Business Use Case

The Automation Center of Excellence (CoE) & its Promise for Higher Education





Amplitude



Executive Summary

Establishing an Automation Center of Excellence (CoE) helps Public and Private Colleges and Universities confront and overcome many of the critical challenges they face today: escalating costs, unproductive silos, inconsistent processes, and tedious and repetitive work by academic and operational staff.

Using the model of an Automation CoE is different than simply using automation in itself. Along with streamlining the activities that go into the automation of processes, reducing the overall cost of implementation, and improving employee morale, it also allows higher education institutions to replicate programs across the span of school activities. This enables schools to significantly enhance operational and administrative efficiencies and scale all of their automation programs. It also allows the staff to concentrate on fostering student success, increases the value employees create for their students, and gives the institutions a competitive advantage in servicing their students.

1

Topics Covered

- 01. What is Automation?
- 02. The Need for Automation in Higher Ed.
- 03. What is an Automation CoE?
- 04. Steps to Establish an Automation CoE.
- 05. Demonstrated Results of an Automation CoE
- 06. Prebuilt Automation Solutions
- 07. Continue your Intelligent Automation Journey

01. What is Automation?

Intelligent Automation (IA) or often referred to as Robotic Process Automation (RPA) is like having a digital assistant that can handle repetitive, rule-based tasks on a computer, such as filling out forms or moving data between systems. It's like teaching a robot to do the boring parts of your office work, where it follows specific instructions and logic you set up. This automation tools are designed to free up time for more important tasks.

02. The Need for Automation in Higher Ed

Higher education institutions face significant challenges in today's rapidly evolving educational landscape, including administrative burdens, budget constraints, and the escalating demand for faster and more transparent student services. Automation presents a transformative solution to these challenges. It streamlines repetitive and time-consuming administrative tasks, freeing faculty and staff to focus on their core mission: enhancing student learning and success. Universities can optimize operational efficiency and resource allocation by automating enrollment, scheduling, and data management. Additionally, automation paves the way for advanced data analytics, enabling institutions to make better-informed decisions and stay competitive in an increasingly digital world.

Establishing an Automation Center of Excellence (CoE) at a College or University is a strategic response to this evolving educational landscape.

03. What is an Automation CoE?

The CoE plays a pivotal role by implementing and overseeing automation strategies across the entire educational organization. Think of it simply as an organizational device with the core responsibility of transforming low-efficiency and tedious operational processes dependent on imperfect human labor to an "error-free" computer software solution that retains the important role of human oversight yet dramatically enhances problem-solving and customer satisfaction. It allows a focused transformation process on initiatives, permitting faculty and staff maximum engagement. It ensures "guard rails" are present to prevent departments or offices from missing important IT security or legal threats to the institution. The CoE ensures that the automation program will not be delayed by faculty and staff already engaged in other important priorities at the institution.

2

04. Steps to Establish an Automation CoE

There is a proven process that has established successful CoEs in the academic space. The steps to building the CoE are not overburdening or complicated.

Step 1: Assemble Stakeholders

Assemble all the stakeholders needed for successful implementation; Keep the participating team focused and lean; grow the CoE team over time as you demonstrate automation success, cost savings, and return on initial investment to the organization; Establishing an Automation CoE allows you to solicit technical, organizational, and operational challenges without faculty and staff fear of retribution that strain limited financial resources and pose barriers to institutions success.

Step 2: Announce Initiative

Announce the CoE initiative throughout the organization as it will ensure involvement to succeed. Making the 'Inside Institution Case' for Automation and the CoE plays a fundamental role for the vision and automation strategies across the institution. The CoE helps identify opportunities for automation, streamlining operations, reducing manual workload, and keeping the automation opportunity priorities objectively rational, thereby increasing productivity and accuracy. It standardizes processes, ensuring consistency and efficiency in administrative tasks such as enrollment, scheduling, and financial management. It also provides training and support to staff, fostering a culture of technological adaptability. By leveraging data analytics, the CoE enables better informed decision-making, enhances student services, and ensures the institution remains adaptable and competitive in the rapidly changing landscape of higher education.

