Robotic Process Automation in Accounting and Finance Processes: An Impact Assessment of Benefits

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Abstract : Robotic process automation (RPA) is a technology of repeatable business processes performed using computer programs, robots that simulate the work of a human being. This approach assumes replacing an existing employee with the use of dedicated software (software robots) to support activities, primarily repeated and uncomplicated, characterized by a low number of exceptions. RPA application is widespread in modern business services, particularly in the areas of Finance, Accounting and Human Resources Management. By utilizing this technology, the effectiveness of operations increases while reducing workload, minimizing possible errors in the process, and as a result, bringing measurable decrease in the cost of providing services. Regardless of how the use of modern information technology is assessed, there are also some doubts as to whether we should replace human activities in the implementation of the automation in business processes. After the initial awe for the new technological concept, a reflection arises: to what extent does the implementation of RPA increase the efficiency of operations or is there a Business Case for implementing it? If the business case is beneficial, in which business processes is the greatest potential for RPA? A closer look at these issues was provided by in this research during which the respondents' view of the perceived advantages resulting from the use of robotization and automation in financial and accounting processes was verified. As a result of an online survey addressed to over 500 respondents from international companies, 162 complete answers were returned from the most important types of organizations in the modern business services industry, i.e. Business or IT Process Outsourcing (BPO/ITO), Shared Service Centers (SSC), Consulting/Advisory and their customers. Answers were provided by representatives of the positions in their organizations: Members of the Board, Directors, Managers and Experts/Specialists. The structure of the survey allowed the respondents to supplement the survey with additional comments and observations. The results formed the basis for the creation of a business case calculating tangible benefits associated with the implementation of automation in the selected financial processes. The results of the statistical analyses carried out with regard to revenue growth confirmed the correctness of the hypothesis that there is a correlation between job position and the perception of the impact of RPA implementation on individual benefits. Second hypothesis (H2) that: There is a relationship between the kind of company in the business services industry and the reception of the impact of RPA on individual benefits was thus not confirmed. Based results of survey authors performed simulation of business case for implementation of RPA in selected Finance and Accounting Processes. Calculated payback period was diametrically different ranging from 2 months for the Account Payables process with 75% savings and in the extreme case for the process Taxes implementation and maintenance costs exceed the savings resulting from the use of the robot.

Keywords : automation, outsourcing, business process automation, process automation, robotic process automation, RPA, RPA business case, RPA benefits