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ABSTRACT

As companies attempt to increase their performance and productivity via technology (Vial 2019), the need for technically skilled developers grows more critical. The demand for technical talent has created an estimated shortage of 40 million software developers worldwide (Breaux and Moritz 2021, Sloyan 2021). An approach gaining momentum is training and equipping employees from functional areas of the organization with the tools to become 'citizen developers' (Oltrogge, Derr et al., 2018, Baumgarten, Simeon, et al., 2020). These employees use low-code and no-code platforms such as Mendix, UIPath, and many more to create specialized technical solutions. UiPath is a Robotic Process Automation (RPA) software that automates highly manual processes to enable cost savings and free up employees to perform tasks that add value to the organization. RPA is a low code/no code software that has proven to be a technology to help organizations increase efficiency and reduce costs. This study will investigate implementing UiPath RPA into business schools for all business majors.

Keywords

Robotic Process Automation, Management Information Systems, Innovated Education

EXTENDED ABSTRACT

The demand for technical talent has created an estimated shortage of 40 million software developers worldwide (Breaux and Moritz 2021, Sloyan 2021). As companies attempt to increase their performance and productivity via the use of technology (Vial 2019), the need for technically skilled developers grows more critical. An approach gaining momentum is training and equipping employees from functional areas of the organization with the tools to become 'citizen developers' (Oltrogge, Derr et al., 2018, Baumgarten, Simeon, et al., 2020). These employees use low-code and no-code platforms such as Mendix, UIPath, and many more to create specialized technical solutions.

UiPath is a Robotic Process Automation (RPA) software that automates highly manual processes to enable cost savings and free up employees to perform tasks that add value to the organization. RPA is a low code/no code software that has proven to be a technology to help organizations increase efficiency and reduce costs. UiPath is the industry leader in the RPA market and has a solid academic alliance program.

Using UiPath to introduce students to RPA for business benefits both faculty and students. RPA provides a means to automate business processes by allowing robots to interact with enterprise systems through a user interface (Santos et al., 2019). RPA can work with production machinery and humans to provide advantages to manufacturing companies by reducing production time, risk, and expenses while improving efficiency and product consistency (Rajawat et al., 2021).

RPA enabled by artificial intelligence replaces tasks that people would typically complete and provides tremendous advantages to manufacturing companies, including continuous work on nights and weekends, offering great scalability (Beerbaum, 2021). A wide variety of industries other than manufacturing are also implementing RPA technologies, including banking (Miambo and Iyamu, 2021), agriculture (Micle et al., 2021), and healthcare (Davenport and Kalakota, 2019).

How to incorporate low-code tools, such as UiPath RPA, into business school curricula is a relatively unexplored research area. With RPA being a relatively new emerging technology, few articles describe methods for teaching RPA to information systems students. Our study seeks to answer the following research questions.

1. How to best incorporate RPA into a business school curriculum?
2. What are the student perceptions of RPA, and do perceptions differ between business students?
3. How can universities encourage and support faculty development to teach RPA?

To conduct our study, RPA UiPath workshops will be handled at three public universities. The workshops will be open to business students interested in learning RPA. After the workshop, students will be asked to complete a student perception survey. The data will be collected and reported in aggregate.

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