

# DPA in Higher Education

ProcessMaker's Guide to Leveraging DPA



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# Introduction

Digital process automation (DPA) software adoption<sup>1</sup> highlights the growing disconnect in higher education legacy operations. In an increasingly digital world, education has treated digital as an afterthought

Educational institutions instead often rely on human staff to manually bridge decades of patchwork digital systems and outdated paper processes. As a result, delays in the back office create a frustrating and exhausting student experience.

However, IT lacks the bandwidth and frontline operations knowledge to supply office staff with integrated tools for speedy, well-informed decisions. Non-technical office employees are tasked with finding often unsecured, shadow IT workarounds in an attempt to unsilo and collaborate on key decision-making data in applications and systems across many campus departments.

DPA helps institutions digitize and distribute workflow burdens seamlessly between humans and computers — connecting teams and tech to offer a more transparent, efficient, and adaptive student experience.

More education institutions are transforming to this digital-first approach to confront the lasting impacts of the COVID-19 pandemic and set the pace among their peers. Easy interaction between your school's existing systems, faculty, staff, and strategic initiatives makes DPA a valuable tool for any higher education institution.

This white paper will elevate your understanding of digital process automation in higher education, and unpack the power of democratized workflow design with a low-code DPA platform. Ultimately, our objective is to help your school achieve digital transformation for a future-focused student experience.



<sup>1</sup> https://emtemp.gcom.cloud/ngw/globalassets/en/information-technology/documents/2022-cio-agenda-cuts/2022-cio-agenda-ebook-higher-education.pdf



# Higher education has a growing technology problem

Like most well-established organizations, universities rely on carefully organized workflows for effective operations — regardless of school size.

Today's university workflows need reliable, error-free ways to carry workflows from one step to the next. However, IT costs and time constraints leave teams using outdated technology solutions designed for old problems. As a result, systems that were never designed for today's challenges are illequipped to face them — and are sometimes made worse by ad-hoc modern solutions.

Issues with legacy systems in higher education often include:

- **Manual tasks:** Systems and people are connected by error-prone, redundant steps.
- **Inactionable data:** Siloed student info and task progress limits decision-making.
- Lack of process transparency: Systems and people are not transparently connected.
- **IT skill barriers:** Skills for better systems are gated behind IT technical training.

Many higher education institutions are starting to realize the benefits of employing process automation to reconnect the campus: from student success to the registrar, facilities management, and beyond.



# Addressing higher education's challenges with DPA

Digital process automation software (DPA) empowers organizations to intuitively design and automate a wide range of workflows. By utilizing a DPA platform with adaptive automation, you can build and automate processes that integrate and extend your existing apps and systems. Additionally, DPA can track all your processes to mitigate issues and ensure continuous improvement.

Low-code technology adds additional value to DPA by encouraging universities to streamline more workflows. Meanwhile, DPA also empowers users to build solutions to orchestrate the flow of work and information across your school's systems and departments.

With this agile approach to process automation, IT departments can better serve all their end-users whether it be administrators, faculty, parents, financial aid, or students. As a result, higher education can focus on their ultimate goal: Offer a high-quality education to students motivated to get ahead in life.

While there are varying ways to achieve this objective, DPA gives schools an edge in terms of speed, flexibility, and accuracy — while offering cost-optimized scalability.



Streamline the student experience across campus—from recruitment to graduation.



# How DPA enables lean operations in higher education

A well-implemented DPA platform allows teams to transform paper and manual steps into centrally-visible actions and data. By turning obscure data into actionable resources for better cross-campus collaboration and decision-making, DPA makes disparate processes and systems easy to connect. DPA makes an impact by encouraging a vast, systemic shift in how work is managed. Embracing digital process automation allows your institution to:

# **Digitize**

Significantly reduce hours required for manual, paper-based workflow. Help to digitize more processes while eliminating the need for in-person signatures, approvals, and reviews. DPA can also ensure your solutions are device-neutral, allowing endusers to get the information they need on any device.

## **Standardize**

Create workflows specific to each department's needs, and streamline them down to the essential steps for the best efficiency. Then, scale the best workflow practices across teams, departments, and campuses to get tasks done with reliable consistency — every single time.

