to share proposals, but it can also have a negative impact as a threat to their position (Ochoa Siguencia, 2018; Gródek-Szostak et.al. 2020; Skrzek-Lubasińska, Gródek-Szostak, 2019).

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This project requires the involvement of IT representatives responsible for the infrastructure. Ensuring efficient and effective operation of robots (in particular autonomous) requires providing them with conditions (virtual workstations) and managing negative phenomena resulting from overloading of business applications with robot activities.

The RPA implementation methodology should therefore cover a wide spectrum of issues, giving employees mechanisms to identify, measure and manage them. In this case, the started works will bring the expected added value to the organization.

inclusion of adult social educators and adult social volunteers.

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