

The impact of AI and automation

How new technologies are changing the way we work in finance

"When paired together, AI can analyze data to identify discrepancies and anomalies, while RPA can automate the data entry and report generation process."

GAIL GRAY
CPA

As the digital landscape evolves, finance teams face a significant transformation driven by the impactful forces of artificial intelligence (AI) and automation. This change is as pivotal as the emergence of the internet and email, with generative AI (GenAI) and other advanced technologies reshaping traditional workflows and fundamentally redefining the role of finance professionals.

ADAPTING TO RAPID CHANGE

In public practice, corporate environments and government organizations alike, it is essential to adapt to new technology to avoid being left behind. The onset of COVID-19 disrupted traditional workflows, forcing quick innovation. Information technology teams scrambled to enable remote work, accounts payable teams could no longer process payments manually and in-person meetings became impossible. This abrupt change accelerated the adoption of Robotic Process Automation (RPA), providing solutions for many organizations to maintain productivity.

AI, likewise, has been gradually integrating itself into our lives. While many first experienced artificial intelligence through virtual assistants like Alexa, AI has since crept into daily tasks and workflows, from predictive models in software to autocorrect features.

In this sense, automation is transforming operations, streamlining processes and improving efficiency. With the combined power of AI and RPA, automating routine tasks can free up time for more strategic work.

THE EMERGENCE OF GENAI

GenAI, introduced to the public in November 2022, has become a significant disruptor. While traditional AI systems primarily focus on analysis, decision-making and automation, GenAI is centered on creating new content, mimicking the creative aspects of human intelligence. The emergence of GenAI tools has sparked a competitive race among developers to capture the largest market share, driving continuous innovation and change.

Some governments have opted to restrict access to these tools, while workplaces have scrambled to



implement policies governing their use. Nonetheless, the genie is out of the bottle. New careers, such as prompt engineers or large language model developers, have emerged, and colleges and universities are adding degree programs related to AI and GenAI. Many companies now include AI skills in their job descriptions.

The accountants of tomorrow must understand how to effectively use and interpret AI and RPA. Those who rely solely on traditional skills will not be competitive in the new landscape of accounting. Just like when spreadsheets were introduced, accountants who clung to "green bar ledger paper" found themselves no longer competitive in the job market. And those of us in practice, who have already finished school, must become lifetime learners, as these tools evolve over time.

How then can we leverage this new technology in finance?

AI tools can analyze historical spending data and revenue trends to forecast future budget needs more accurately. AI can identify discrepancies and anomalies in data, which is crucial for compliance with regulations and standards. And AI

can monitor patterns and detect outliers in financial transactions, enhancing the ability to detect and prevent fraud, leading to improved financial security and reduced losses.

RPA, meanwhile, seeks to automate repetitive, rules-based, and structured tasks. It is designed to work with existing systems and applications. Indeed, RPA can automate routine data entry tasks, reducing manual errors and freeing up time for strategic analysis.

When paired together, AI can analyze data to identify discrepancies and anomalies, while RPA can automate the data entry and report generation process. This combination of AI and RPA can streamline financial operations, improve accuracy and increase efficiency.

EMBARKING ON AN AUTOMATION JOURNEY

There are several strategic steps organizations should consider when beginning their automation journey. Initially, it is crucial to identify a group of individuals with a change mindset who can serve as evangelists. This group will be pivotal in helping stakeholders appreciate the value and importance

of these new technologies. They will play a key role in ensuring that others are on board and excited to explore what is possible.

As for where to start, introductory seminars and workshops will help ensure everyone understands the technical aspects and strategic implications of AI and RPA, and successful case studies can demonstrate potential benefits and common challenges, fostering a culture that accepts change. Aligning the automation objectives with the overall goals of the organization is essential, and this alignment should be reinforced with continuous training and communication to address concerns and gather feedback.

Once your stakeholders are on the same page, choosing the right processes to start an automation journey will ensure better success for the organization, and early wins will help others see that automation can actually help with their day-to-day processes. It is best to adopt a strategic approach to selecting processes, prioritizing those that promise the highest return on investment. Such an approach involves several key factors:

1. TIME INTENSITY

Identify processes that consume significant amounts of time and resources. Automating these can lead to substantial efficiency gains.

