

Chapter 84

Delivering Value in Procurement With Robotic Cognitive Automation (RCA) Services

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ABSTRACT

Organizations are applying digitalization to increasing amounts of different organizational processes. The procurement sector is also changing and actively seeking better ways to enhance performance such as the automation of workflow processes, for example, robotic process automation (RPA). To meet this clear demand, the automation of workflow processes in organizations has been a rising trend during the past few years. The author analyzes the potential of RPA along with the cognitive technologies robotic cognitive automation-based (RCA) value creation through knowledge work digitalization in the procurement sector.

INTRODUCTION

Most Companies are progressively using software robots to carry out standard business processes by imitating the methods in which individuals interconnect with software applications. And the speedily growing market for robot process automation (RPA) is by now indicating signs of major emerging trends: Enterprises are rapidly thinking of signing up to RPA along with cognitive technologies such as voice recognition, machine learning and natural language processing, to automate perceptual and wisdom-based tasks previously reserved for humans. (Herbert, Dhayalan, & Scott, 2016; Willcocks & Lacity, 2016) The combination of RPA and cognitive technologies is causing automation to emerging areas and can help organizations become more structured and agile as they move towards digital transformation business.

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The growing amount of organizational data has posed a challenge to its processing recently, also requiring increasing organizational resources to be able to perform the required processes efficiently. Organizations are applying digitalization to constantly growing amounts of different organizational processes. The automation of workflow processes, e.g., Robotic and Cognitive Automation (RCA), has been emerging in organizations as a solution to this demand after RPA. (Oliveira, 2016; Slaby, 2012) Robotic Process Automation (RCA) is an automation process that uses software and algorithms to automate the employer's operations with various digital technologies such as dynamic workflow, machine learning, and/or natural language processing (NLP), are realizing greater value by achieving intelligent automation and which can be used instead of a human resource in performing a specific process. (Lacity, Willcocks, & Craif, 2015) Utilization of RCA is justifiable, when using human resources is either too expensive, inefficient, or when the amounts of data to be processed are enormous. The Procurement sector is also altering and actively looking for better ways to enhance Performance (O'Sullivan & Stafford, 2016; Leopold, van der Aa, & Reijers, 2018).

The aim of this paper is to study the potential of RCA based value creation through knowledge work digitalization in the Procurement business industry. We are especially interested in analyzing what are the types of procurement work processes that can be digitalized with RCA. The potential of RCA in enhancing operational excellence can be a very important aspect of the digitalization of knowledge work, but there are few previous studies that have looked at the potential of RPA in this issue. By analyzing the opportunities enabled by RCA in the procurement Industry, the research brings a significant novel value for procurement sector, specifying the opportunities enabled by RCA.

BACKGROUND STUDY

RPA vs. Traditional Automation

In traditional automation method activities were performed by humans and helped by technology in this method tools used to perform tasks were excel spreadsheets with required human intervention thus bridging the gap between automated string of tasks, also end-to-end processes cannot be carried out autonomously. Whereas in robotic process automation end-to-end processes are carried-out by the robot. These robots connect existing tools and the employee handles only the exceptions. Also, cognitive technologies, based on artificial intelligence expand RPA possibilities and help reach the next level of performance. What distinguishes RPA from traditional automation is its potential to be acquainted with and adjust to changing circumstances or new situations (Oliveira, 2016).

About Robotic Process Automation

RPA is a new emerging technology and much empirical works have already proved it. It can be seen that Robotic Process Automation (RPA) is a programmed software robotic tool that imitates the actions of individual performing manual tasks and is a growing solution to traditional automation. RPA software is a obtrusive technology that does not require integration like other technologies (e.g. ERP systems and BPM). It runs this by using systems' presentation layers, or the screens and reports given to users, to ingress them and complete work. As a result, RPA technology is rapid and agile to deploy and can swiftly fill holes that current systems show or find costly to address. RPA technology is a good candidate

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