Employing a ‘Digital Workforce’ in Higher Ed

HOW INTELLIGENT AUTOMATION AND ROBOTIC PROCESS AUTOMATION CAN BENEFIT STAFF, STUDENTS AND INSTITUTIONS ALIKE

By Matt Jones and Alex Seran

COVID-19-driven constraints, tenuous enrollments and increased competition have further compounded the financial pressures universities and colleges face. As leaders consider their best paths forward through this crisis, intelligent automation and robotic process automation can help. Automating and digitizing repetitive tasks can benefit students, staff and institutions alike.

Staff attrition affects everyone on campus, whether due to budget cuts, retirement or job changes. Remaining staff may feel overburdened, important tasks may get deprioritized or overlooked, and students may experience diminished support.

More than ever, colleges and universities must find ways to realize operational efficiencies and utilize staff more strategically. Relieving staff of repetitive tasks can free critical human resources to focus on more strategic imperatives, such as building relationships with students and donors. Intelligent automation can help.

What Is Intelligent Automation?

Intelligent automation is an umbrella term for computer programs that are designed to mimic human behavior. Examples include robotic process automation (RPA), digital readers, conversation bots and artificial intelligence. It is a means for replacing repetitive human tasks with a “digital workforce” of software programs or “robots.” Intelligent automation can also help automate human processes by moving large datasets across multiple technology systems.

The impetus for considering intelligent automation may stem from pandemic constraints, such as complications with performing on-site manual

tasks due to a remote workforce, or from natural attrition, such as retirements. Both situations present an opportunity for institutions to explore whether intelligent automation can absorb certain tasks or responsibilities and create increased efficiencies.

Digitize Before Making Decisions: Progressive Use of Technology

The spectrum of technology solutions that fall under the intelligent automation umbrella range in complexity from RPA software (which automates repetitive tasks) to more complex technologies such as artificial intelligence (which can evaluate massive amounts of data to evaluate patterns and, subsequently, execute actions).

As the use of intelligent automation continues to mature over time, many colleges and universities will have the opportunity to achieve short-term wins by initiating their exploration of these technologies with less complex RPA solutions. Starting there, higher education can establish a foundation of automation technologies and capabilities that, over time, can be leveraged to implement more advanced solutions (such as recommending personalized learning paths for students) and achieve transformative benefits.

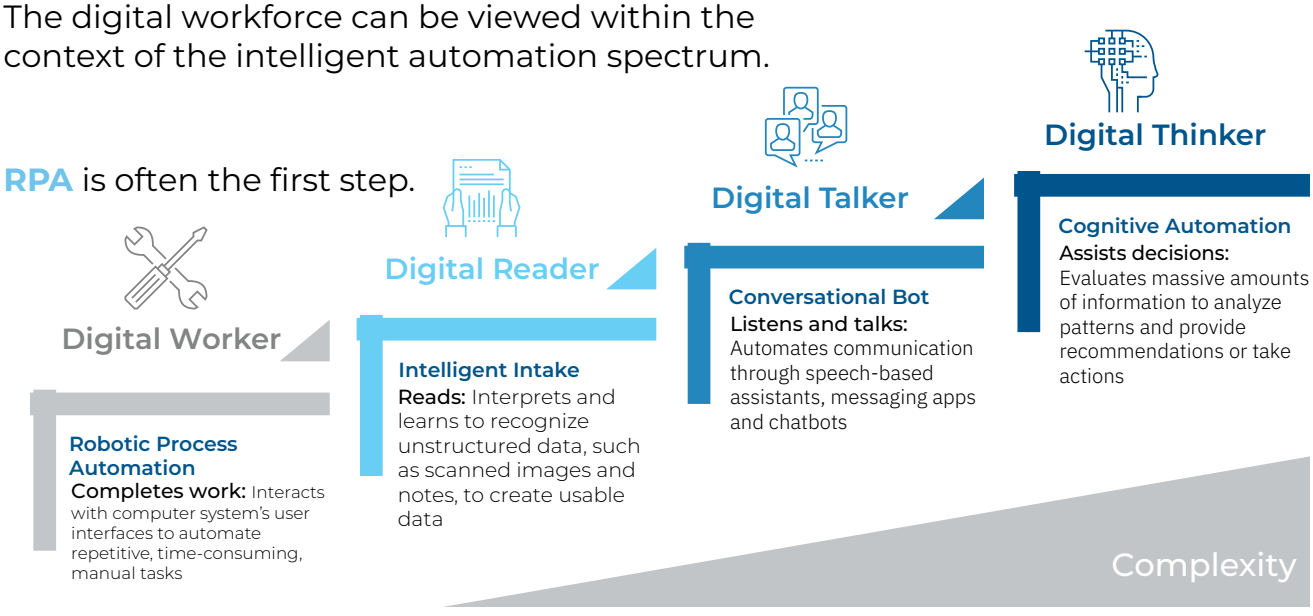
Free Up Staff to Focus on High-Value Tasks

Institutions have critical but repetitive and manual processes across many functions — accounting, finance, financial aid, admissions and others. Given workforce costs, competition for talent, and increased stakeholder expectations, institutions are re-imagining how staff members can better allocate their time to tasks and strategic initiatives that enhance the mission and differentiate the institution.