2. ERROR FREQUENCY

Look for processes prone to human error. Automating these tasks can enhance accuracy and reduce the risk of costly mistakes.

3. PROCESS STABILITY

Determine if the process being evaluated is being considered for change. If a component of the process involves software that is changing, it is not a good candidate for automation at this time.

4. COMPLEXITY OF AUTOMATION

For initial automations, it is prudent to look for processes that are considered “low-hanging fruit.” This means looking for a process that does not require AI, such as machine learning and document understanding.

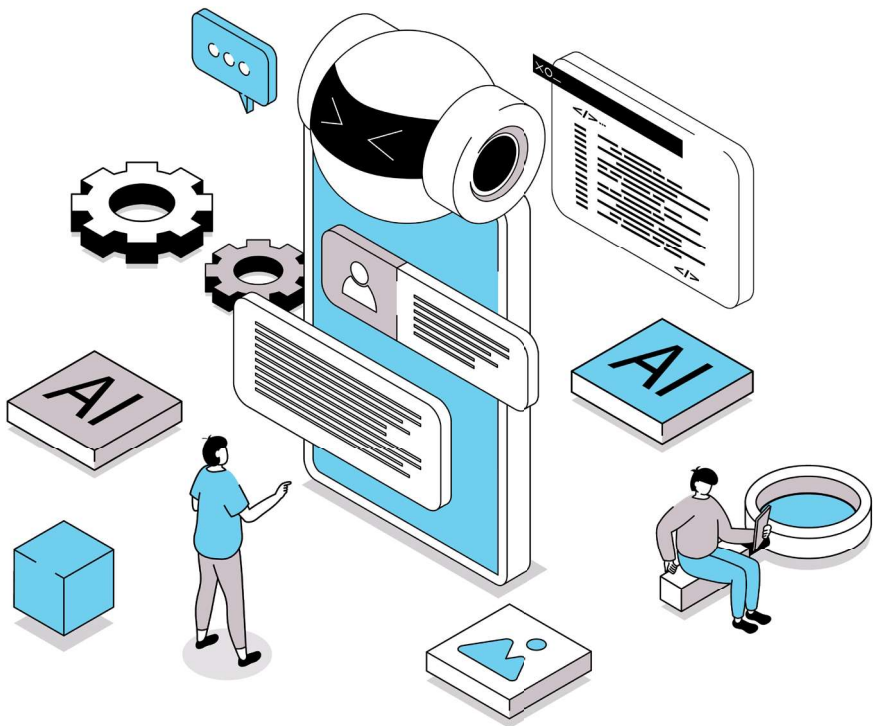
5. STRATEGIC RELEVANCE

Evaluate how critical each process is to your organization's strategic goals. Prioritize automating tasks that directly contribute to achieving these objectives.

By focusing on these factors, you ensure that your automation efforts are aligned with your organization's priorities, delivering the greatest impact.

Once a process has been identified as a good candidate for automation, create a map of the as-is process and document each step. Aim to digitize as much of the process as possible, while also being mindful of all the relevant exceptions.

Once you've mapped the as-is process, it's time to construct your to-be process. This should be a collaborative approach with the automation team, subject-matter experts and the decision-makers of the process. It is important to have a change mindset as this new process



is designed with an emphasis on challenging the status quo.

Finally, you'll want to set clear performance metrics to evaluate the effectiveness of automated processes, including processing-time and error-rate reduction, cost savings and user-satisfaction levels. Revisiting and refining these metrics over time will ensure they deliver the expected benefits.

Once you've scaled your first automation project, you'll be able to leverage the insights gained from this initial implementation to enhance future rollouts. You'll also be ready to expand the scope of automation and explore new areas for AI integration. For example, after achieving significant reductions in processing times and error rates in accounts payable, you might consider expanding automation to areas like customer service or inventory management, driving further efficiencies and improvements.

EMBRACE THE FUTURE OF FINANCE

The integration of AI and RPA in finance is not just a trend; it is a transformative shift that is redefining how finance professionals operate. As finance professionals, we must seize this opportunity to innovate, evolve and lead our organizations into a new era of technological advancement and operational excellence.

Gail Gray, CPA, is a partner at LSL CPAs in Houston, Texas, and is a CaseWare certified trainer and consultant. She has previously been a speaker at the FICPA's Women's Leadership Summit and State & Local Government Accounting Conference.