Step 3: Evaluate Operations

Prepare the organization for the need for process reengineering. Reengineering processes is a critical yet often overlooked task. It requires a comprehensive evaluation of existing workflows to identify inefficiencies and redundancies. This step involves deeply understanding the process intricacies, stakeholder needs, and potential bottlenecks. Collaborative efforts are essential to ensure a holistic view, to garner support for the changes, and to establish a culture of trust.

(Cont'd)

3

04. Steps to Establish an Automation CoE

Continued...

The measure also includes mapping out the optimized processes, ensuring they align with organizational goals and are feasible for automation. This phase is crucial as it sets the foundation for successful automation, dictating its effectiveness, scalability, and impact on the organization's overall productivity.

Step 4: Establish Partnerships

Consider forming partnerships with existing individual Automation CoEs that already exist in higher education and leveraging the subject matter expertise to circumvent obstacles others previously faced. This leverage will ultimately help to reduce your costs and time horizons. You should also consider joining the Virginia Academic Intelligent Automation Community of Practice whose mission is to help private and public schools fully embrace automation and benefit from its implementation. Furthermore, collaboration with other higher education institutions advances process standardization and further propels all partners toward accelerated implementation and shared success.



Δ

05. Demonstrated Results of an Automation CoE

Large Efficiency Gains (Cost reductions)

One top university has automated eight critical processes in its first year of having an Automation CoE, effectively absorbing the workload equivalent to six full-time employees' manual efforts. These implementations have significantly improved operational efficiency by reducing processing time from several weeks to just a few hours. These results have also proactively attracted the attention of university departments and the CoE is exploring a decentralized model for its second year.

Shaping New Paths for Students & Interns

One large university found dual benefits to using student interns to assist with the Automation CoE. Interns bring fresh perspectives and digital skills, which enhances innovation and enables the automation CoE to automate processes efficiently. In turn, internships with the Automation CoE provides interns with invaluable hands-on experience in automation technologies and project management, preparing them for future business careers. This gives them a proven skill that immediately benefits their future employers. Demand for automation skills and experience is highly coveted and the automation sector is expected to grow, giving experienced students and interns great career opportunities. The collaboration also fosters a dynamic learning environment, where knowledge transfer benefits the interns and the existing CoE team, creating a vibrant, forward-thinking ecosystem.

Enhancing Faculty, Staff Morale

Evidence has shown that the CoE activities through inter-departmental collaboration, improved personal relationships and a culture of trust ultimately boost employee morale. Moreover, it has been demonstrated to be an incentivizing and rewarding model for the organization. Finally, the faculty and staff can focus on their best talents as repetitive, manual tasks are automated.

Employees are best positioned to determine where automation can be most impactfully implemented. Therefore, engaging them from the start, having their voice heard, and supporting them by giving them access to the latest tech tools and continuous education are the main drivers for successful automation programs. Overall, it shapes an optimistic mindset, a positive change of attitude, and real energy within the organization.

5

05. Demonstrated Results of an Automation CoE

Continued...

Communicating early (pre-automation), often (during and post-automation), and simply in order to keep key stakeholders in the loop is also critical. Such benefits are essential to overcome the fear and uncertainty that represents a common challenge for every automation initiative. Instead, It reduces risk and embraces the voice of the employees ensuring the automation program is moving forward at the expected pace.

The human-centered approach to problem-solving ought to go hand in hand with the tangible benefits expectations.

Demonstrating Automation Success Attracts Growth

The success of automation programs often serves as a beacon, showcasing both tangible and intangible benefits, which naturally attract the interest of other departments. Witnessing the streamlined workflows, reduced errors, and time savings in one area, departments across the organization become eager to replicate such success. This domino effect leads to a broader adoption of automation, as various departments seek to leverage these advancements for their process improvements and operational efficiency.



