# Can Robots Simplify Your Business?

By Aaron Hensley, Jimmy Mitchell, and Danal Slay Jr.

Consider whether "robotics process automation" can streamline repetitive processes—and even add a little logic to the mix.
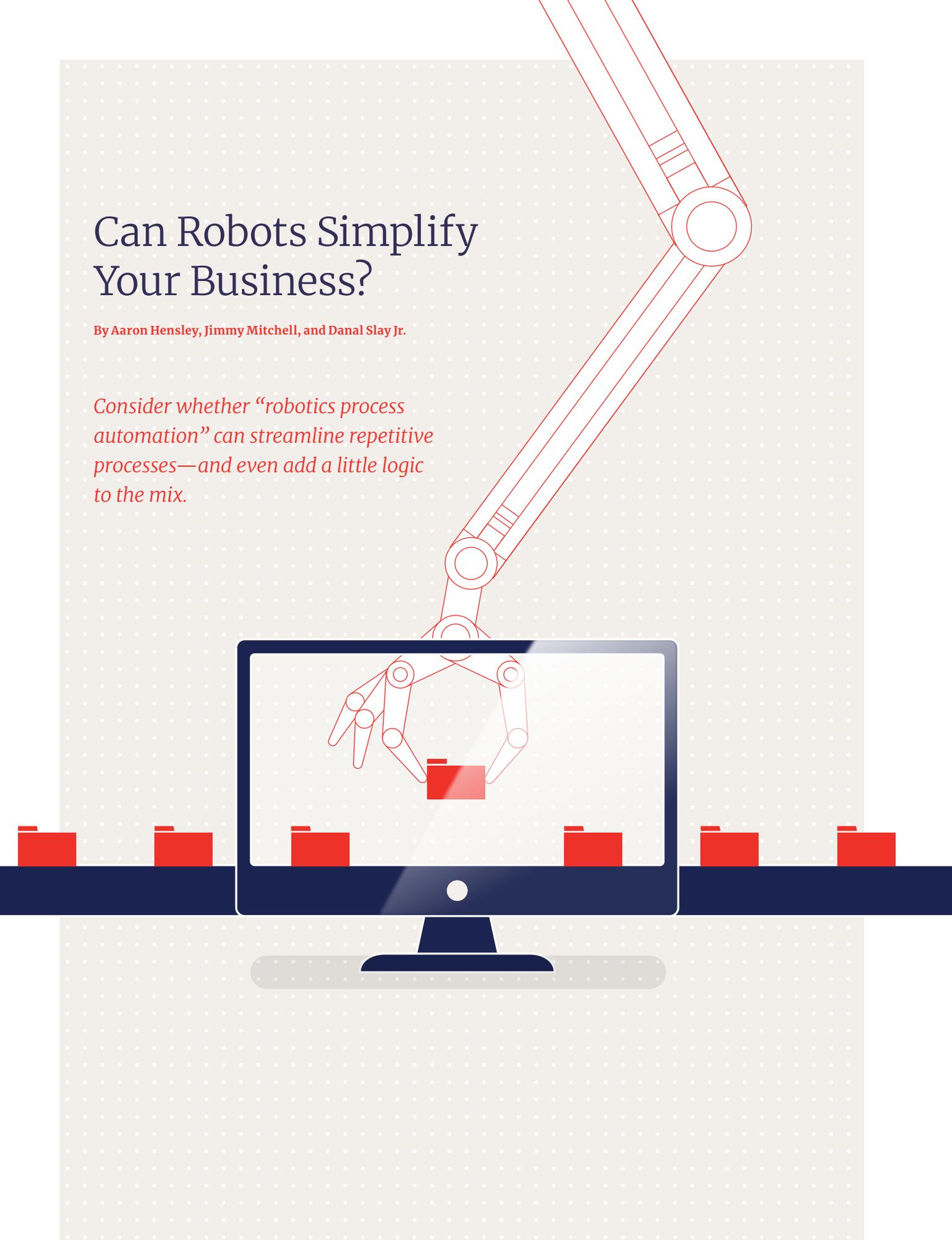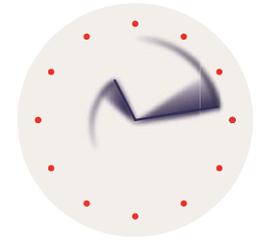
TODAY, ROBOTS ARE CAPABLE OF SUPPORTING HUMAN EMPLOYEES BY TAKING OVER THEIR MANUAL, TEDIOUS, AND REPETITIVE PROCESS STEPS.

R obotics have become an ordinary part of our lives. The Chili's restaurant chain has now installed tablets at each table enabling customers to order, pay bills, and even play games. Avis allows you to rent a car without having to interact with another human.

Even Lowe's is experimenting with a robot that greets you and directs you to the correct aisle to expedite your experience. How far-fetched is it to think that a robot would eventually be able to write this article?

While robotics in general is a hot topic in today's culture, a subset of robotics—robotics process automation (RPA)—has become increasingly popular. RPA refers to technology that automates business processes. In other words, RPA can replicate any repetitive process that historically has required human interaction.