## Centralize

Connect all disparate school systems onto a centralized platform to bridge the gaps in productivity. Schools can incorporate essential data with everyday processes. DPA can also link workflows through disparate channels so team members can collaborate effectively without any blockages.

# **Integrate**

DPAs feature application programming interface (API) connections that allow applications and databases to "talk" to each other nearly universally. Unsilo data across your learning management systems (LMS), digital signature tools, document management systems (DMS), and more.



#### **Automate**

API integration also enables automatic actions across all your institution's applications and systems. By offloading repetitive human actions onto automated programs, DPA cuts many risks of human error. Repeated text entry and

# **Comply**

Help your teams prepare for compliance with automatic logging, create audit trails, and even digital signatures, for every step in a given workflow. Manage the tangled web of data-driven processes while complying with the various regulations that protect them.

#### **Monitor and track**

Design dashboards for workflow reporting, set up notifications for when certain KPIs are met, and trace all actions in real-time. DPA platforms have audit trails around their processes to ensure the right information is always available to make the most concise, data-driven decisions.



# Accelerating change with low-code technology

DPA's initial appeal draws institutions to offload low-level tasks into automated digital tools. However, *low-code DPA* ultimately enables organizations to democratize the development of technology solutions away from overloaded IT queues directly into the hands of frontline staff.

# Why low-code?

Low-code development facilitates easy app creation with pre-built models and a user-friendly interface — even for non-technical users.

Staff can safely connect and swap a growing suite of plug-and-play components without any coding knowledge. The result is an IT-sanctioned sandbox with the accessibility of modern office productivity suites that sets the stage for streamlined work.

# How low-code supports staff

With low-code DPA, support comes twofold:

- 1. A pre-approved sandbox gives IT peace of mind around the security and compatibility of digital systems.
- 2. A non-technical toolset gives frontline staff freedom to define their problems and build custom solutions in a self-contained, self-supported development loop.

With the introduction of these citizen developers, institutions ultimately widen their technical talent pool while mitigating major risks of shadow IT.



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# Bridging the technical gap

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DPA blurs the barriers between IT and business users for better and faster decisions on solutions for efficiency, productivity, and digital agility.

By creating a united front for IT and business-level users to solve workflow challenges, DPA enables offices across campus to reinvent and connect their workflows end-to-end. From the back office to the student experience, frontline staff knows these needs best.

Once frontline staff is free to create and iterate their own cross-campus workflows fast, all employees across IT and beyond can redirect their newfound time and focus towards higher-level, mission-critical functions and workflows for your school.



# Using DPA to reunite CUNY Law's higher education experience

The digital-first approach has become essential with the onset of the COVID-19 pandemic. While the new hybrid and fully-remote challenges take the spotlight, many of today's issues are symptoms of long-running inefficiencies in higher education.

<u>CUNY School of Law</u> recognized how ProcessMaker's DPA could help them tackle these deeper issues. By viewing their challenges from a broader lens, we can pinpoint exactly where DPA bridges the gaps:

- 1. Students need faster access and support from campus departments.
- 2. Staff need resources across departments to build and support their own solutions.
- 3. IT needs better control over security and functionality, and less work in their queues.





# Challenge #1: Unintuitive student experiences

Higher education students are increasingly from digital-first generations— where services are expected to be instant, accessible from anywhere, and simple to use<sup>2</sup>.IT

2 https://www.zendesk.com/blog/millennials-vs-gen-z-customer-service-expectations-compare/

### The problem

If digital self-service isn't entirely absent, it is often clunky, slow, error-filled, and supported by manual back-office paperwork. This leaves many university offices struggling to track paper requests and inconsistently report progress. As a result, students are forced into slow support funnels that overwhelm frontline employees. Students require faster response times, more transparency, and more digital-friendly experiences to stay engaged.

## DPA for end-to-end digital

Frontline staff use DPA to not only streamline and automate their back-office processes, but also redesign student-facing touchpoints and merge it all for end-to-end digital experiences. CUNY Law's Admissions office leveraged DPA to create a fully digital admissions application. With lean interactions between staff and student-to-staff, requests with issues that once took over a week now just take hours to resolve.

Students now get real-time status updates, instant requests for next action steps, and provide additional information across all relevant departments from any device — saving staff three to 10 days of productivity hours per request.





# Challenge #2: IT staff workloads

IT personnel operate with the intent to enable campus departments with efficient workflow solutions — and keep systems secure and compliant.

