

Nonprofit Research Institutions: Why Digital Transformation Matters

This joint industry perspective between Huron and Workday explores how nonprofit research institutions can digitally transform to reimagine their future.



Adapting to the speed of change.

Nonprofit research institutions often play a key role in advancing scientific and policy knowledge around the world, ultimately benefiting the public good. But in this complex and fast-moving world, they are hindered by outdated technology, manual processes, and data silos. To address these issues and adapt for the future, leaders must embrace digital transformation.

Pioneering medical research for heart disease. Discovering the double-helix shape of the DNA molecule. Creating new approaches to cancer treatment and human genetics. These are some of the essential scientific breakthroughs by nonprofit institutions that conduct critical research and serve knowledge-mission goals for the good of humanity.

"A lot of their mission is driven by serving the greater community of medicine, biomedical research, and general research to enable people to solve problems that seem unsolvable," said Bryan Birkeness, senior director, Workday Consulting, Huron.

Running the gamut from biomedical science and climate science to public policy and governance research, nonprofits in research address global challenges without profit or partisan agendas.

And while their scientific research and knowledge production is often decades ahead of widespread impact, their back-office systems and processes are often decades behind.

To continue their important mission, research institutions need to keep up with the speed of scientific demand and discovery, and the volume of the information available to them. But these institutions don't have the digital backbone in place with the processes and systems to operationally meet their digital acceleration needs.



Using manual and inefficient processes across many point solutions is blocking research institutions from being as efficient in their back offices as they need their labs or their researchers to be in the field.

Michelle Adams O'Regan

Industry Director, Nonprofit Solution Marketing, Workday



These disparate, cobbled-together legacy systems also lead to inflexible operations and data silos—requiring institutions to focus more on time-consuming and manual efforts and less on their mission. This limits their ability to change, grow, and make better decisions.

So how can nonprofit research institutions prepare for what's next? In this report, we share how they can modernize their technology to accelerate their digital transformation.

Outdated technology built for a different time and purpose.

While working on cutting-edge science in their labs, many nonprofit research institutions have enterprise management systems that were created in a different time. John Cunningham, grants product manager, Workday, compares antiquated infrastructure to the U.S. highway system that was built in the 1950s and '60s in Los Angeles where Cunningham lives. It worked for what was needed at the time, but it doesn't scale for today's needs and the future.

"As there are more people on the road and cities grow, the highway system isn't easily expandable. It's not very flexible," said Cunningham. "With research nonprofits, people had these older generational systems that did one thing well. If all the money was coming from a big federal sponsor, then everything worked."

But as organizations and funding models evolve, these systems falter and are unable to adapt and grow. To compensate, piecemeal point solutions are often patchworked onto outdated legacy systems, creating complex workarounds that require business processes to fit within the tech stack's limitations.

"Our system was old, difficult to maintain, heavily customized, and did not always follow best practices," said Patrick Klupa, business systems manager, Whitehead Institute for Biomedical Research. "It was the source of many errors and a lot of drama, and it was not intuitive to our users."

Before Workday, upgrades at Whitehead took 1 to 2 years and vacuumed up the team's time and resources.

"I don't think people realized how much of a price you pay for customizing a system like that," said Klupa. "And it became 'This is just the way it is."

Complex funding models and staffing requirements (including affiliations) require significant manual integrations between multiple point systems and present unique payroll challenges as well.

"They're having to go into three different salary systems to enter data and build reports," said Cunningham, "and then manually enter and tie the data together into spreadsheets. That's the knot that they've gotten into."

Improving financial stewardship.

Funds management and reporting for compliance and sponsor accountability are fundamental to institutions requiring funding to support their research. Organizations must not only show how they spend every grant dollar but must also accurately predict their revenue and expenses to demonstrate progress toward their research goals. No surprise, then, that more accurate funds management is a top priority, a Workday-sponsored 2023 IDC survey found. But in the meantime, manual processes in functions such as capacity planning, sponsor and grants management, and financial close are time-consuming, costly, and inefficient.

"Research organizations face challenges with grants because there's just such complex financial stewardship that's required for regulatory and funding compliance," says Adams O'Regan. "Being able to connect all the dots and report on those dots at the click of a button is huge."

By eliminating clunky manual spreadsheets and incorporating finance, people, and operations data into the planning process, cloud-based systems enable finance teams to quickly create plans based on real-time data and model different scenarios to guide decisions and prompt pivots when needed.