In fact, it can even go a step further. RPA is not only for repetitive processes, but also for processes that have logic built into them, modeling predictive behavior. The most critical part is the speed, accuracy, and reliability built into RPA tools. Consider how your workforce can become more innovative when mundane, everyday tasks can be substituted with time for thought leadership.

DEFINING TERMS

First, let's define robotic process automation. RPA is the use of a software robot to automate repetitive, routine tasks that don't require human strengths such as reasoning and judgment. RPA is obviously a form of automation—indeed, it can be seen as the next generation of automation.

It's the difference between using automation for one step of the process (data entry) to using a bot to complete the whole process (perhaps inclusive of complex logic). RPA incorporates more robust logic that enables the bot to replace human decision-making in cases where we can define discrete and repeatable decision rules. People can essentially "teach" the bot how to accomplish a linear task by defining the if/then paths for each decision.

For example, when setting up a new account, we can teach robots to look up last names or Social Security numbers discretely in multiple instances of an ERP platform to determine whether it's truly the first time the person has set up an account. This reduces duplicate entries and improves data quality, in addition to removing the tedious and manual process of looking up names in multiple applications and databases.

One of the most attractive aspects of RPA is how the customization and configuration shifts from the IT department back to the business. Business operations can learn the software quickly and apply logic to perform the processes thanks to the unprecedented level of customization available in the user interface of today's robots. Even in areas of the business where data is sensitive—such as finance—the existing workforce is partnering with robots to create a new era for the digital workforce.
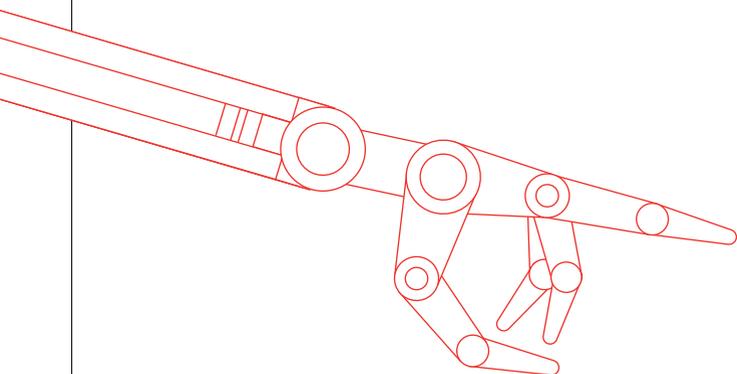
IF YOU WANT TO PRODUCE VALUE FOR YOUR COMPANY WITH RPA, IT'S BEST TO APPLY IT TO A PROCESS THAT PROVIDES EITHER BUSINESS OR CUSTOMER VALUE.

IS RPA AN OPTION FOR YOU?

As with any effort, defining the problem and your goals is extremely important. Along with the basics of scoping the problem, identifying your key stakeholders, and setting goals for your improvement project, keep these key considerations in mind:

Transformation or Improvement: Are you looking to transform how an area of your company operates, or improve stable functions and processes? If you're seeking a transformation, RPA is probably not a strong candidate. However, if you're looking to reduce costs without too much modification, RPA could remain an option.

Flexibility or Consistency: Are you looking to increase flexibility within a process or reduce variability? In some cases, a process area needs to be more adaptable and flexible as a company deals with new customers, new products, or new geographies. If the process must handle additional variation or complexity in the future, RPA might be less of a candidate— although, leveraging an RPA solution that easily allows modification might

keep it on your radar. If you need to reduce errors and improve or enforce consistency—risk reduction goals or regulatory needs come to mind—RPA could ensure a level of consistency that would be unattainable manually.

Value: Are you looking to automate a process that isn't adding value, that the customer would pay for, or that regulators require? If you're looking at RPA to reduce time spent on waste, it might be best to take another look at your scope to try eliminating the process altogether (or rebuilding it). If you want to produce value for your company with RPA, it's best to apply it to a process that provides either business or customer value.

SCOPE

While this can be an ethereal concept, the application of RPA can be quite simple. Consider an example from the world of consumer banking, an industry familiar to most American adults. As consumer preferences have shifted from relationship banking—with a person in a physical branch location—to mobile banking, the industry has changed dramatically. That shift in the marketplace has been expensive for the banking industry to adjust. Security platforms, anti-fraud

protections, single view of the customer, regulatory-driven changes, digitally driven upselling, and marketing have caused corporate expenses at banks to rise substantially over the past five-plus years. Expenses have risen sharply across the back-office functions of IT, risk and compliance, and finance.