## The problem

task queues are often overloaded with requests from students and campus-wide staff. Low-stakes requests like student Wi-Fi access draw time away from creating, integrating, and securing new mission-critical workflow tools. Then, IT staff must find time and work with less than 5% of the college's budget<sup>3</sup> to **seek secure** solutions for business needs they don't personally engage with. New IT solutions ultimately take too long to implement, cost too much, and are ill-fitted to the needs of the back office and students. IT staff alone cannot keep pace with the teams they support.

# DPA for end-to-end digital

IT staff use DPA's automated "staff" to support students and office employees across many of their requests. For instance, around 200 staff-to-student monthly requests are now triggered free of errors at CUNY Law with ProcessMaker. Using a low-code platform doesn't mean you abandon hand-coding. Administrators simply gain more control over digital solution development — while leaving more bandwidth to tackle the big coding challenges. DPA empowers the IT department with pre-built modules they can swiftly update with additional coding where needed. IT staff also works with ProcessMaker to keep the university's citizen developer community empowered, while the platform supports its own baked-in data security and compliance.



<sup>3</sup> https://library.educause.edu/ resources/2018/11/2017-educause-coredata-service-cds-benchmarking-report

# Challenge #3: Shadow IT concerns

Higher education students are increasingly from digital-first generations— where services are expected to be instant, accessible from anywhere, and simple to use<sup>4</sup>.

4 https://www.zendesk.com/blog/millennials-vs-gen-z-customer-service-expectations-compare/

## The problem

As staff files tech requests to adapt the back-office for better studentfacing experiences, they face strict roadblocks from IT on security, compliance, and application compatibility. Rather than pile up student complaints and employee stress, teams bring in unapproved tools to get their work done better. This shadow IT drives a sharp spike in risks⁵ of security breaches, legal compliance issues, and traps information in unintegrated applications. To unsilo data, office employees get stuck finding workarounds for workarounds and poor efficiency seeps into student touchpoints.

#### **Democratize tech with DPA**

CUNY Law found that DPA is the low-code platform necessary to democratize technology for non-technical users. While lowcode takes away the complexity of hand-coding, CUNY Law office employees use the platform to pinpoint bottlenecks and plan solutions that are relevant to the associated needs. DPA enabled CUNY Law's Human Resources to map out and automate an entirely new process for vetting the creation of new employee hiring positions. Additionally, the Registrar has been working towards integrating class seat reservations with PayPal.



<sup>5</sup> https://track.g2.com/resources/shadow-it-statistics

# DPA overcame CUNY School of Law's challenges

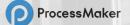
As CUNY Law's Data Analyst Elgin Bryant notes, "a lot of our processes involved paper, walking around, a lot of back-and-forths. Both time and money were wasted. Now everything can be done at the click of a button."

DPA affords employees the **flexibility for agile process changes**. But ultimately, low-code gives the team members closest to the issues an opportunity to create relevant solutions.

# Where else can higher education use DPA?

Just as CUNY Law school has discovered, DPA's versatility can simplify and automate many academic and non-academic processes across campus. Opportunities include but are not limited to:

- **Registrar:** Diploma requests, transcript requests, requests for independent study, change of major, course approval, adding/dropping classes.
- **IT support:** Wi-Fi access requests, staff identity and access management, software license management and compliance.
- **Accounting:** Tax compliance, grants management, vendor procurement policy compliance, expense management.
- **Student health:** HIPAA student records protection and access rights compliance, appointment scheduling, prescription requests.
- Student housing: Maintenance requests, housing applications.



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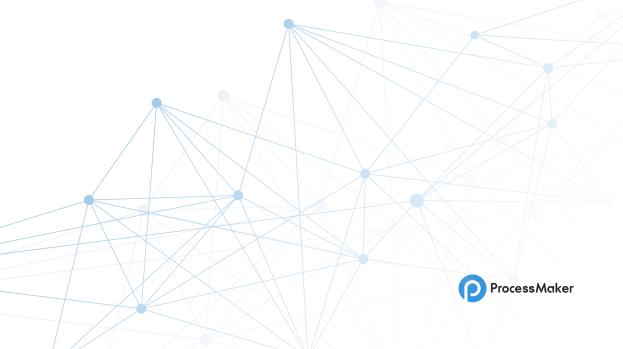
# Manage the digital era of compliance with DPA

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Compliance touches almost every area of academic and student life in addition to harassment, educational integrity, sexual assault, financial aid, admissions, and athletics. Higher education faces many risks without comprehensive compliance programs in place. The better an institution can understand and manage risk, the less exposure it will have to bad public relations, expensive litigation, costly fines, and the loss of public trust.