For nonprofit research institutes, this translates into the ability to model decision packages against funding levels, build program expense budgets, and forecast revenues from funding streams. By optimizing grant processes and reducing the cost of compliance, they can link grant data to payroll, time collection, and other cost-related business areas; mitigate risks and ensure compliance with automated processes; and prevent grant overspend and underspend.

Having grants data integrated with HR and finance data helps fuel decision-making and eliminates organizational silos. With a fully integrated platform such as Workday, adding an award or a grant communicates that data to all the apps within Workday so people can track their funds management in real time.

And with Huron's pre-award solution HRS Grants, organizations can track award proposals, upload to the federal government (grants.gov), assess the win-loss ratio, and integrate awarded grants into Workday. Huron brings a best practice on what data to integrate, when to integrate the data, and how to best align the data model so principal investigators are seeing the same information from inception to compliance within an award.

"You're able to have transparency from purchase requisition to cash application, track how you're trending on your life-to-date balances, and integrate aspects of funding proposals and pledges into Workday for analysis," said Birkeness.

"We can bring data from those best-of-breed systems—Huron Research Suite [pre-award system] or Salesforce [donor management]—into Workday, and you have a complete picture."

Better control of spend.

For nonprofit research institutions, managing expenses effectively is another critical way to maximize the impact of their work. But they are held back by inefficient, manual, and disconnected processes.

"When you have multiple labs within your organization running different procurement processes and none of it is connected, that's another issue that Workday can help nonprofit research institutions solve," said Adams O'Regan. "They'll get a single system for procure-to-pay, drive cost savings, and implement best practices and spend management rather than having each lab doing its own thing without visibility."

With Workday, Whitehead was able to automate and streamline its procure-to-pay process.

"By having a unified system, we have one source of the truth," says Klupa. "We don't have to integrate different systems together. There are no delays in synchronizing data between systems. There's no balancing or reconciling between systems."

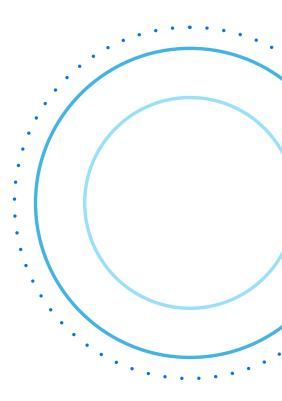
That means Whitehead can immediately assign a new hire's pay to grants, enabling the employee to order supplies and enroll in their benefits. And all those transactions are on the accounting reports right away.

"With the grant's data integrated with our HR and finance systems, it's very easy to track grant spending," said Klupa. "You can just go into one of your financial reports, run it by a grant worktag, and there's all of your grant spending right there. It makes it very easy to calculate the bills and to bill a granting agency. It's easy to see which employees were paid on each grant, which is important for compliance requirements."

Because of the nature of grants, administrators in all the departments, labs, and research centers are basically doing salary management tasks. And without a system such as Workday, they're doing all that on spreadsheets and making tens of thousands of payroll accounting changes a year.

"Workday can take out a little more than one-quarter of all the current baseline of manual payroll entry because grants and payroll kind of work together.

That's where most of the expenditures and most of the manual work for grants comes out of managing payroll," said Cunningham.



Future planning.

In the aftermath of the COVID-19 pandemic, it became clear to researchers—especially those in the biomedical and infectious disease fields—that they must plan for any number of future scenarios and be able to replan with agility as conditions change. An enterprise platform with powerful modeling capabilities enables nonprofits to model and analyze various funding and spending plans across multiple fiscal years.

Accurate financial forecasting in particular will allow nonprofit research institutions to service demand and pivot in the event of future disruptive events. It will also provide up-to-date visibility to track and manage the institution's workforce along with grants, and project how they can recover their back office.

A Workday-sponsored 2023 IDC survey found that 67% of nonprofits that embrace cloud services for financial management and planning realize improved decision-making. And 61% report improved compliance and accountability.

Workday Adaptive Planning can provide full visibility into business performance; broad access to real-time data; and faster, more effective decision-making. An FP&A mindset, instead of a reactionary cleanup effort, can help.

Research institutions, from leadership to PIs, can adjust in real time and do more frequent planning cycles. They can work fluidly to solve a problem and access the data quickly. It's more achievable and consistent throughout the year and future years to come.

"It allows organizations to think years ahead with their mission, and about where they should be focusing their time on research and making business decisions along with their mission," said Birkeness.