6

06. Pre-built Automation Solutions

Here is a summary of key automations that have been developed for higher education that can be quickly deployed for colleges and universities:

529 Remittance:

- Posts payments received from Virginia 529 on student accounts in Banner or SAP.
- Reads PDF remittance, extracts student details, posts payments, removes memos, and reports processing results.

Chapter 33/GI Bill Payment Posting and JV:

- Records Chapter 33/GI Bill deposits and posts payments to student accounts.
- Reads SSN, Name, Term, Credit Amount from a bank file, validates data, posts payments in Banner or SAP, and processes JV entries.

Fixed Price Grant Invoicing:

- Invoices fixed price grant events.
- Reads an Excel file, determines events to invoice, enters events in Banner or SAP, creates invoices, and sends them to grant sponsors.

Third Party Billing Payment Posting:

- Posts payments received from third parties for payment accounts.
- Reads payment information from spreadsheets and enters it into Banner or SAP.

Bank Reconciliation:

- Compares bank statements to your financial system, reconciles differences.
- Enters bank statement data into Banner or SAP, runs reconciliation, identifies unreconciled transactions, and makes corrections.

Chapter 33/GI Student Account Memo Adjustment & Removal:

- Adjusts or removes memos in student accounts based on Chapter 33 payments.
- Reads Excel file, evaluates account balances in Banner or SAP, and adjusts or removes memos.

Bank Journal Voucher Creation:

- Creates journal vouchers for bank transactions.
- Creates template JV in Excel, populates fund and account codes, marks entries for manual review, and creates JV in Banner or SAP.

TIN Match - Vendor Onboarding:

- Matches payee/vendor information with IRS records for accuracy.
- Reads EIN/SSN and Business Name from W9, enters information in the IRS TIN Match application, and reports the results.

07. Continue your Intelligent Automation Journey

Need more information to ensure your intelligent automation journey is successful for you and your higher education organization? Please feel free to reach out and connect with the co-authors to help.

As you may know, the Virginia Academic Intelligent Automation Community of Practice (CoP) and our partners like Impact Makers and Amplitude9 want to educate, research, communicate and engage private and public schools to take advantage of IA technology so institutions of higher learning can be even more effective, efficient, and further increase student engagement. Contact the co-authors below.

7

ace

Please feel free to reach out and connect with the co-authors to help.

Matt Bartles

Intelligent Automation Consultant, Impact Makers mbartles@impactmakers.com | (m) 571-422-8366

Matt is the practice lead for Intelligent Automation at Impact Makers. He has automated over a million hours of manual processes, holds degrees in engineering and technology, and is an MBA candidate at the University of Virginia Darden School of Business.

Tony Fung

Intelligent Automation Evangelist, Amplitude 9 tfung@impactmakers.com | (m) 301-887-3888

Tony has over 25 years of experience in information technology management, strategic planning, and operations management. Along with leading Amplitude9 (a teaming partner of Impactmaker's), he's served as Deputy Secretary of Technology for the Commonwealth of Virginia.

Dorin Munteanu

Co-Founder of Intelligent Automation Initiative, Schar School of Policy & Government, GMU dmuntea@gmu.edu | (m) 202-594-9077

Dorin is a Co-Founder of the Intelligent Automation (IA) Initiative at the Center for Business Civic Engagement, George Mason University as well as Co-Director of the Virginia Academic IA Community of Practice (CoP). He is currently enrolled in the RPA Developer course at the UiPath Academy. Additionally, he holds the RPA Awareness and Business Analyst UiPath certified diplomas as well as RPA continuing professional education (CPE) credits.

Dr. David Rehr

Co-Founder of Intelligent Automation Initiative, Schar School of Policy & Government, GMU drehr@gmu.edu | (m) 703-819-9396

Dr. Rehr is a professor and Director at the George Mason Schar School of Policy and Government Center for Business Civic Engagement as well as Co-Director of the Virginia Academic IA Community of Practice (CoP). He holds a PhD in Economics.

8