Unfortunately, inefficient audit trails and elaborate regulations make it nearly impossible for any institution to achieve 100 percent compliance. Before COVID-19, reliance on a physical paper trail was an inefficient but widely accepted practice. Now, intense pressures to remain solvent during a time of massive change have escalated the demand for extreme efficiency and digitization.



<sup>6</sup> https://universitybusiness.com/colleges-are-closing-in-oncompliance/

# Generate process event logs

To satisfy regulations, the DPA system tracks each time an action or information interacts within a process — such as user-submitted invoices or automated approval requests. Log who the participants are and the tasks they managed, comments they made, files generated, digital signatures verified, and more. Then, you can record every change to develop a comprehensive audit trail.

# Link policies to processes

You can also automate the attachment of electronic forms to any policy document to ensure each auditor can clearly see what policy was in effect for every specific action. Further, you can automate the disposal of documents when they are past their mandatory retention dates.

# **Automate audit prep**

In this way, DPA retains every process step so it is centralized, indefinitely searchable, and always replicable. Since no single employee is the gatekeeper of compliance documentation, it is more than possible for fellow employees to trace and replicate the process. Policies give context to automatically translate vague regulatory language into processes that ensure accountability for every stakeholder involved.

# **Evolve with regulations**

It takes an ongoing commitment to implement the right policies per process and change them when needed. Your DPA systems can manage everything digitally, which means you have immediate access to a data pool for oversight and better compliance.



# Reclaim agility against pandemic disruptions to higher education

The COVID-19 pandemic has severely impacted admissions<sup>7</sup> and instantaneously transformed the student education journey for the foreseeable future<sup>8</sup>. In higher education, standard processes will need to change to meet a new set of needs for returning and incoming college students. Consider just a few of the latest issues impacting higher education, including:

- Reconciling varied admissions requirements,
- Communicating with remote students,
- · Deferring enrollment,
- · Updating timelines for reopening and enrollment,
- Scheduling faculty and classes, and
- Ensuring reopening plans meet state and federal health guidelines.

While none of these have a simple solution, agility helps mitigate all of these types of activities. Agility is driven by better decisions and faster action, which requires timely data access and modular tools to adapt against unpredictable times.

<sup>7</sup> https://www.forbes.com/sites/andrewdepietro/2020/04/30/impact-coronavirus-covid-19-colleges-universities/

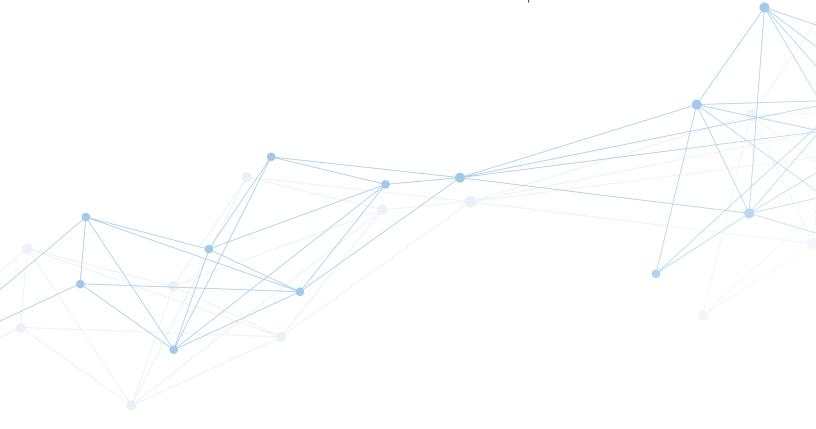
<sup>8</sup> https://fortune.com/2020/04/30/coronavirus-onling-learning-college-student-debt-chegg-covid-19/

#### **Data-driven decisions**

Within the current environment, real-time information is vital. Admissions application requirements are changing, as are classrooms and schedules. Moving quickly to update enrollment and admissions means data must be accurate and easily accessible when and where it's needed. DPA centralizes decision-shaping data to make it accessible and actionable for designated end-users — whether it is stored in spreadsheets, disparate systems, or point solutions. Your team can use the data to build custom apps that service rapidly changing requirements and needs at your school.