By having an FP&A tool in place such as Workday Adaptive Planning instead of spreadsheets, organizations can pull actuals in real time and snapshot them, do win-loss ratios, and perform workforce planning. They can figure out how all of their grant money should be spent from a salary perspective.

"Having a single platform that produces projections at the click of a couple buttons and uses the data you've entered for allocating salaries and running commitment accountings basically eliminates 10 hours a month in a typical planning process," said Birkeness. "They're more informed in real time. And they can run it for five years out. That's huge."



Employee experience.

The nonprofit sector hasn't been immune to the tight talent market. Attracting and retaining talent remains one of the top priorities for organizations across the board, including research leaders, administrators, PIs, and laboratory staff.

Keeping a hybrid workforce empowered, connected, and focused on higher-value work that supports the mission versus time-consuming administrative work can provide a better employee experience.

"We want scientists to be doing science and researchers to be doing research rather than doing administrative tasks," said Adams O'Regan. "The right data, insights, and technology for automation can give them more time for mission-critical work and limit frustrations from cumbersome, time-consuming, and error-prone processes. That's a big part of the ROI."

An ERP that unifies data into one system can help leaders:



Remove barriers to productivity. By breaking down silos and prioritizing self-service to eliminate friction, IT can enable greater access to data and more process automation to help free up capacity.



Make faster, more informed decisions. Analytics and machine learning can help organizations get the data they need for decision-making.



Increase engagement. A more personalized, collaborative application experience that meets people where they are can improve performance and satisfaction.

According to Whitehead's Klupa, "The jobs of our procurement buyers and our accounts payable clerks have gone from basically keying paper forms to just focusing on the out-of-the-ordinary orders."

There are also employee expectations for upgraded work environments, especially the workforce in the field or in demanding service positions. Without a system that can provide a mobile experience and a consumer-grade experience to employees, organizations are missing an essential component of hybrid organizations. Especially for organizations with researchers all over the world and in the field, nonprofits need to ensure that all employees have a voice and are connected.

"Organizations purchase Workday knowing that it's going to bring efficiencies, but then they see their people are happier," said Birkeness. "They're able to focus more on their research. But they've also got culturally stronger as an organization."

For Whitehead, the formerly laborious and multiyear enterprise resource planning (ERP) system upgrades have become a thing of the past—a huge relief for its people.

"I cannot emphasize how happy I am not to have to devote my team for as many as two years to do one of these upgrades," said Klupa. "The upgrades are not fun. They don't add value. And nobody is going to thank you for doing it."

Building a connected workforce means organizations can also hire a skilled workforce from all over the world. Their talent search is no longer geographically limited.

As Cunningham said, "A customer told me 'Now, I can find talent for my office. I can hire research administrators from anywhere. I've really been able to upskill my talent because I can go after experienced people where they are—not try to talk them into coming to where I am.' And if you've eliminated paper and spreadsheet processes, you can do that work from lots of places."

Data brings collaboration and better decision-making.

For many organizations, their finance, HR, or IT teams spend a lot of time wrangling data.

In this environment, providing leaders with decision-ready data to guide strategic decisions remains slow and challenging. With data and people in silos, organizations are less cohesive, lacking collaboration for strategic planning and decision-making.

Using accurate and easily sourced data insights for effective and impactful organizational decision-making remains one of the **top priorities** for nonprofits (36%). A cloud-native enterprise management platform can banish data silos entirely. Instead, the unified data core in Workday means that finance, HR, and IT all work from a single source of real-time, reliable data and a shared, comprehensive view of the company's operations. And for researchers working long hours, having the data at their fingertips can be enormously helpful to make the best decisions from the lab level to the leadership level.

"Departments actually speak to one another for the first time in many years as to why they do what they do," said Birkeness. "By gaining a more modern service delivery model, they can better support their constituents across the organization. And so you're having a more collaborative administrative impact where people know the full story and can see from start to finish how something works."

Leaders of research institutions need to make important decisions cross-functionally that can impact the future of a cure, our climate, or our world. They need access to dashboards with the data and to insights that allow them to better understand the impact of the work and how to potentially reallocate or redirect or change research directions.

"Workday obviously doesn't cure disease," said Adams O'Regan. "But having Workday can help reduce administrative burdens, free up time and resources, and provide insights so that institutions can have the most strategic focus and make the best decisions to help cure disease."

Best practices for digital transformation.

Nonprofit research leaders are starting to undertake the transformational shift required to modernize operations, empower workers, and further mission impact. But getting support and driving a true transformation can be difficult. In this section, we share how nonprofit research leaders can prepare for a successful transformation.