There are tangible ways that automation can relieve some of the burdens of human personnel. For example, within an accounts payable function, staff may spend significant time manually processing invoices. This time could be better spent on other high-value tasks such as performing financial analysis or supporting business intelligence efforts.

A properly designed digital workforce or RPA solution can complete in minutes daily tasks associated with invoice processing that typically take staff hours to complete. The return on investment over time can be manifold, both quantifiably in person-hours and qualitatively in enhancing data and reporting capabilities.

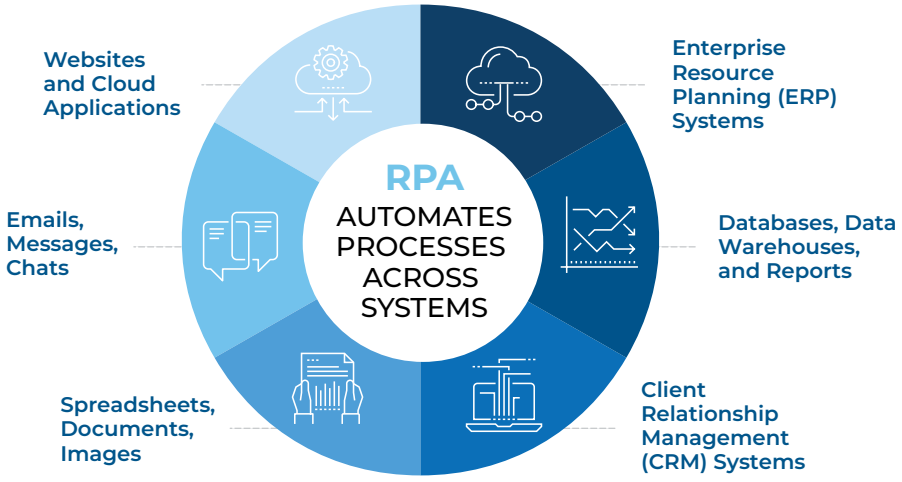
The digital workforce can be viewed within the context of the intelligent automation spectrum.



Robotic Process Automation

Mimicking Human Processes

Robotic process automation includes software "robots" that mimic human behavior by interacting with multiple programs to automate repetitive, time-consuming, manual tasks.



Typical Use Cases Include:

- Transferring or loading data between systems
- Entering data into a system from a document
- Accessing websites or databases for information
- Generating documents or reports on request
- Emailing messages or documentation

Invest in New Technology Strategically

It is important to note that the use of RPA needs to be about the strategic application of technology to an institution's ultimate mission and not about "using technology for technology's sake." There may be times when an appropriate solution already exists and the effort to develop a new automation isn't in the best interests of the university.

There are many workflow solutions that automate simple approval processes where straightforward automation functionality is already "baked" into many software tools, such as the automated routing of emails within Microsoft Outlook. Thus, it is helpful to first explore whether a solution already exists rather than investing energy into developing RPA to perform the same tasks.

Connect Automation to Institutional Strategy

The most effective use of automation involves aligning it with the institutional strategy. To illustrate the point, a college or university may wish to improve student retention rates. Rather than tie up valuable staff time answering rote questions, a cost-effective, automated solution (such as an integrated chatbot) could be used to interact with students, providing real-time answers to simple questions and resolving straightforward requests.

The chatbot could also capture the most common requests in an analytical data lake to provide leadership with analytics to identify student interests or where they may be at risk. These outputs could also establish the basis for digital process mining and drive further process efficiencies or develop business intelligence related to student retention.

Among other benefits, automation can support both enrolled and prospective student engagement needs, adding critical capacity to limited student services staff and increasing enrollment and retention metrics. When designed well, advanced intelligent automation solutions, such as artificial intelligence and machine learning, can support leadership in developing data-driven approaches and models to further student success.

Summary

Staffing changes at many universities, whether in response to COVID-19 financial constraints or to natural attrition, can serve as an impetus for broader change. These events provide logical junctures for institutions to consider the role that intelligent automation can play in improving operational efficiencies and improving student support. RPA often serves as a logical and cost-effective starting point.

Institutions can drive tactical efficiencies during resource-constrained times and create strategic advantages by starting with less complex intelligent automation solutions such as RPA. When aligned with an institutional strategy, RPA can enable colleges and universities to better serve constituents, improve operations and deliver insights that inform the mission.

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Key Takeaways

Think differently.

Consider the strategic role that automation can play in furthering the institutional mission. Align automation decisions with key objectives, such as improving student support or improving staff efficiency.

Plan differently.

Be intentional and strategic when determining how and when to use automation technologies. Explore whether existing tools offer solutions to current challenges before investing in more advanced forms of automation.

Act differently.

Leverage intelligent automation to shift resources to higher-value tasks. Utilize events (such as staff attrition) as opportunities to itically assess whether automation can be used to re-imagine how work gets done.

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