# Modular workflow apps

The most efficient way to build apps resilient to the evolving COVID-19 landscape is with a low-code platform offering pre-built components in a drag-and-drop interface. Speed is key here. Anyone on your staff can create rapid solutions and put them to use immediately. When it is difficult to make future plans, this form of agility gives higher education an advantage when it comes to providing the right solutions. DPA delivers a clean way to rewire workflows to meet the daily circumstances of the pandemic. In a time of rapid fluctuation, it's important for your school to increase its level of responsiveness.





# Become "proactive" through digital transformation

Even with reactive changes, today's solutions won't meet tomorrow's challenges. With the arrival of the pandemic, long-term growth plans must run on a new playbook. Higher education institutions can keep ahead of the curve by keeping their operations malleable. The stark difference in choosing "change" versus "transformation" will set higher education on diverging paths.

**Change** is more immediate and responds to short-term needs. When you look at forward-thinking institutions, they are not just trying to put out the short-term fires: they are looking at what happens after the pandemic. How will it change higher education forever, and how does a university adapt?

**Transformation** is about taking a holistic approach to meet the needs of the future. Therefore, digital transformation can occur when stakeholders are prepared for proactive and long-term changes.

DPA allows higher education institutions to remain competitive in a digital world. Not only do you have contextual awareness, but you have access to the right data for making the most informed decisions.



# Minimize disruption

DPA encourages teams to deconstruct monolithic workflows and systems into smaller digital building blocks.

Replacement of legacy systems is no longer a massive overhaul. Instead, offload select system functions onto cloud-native app components without major operations downtime. This pivot moves universities from costly, rigid applications to scalable plug-and-play microservices — piece by piece.

# **Elevate scalability**

DPA is repeatable where it can automate multiple processes for as long as needed. As a result, higher education can cut and standardize the mounds of ineffective, manual, largely paper-based processes. Update all similar processes at once for better cost efficiency to deliver true digital scalability to your school.

# Increase agility

Low-code DPA allows teams to change workflows fast with visual drag-and-drop design. Without the constant need for IT assistance, office employees can design and automate workflows in hours or days, not months. Additionally, IT can rapidly expand the suite of app components and third-party integrations to meet any new needs.

# **Deliver high-impact results**

DPA delivers results even when projects start small. With continuous improvements to your newly digitized, streamlined, and automated workflows, you will gradually see digital innovation across campus.

DPA empowers you with organizational innovation at your fingertips to naturally drive enhanced digital transformation.



# In conclusion

The COVID-19 pandemic will forever change the landscape of higher education. It will also test leaders and administrators for years to come in terms of maintaining their institution's viability. Therefore, it's important to take advantage of the massive productivity gains you can achieve with the digital transformation you can obtain with DPA.

While process automation isn't a new technology, it is both proven and established — while also constantly evolving<sup>9</sup>. Low-code DPA can empower higher education to connect staff, students, processes, and data to get work done more quickly and effectively to meet the expectations of the new normal.

By embracing DPA to automate processes across your campus, you can also empower your teams to easily design digital workflows that meet evolving needs. In a post-COVID world, the question is no longer if, but when, you will achieve digital transformation. With these powerful tools, higher education can finally achieve the needed scalable digital transformation in a changing world.





<sup>9</sup> https://www.automationanywhere.com/company/press-room/automation-anywhere-named-a-leader-in-the-2019-gartner-magic-quadrant-for-rpa-software

# About ProcessMaker

ProcessMaker is low-code DPA and workflow software. ProcessMaker makes it easy for business analysts to collaborate with IT to automate complex business processes connecting people and existing company systems. Headquartered in Durham, North Carolina in the United States, ProcessMaker has a partner network spread across 35 countries on five continents. Hundreds of commercial customers, including many Fortune 100 companies, rely on ProcessMaker to digitally transform their core business processes enabling faster decision making, improved compliance, and better performance.

Find out how we can elevate your business today. Read more and watch a brief video to learn about **ProcessMaker for Higher Education.** 

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