Prepare for significant change management.

Navigating change requires a deep understanding of the value proposition to the organization, its employees, and donors, as well as a willingness to build consensus at every level of the organization.

To start, leaders need to clearly explain why the status quo is no longer acceptable, discuss how outdated business systems hamper the organization's ability to fulfill its mission, and address employees' concerns about their shifting duties.

"This is truly an organizationwide effort," said Klupa. "Every single person is going to be impacted. Some are going to be heavily involved in the project. Others are going to have their day-to-day processes changed. There's just no way around it."

To gain this support, organizations need to focus on fully addressing the benefits of a cloud-based ERP, especially mobile capability, and access to timely information that can accelerate and automate day-to-day operations.

"Modern implementations should now include a change management function that, right from the start, figures out who the stakeholders are and who's going to be most impacted, and make sure that we're addressing concerns and keeping people informed and on board all the way through," said Klupa.

Get alignment on transformation goals.

Projects struggle when organizations don't have executive and goal alignment as important decision-making gets bogged down. Gaining support for any transformation is difficult, but the first step in getting agreement about the transformation and what it entails is huge.



"If you can't get your organization to think through and articulate some business goals, you won't achieve them," said Cunningham.

That means making sure you understand your requirements and identify any gaps in functionality so you can address them at the start of the project. And make sure you involve all the administrative groups, including those in the labs handling all the administrative work.

"It's absolutely critical to have them on board too, especially because they are the direct connection to the principal investigators and the labs," said Klupa. "You want them on your side to help smooth things over with everybody."

This also means getting aligned on future goals. Having a vision of where you're going helps define a guiding principle for the implementation. Start thinking about your roadmap and where you want to be five years from now because you may likely go live with the functionality you need for now, but you will want to make sure that everything is scalable and that you can grow into more technologies and functionalities within the Workday suite.

And have a mindset for continuous innovation.

"This is a dynamic journey just like research is a dynamic journey," said Adams O'Regan. "You want this to take you into the future. It's not a one-and-done. Change management is critical, because you want to convey that strongly to your organization as you're going through the process."

Assess your data and consolidate systems.

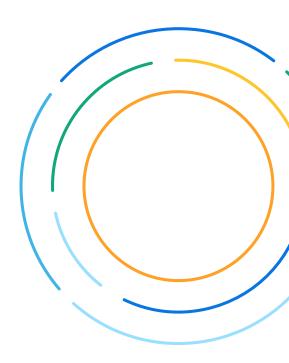
A transformation is more than just swapping technologies. It's an opportunity to reimagine processes, operations, data, and the skills you need.

"Huron can help people from an implementation perspective, but we can't replace institutional knowledge," said Birkeness. "Organizations should ensure their people are able to pull their data and know what to do with it, and know what's clean, what's dirty, and what's the proper record versus a duplicate."

Organizations should resource the implementation from a data-conversion and functional perspective. Engaging with the people who are going to make decisions and then work in that environment post-go-live is also paramount.

There also won't be one system that does everything, but you don't need as many systems.

"You want to consolidate systems and put all the data together," said Cunningham. "That's really where the big bang comes from beyond the more efficient transactional work. It's insight. And if you believe where AI is going, it's all going to be around access to data. All of that's going to come from putting the data together."



Talk to people who have done this before.

It's critical to rely on a community for insights and best practices. Since 2007, Workday has helped support more than 60,000 researchers, scientists, educators, and other members of the research community worldwide in their contributions to knowledge and scientific advancement.

"A lot of people helped me out when Whitehead started on this journey, and many of us, including myself, are happy to pay it forward," said Klupa.

For Birkeness, success is a happy customer. "We view these projects as actually a customer project. We are just here to paint the lines on the road, give guidance, and support and consult. But ultimately, we don't take success for a Workday implementation. We are only successful if our customers feel successful and feel happy."





Huron is a global professional services firm that collaborates with clients to put possible into practice by creating sound strategies, optimizing operations, and empowering businesses and their people to own their future. By embracing diverse perspectives, encouraging new ideas, and challenging the status quo, we create sustainable results for the organizations we serve.

As a Workday Services and Innovation Partner, Huron combines its industry and digital expertise to help companies design and implement technologies to accelerate digital transformation, facilitate data-driven decision-making, and enhance customer and employee experiences.

Learn more at huronconsultinggroup.com.