Could robotic process automation counteract this rise in back-office costs? Absolutely, yes it can, and the applications of RPA are broad enough to affect most of these back-office functions. When looking for processes RPA can aid, focus on processes that:

- are expensive, requiring a material amount of employees' time, for example
- are manually intensive
- are repetitive
- are impactful—that is, errors early in the process are magnified downstream
- cross applications, requiring data movement from one application to another

In this case, let's assume we have done some level of digging and determined that the financial planning

OPPORTUNITY AREA	HUMAN FP&A TEAM	ROBOT FP&A TEAM
Data gathering	Receives external data from sources and starts robotic process	Pulls automated data extracts from a few select sources
Financial planning worksheet creation	Creates file templates, define automation rules, and set validation rules	Creates new worksheets for each reporting period: · Formats data · Performs self-validation checks · Submits files to business
Review and validation	Deals with exceptions only	· Receives/organizes new files · Performs review and validation steps
Loading financial results into central planning application	Manages workflow timing and follow up if steps are delayed	· Uploads worksheets to central application · Validates that load happened successfully/create track error report · Signals FP&A and the business when loading has occurred

process has become much more expensive in recent years, that it is impactful and manually intensive. We decide we would therefore like to focus RPA planning efforts in that space.

WHAT PROCESS ANALYSIS CAN SAY ABOUT RPA

ANALYSIS

In our example, we determined that RPA was viable based on the considerations listed above. The next stages were to define the current state of the process and establish where pain points exist, where the process is inefficient, and where improvement opportunities lie. The answers might sway us from an RPA solution.

Current State Review: Are decision points routine and/or categorizable? Do handoffs happen across multiple systems (or modules of a complex technology solution)? Are work items constantly queuing up at various stages of the process? If so, RPA is a strong candidate again. If decisions cannot easily be categorized, RPA might be tough to implement. If handoffs happen within the same system, look to improve the technology solution before leveraging RPA as a workaround.

If work isn't queuing up, there may not be a need to automate the solution.

Pain Points: What does the qualitative or quantitative data from downstream partners tell you? Does the data indicate inconsistent outcomes or a high error rate? Do small errors have a large effect on the customers of the process? If so, RPA could be a stronger candidate.

While reviewing the current state for pain points, look for parts of the process that can be automated. A viable candidate for automation fits the description from the list above (expensive, manually intensive, etc.), and will also likely appear in the qualitative findings as a consistently "painful" part of the process. Through the analysis done at our banking client, we identified the following four areas as opportunities for improvement through automation:

· Data gathering

· Financial planning worksheet creation

· Review and validation

· Loading financial results into central planning application

SELECTING THE SOLUTION

Our client identified a few opportunities across the process that could leverage RPA, but was it the right solution for the job? We needed to identify potential solutions and prioritize them based on their benefit and cost. We considered several issues when determining whether RPA was the right solution.

Investment Capability: Can the organization invest the dollars and stomach a longer time horizon to break even? Or does the company need quick wins that require little investment? Even the simplest RPA solution requires an up-front investment of time and money. If RPA is really the best way to go, try to stage the improvement in steps to generate the savings over time, accommodating a long-term investment. From a different perspective, if the company can invest in a true transformation of the process, it might consider whether RPA or a process overhaul would better meet the need.

Decision Rights: If RPA requires a solution that spans groups outside the company's control, ensure the other team is on board. If they are solving for the same things, RPA will make

the handoff easier. If not, RPA could increase the organizational rift and require additional workarounds.

Value of Knowledge: Even if a process is a prime candidate for RPA, what happens to the knowledge that existing resources capture by performing it? If that information is proving valuable to the company, see if there's a way to ensure that knowledge remains visible and useable with RPA. If not, that knowledge capital could be worth more than the savings that RPA could generate.

IMPLEMENTATION
Because we recommend looking at expensive and transactional processes as a starting point for finding RPA use cases, there are typically many processes that fit this description. The hard works comes in the solution/implementation phase where we choose what to do about the problem at hand. While there are many possible strategies, two are chosen so frequently they require a deeper look.

The Big Technology Solution: In many cases, there could be an expensive technology installation or upgrade that could alleviate the problem as well. While the benefit to choosing big technology can be large, there is typically an equally large cost associated with this solution. These costs extend beyond the price of licenses and the technology itself to the costs of implementation—including external consultants, lost productivity, turnover, training, and other change-management costs.

The Doing Nothing Solution: Up to this point, nothing has been done. That can continue to be the case.

The Robotic Process Automation Solution: Between these two extremes is the RPA solution. It can certainly have more influence than doing nothing and will cost less than a big technology solution. In many cases, RPA will be a great alternative to doing nothing and can be a first step toward using technology as a process-enabler. Keep in mind the business case will vary widely with each specific opportunity.

In our banking example, the process was redesigned to incorporate "robots," dividing work responsibility between human and robot workers in financial planning and analysis.

RESULTS/OUTCOMES
In our banking example, the client was able to reduce the forecasting timeline by 40 percent on average (from approximately 25 days to approximately 15). Much of the remaining 15 days is spent in business review and re-planning, which makes the organization more nimble and better able to respond to new trends.

In addition to the end-to-end time savings, the change produced a noticeable drop in errors caused by manual data entry and data discrepancies between systems. While this metric was not tracked, it was another tangible savings resulting from the RPA solution.

It can be frightening to think about using robots to replace human employees inside corporate organizations. But the robots depicted in science fiction movies—compared to the reality of what robots actually are today—could not be further from the truth. Today, robots are capable of supporting human employees by taking over their manual, tedious, and repetitive process steps. Through robotic process automation, companies can save costs in back-office functions and even reduce errors.

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