

EMBRACING EFFICIENCY THROUGH ROBOTIC PROCESS AUTOMATION

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Michael Caton Research Analyst, Information Technology The future of business process management lies in Robotic Process Automation. This report covers the benefits of the technology and other business process optimization approaches that Best-in-Class organizations take to improve efficiency.

Robotic Process Automation lowers costs and improves accounts payable processing time for organizations.

Don't let the name fool you; Robotic Process Automation isn't about industrial automation. It automates mundane, time-consuming, and repeatable tasks for knowledge workers in order to improve efficiency and the reliability of work outcomes.

Companies who want to enhance efficiency in their processes should be investigating RPA (Robotic Process Automation) — especially in conjunction with artificial intelligence and analytics technologies — to reduce costs, expedite outcomes, and provide a better customer service experience.

RPA technology encompasses a variety of tools that fix routine, time-consuming problems, allowing knowledge workers to spend their time performing more valuable tasks. For example, many organizations have started to make use of advanced document imaging to accelerate and automate invoice processing. Because invoices will vary by supplier and can contain information in a range of formats, including handwritten notes, having intelligent imaging software that can pre-process documents improves time to completion and reduces the likelihood of errors.

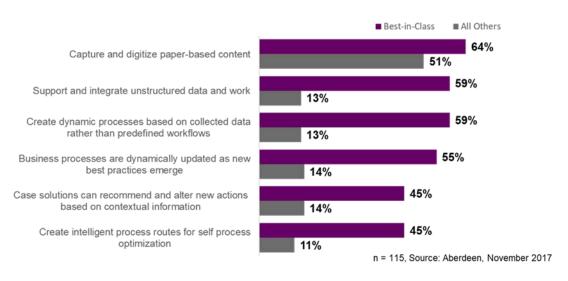
While automating invoice processing may not sound exciting, it saves organizations time and money in a scalable way. Organizations that use RPA for accounts payable process invoices twice as fast as non-users, and they do so 43% faster and for 40% less cost.

The accounts payable example could be an embedded solution provided by an ERP vendor. Companies and groups within companies can use a variety of tools to build their own RPA solutions. These can run the gamut from desktop bots that handle repetitive tasks, to more sophisticated analysis and optimization of more structured processes created using business process automation and business rules systems.

In Aberdeen's research, we've found Best-in-Class organizations have embraced adaptive, dynamic and self-optimizing business process management platforms (Figure 1). Companies that perform best are the ones Aberdeen defines Robotic Process Automation as the application of technologies that help organizations understand and perform repeatable knowledge work, with the goal of "training" process-based applications to better understand and work with structured and unstructured data, and to automate transactions with other digital systems.

that strive to constantly improve how they do business. They generally perform better in areas like customer service, retention, and satisfaction.

Figure 1: Business Process Optimization Technology Adoption



% of respondents

Most of the business process management technologies adopted by Best-in-Class organizations can be applied in customer service applications, as well as in back-office processes. These advanced capabilities of adapting and self-optimizing not only help organizations be more efficient, they also deliver scale. Let's suppose a customer service process "learns" that under a given set of conditions, the result is always a specific outcome. When that process optimizes itself by changing a governing business rule, that rule can then be applied to other processes in other applications, such as the self-service workflow on the company website.

Beyond the basics of business logic and business rules, bots and artificial intelligence will be the next wave of RPA for many organizations. Bots provide the potential to automate very mundane, repeatable tasks for knowledge workers. They can train these bots to learn their behavior so they can skip the task of going to data repositories and gathering, cleansing and consolidating data used to make decisions.

Artificial intelligence and related technologies give organizations a way to monitor processes and large volumes of related data to gain insights about less predictable and unstructured behavior, and fine-tune processes on the fly to help improve outcomes. For example, in customer service applications,

doing real-time voice analysis can help customer service representatives better engage dissatisfied customers and alter call scripts to keep calls on track and keep the customer from becoming angry.

Artificial intelligence technologies can also help workers "train" process-based applications to better understand structured and unstructured data, to process transactions and data, and to automate transactions with other digital systems. These technologies can also use algorithms to bypass tedious and error-prone manual work, such as image analysis and data extraction.

Companies should be looking at ways to better automate their processes and see where they can benefit from robotic process automation. While embedded technologies and tools can certainly help for certain applications, such as payment processing, the real opportunity is in eliminating the tedium and mundane work that highly-skilled professionals do, so that they can focus on adding value by engaging with prospects or providing recommendations, advice, and council based on data and experience.

Organizations that use RPA for accounts payable process invoices twice as fast as those that don't have RPA.

About Aberdeen Group

Since 1988, Aberdeen Group has published research that helps businesses worldwide to improve their performance. Our analysts derive fact-based, vendor-neutral insights from a proprietary analytical framework, which identifies Best-in-Class organizations from primary research conducted with industry practitioners. The resulting research content is used by hundreds of thousands of business professionals to drive smarter decision-making and improve business strategies. Aberdeen Group is headquartered in Waltham, Massachusetts, USA.

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