

📁 KAINOS SMART CASE STUDY

# Cardinal Health Revitalise Workday Testing Following Misadventures with Generic Automation

## Project Requirements

Reduce testing effort

Eliminate test-data prep

Increase test coverage

## Project Results

**8864%**

increase in breadth and depth of test coverage

**95%**

reduction in testers required

**4**

weeks saved during update testing

**16k**

BP, security and payroll tests ran per update



“ Smart is just awesome, my only wish is that we had implemented Smart sooner! ”

Sam Abdullah — Sr. Advisor, Strategic HR Consulting at Cardinal Health

## About Cardinal Health

Cardinal Health is a global, integrated healthcare products and services company employing 50k staff globally. Listed number 14 on the Fortune 500 list, it prides itself on providing bespoke solutions for hospitals, health systems, pharmacies, laboratories and physician offices worldwide.

### Growth intensifies resource pressure

In 2010, Cardinal Health became Workday Customer #100, going live with Workday HCM. At the time, Cardinal had 20k employees operating only in the US. Nine years later, with a number of acquisitions under its belt, Cardinal now operates in 56 countries and employs 50k staff.

“During this period of growth, our Workday configuration underwent seismic change,” explains Samantha (Sam) Abdullah, Sr. Advisor, Strategic HR Consulting at Cardinal Health. “We rolled out Talent, Recruiting, Time Tracking and Payroll. We implemented the extensive configuration changes that come with mergers and acquisitions, like expanding our supervisory orgs, building new security groups, and adding business processes. And this was on top of our business-as-usual changes.”

Cardinal discovered that as their Workday footprint grew, so, too, did their support needs. “We had a cross-functional team of 16 staff from HRIS, HRIT and Change Management who was responsible for managing all HR systems—including supporting and testing Workday,” says Sam. “But covering all of our bases was getting more difficult, and testing was putting a particularly noticeable strain on our teams. We’d been regression testing manually since go-live and for every project launch, every bi-annual Workday update, and for the few Workday weekly releases we’d managed to get to. Every new Workday module you add brings a host of new tests that you need to run to protect that functionality—not just during the deployment project itself, but on an ongoing basis after go-live. It’s the same when you add new orgs, locations, and security roles after acquisitions. Our testing requirements had grown significantly, but our testing capacity hadn’t scaled to support that volume.”

### Test maintenance undermine updates and feature adoption

Workday’s bi-annual updates posed a particular challenge for HRIS. Every six months, the team drafted in up to 40 staff to help with regression testing. However, despite the added resource investment, test quality and coverage were minimal and left business partners with no time to explore new functionality or optional features within the release.

Sam explains, “We were bringing in the entire recruiting team, everyone in HRIS, and everyone in our service centre for two weeks solid. Yet we’d only manage to complete around 150 HCM tests and maybe 20-25 security tests—nothing we could call thorough. There were so many tests that we couldn’t get to, and we always felt at risk of missing issues.”

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Sam continues, “We were also fighting an ongoing battle with test data. We’d test our core scenarios using real worker data, but almost every time we’d go to re-test during after a fix was applied, we’d find the test data was no longer valid. We were continuously having to source new employees to fit each test’s criteria for retesting. It was enormously time-consuming but critical—because if we didn’t and a test failed, we wouldn’t know if it was because of a config issue or bad data. With all of this going on, we had zero time to explore new enhancements or optional updates within each release.”

## Misadventures in generic test automation

In 2016 Cardinal went to market for a test automation tool that would minimise data prep, increase test coverage and reduce testing effort—opting for a generic, multi-purpose testing solution. To get the tool off the ground, Cardinal invested six months of project time and hired three external contractors to support onboarding efforts, significantly increasing adoption costs. As the project progressed, it became apparent that the vendor had misrepresented its tool’s capabilities and the time savings it could deliver Cardinal.

Sam explains, “To create the automated tests, we had to itemise every single point and click step in a scenario. We’d then send these to the vendor, who’d build the automation based on our documentation. We were led to believe that their solution was low maintenance—that once the scenarios were developed, they’d be easily deployable into the system with little effort by our teams. This was not the case. We also didn’t realise until we were getting ready to deploy that they had used real worker data from our system in the tests. So just like with our manual testing, we’d have to review every scenario every time we ran it to ensure there hadn’t been a change to the data set.”

But it wasn’t just the data they’d have to maintain, it was the test automation itself. “We learned that whenever we changed our config or Workday made changes, we’d be responsible for updating those scripts,” she continues. “Given the volume of activity in our system and the rate which Workday releases changes, their automated solution was just too complicated and too time consuming. We realised that we’d be spending nearly as much time prepping and maintaining the automated tests and data as we were currently spending on manual testing, so we ended that relationship.”



## The Impact of Kainos Smart

In 2017 Cardinal Health went live with Kainos Smart, automating testing for HCM and Security—later adding Smart Payroll to the stack. With true test automation now in place, Sam and the team are armed with a fit-for-purpose testing tool that requires nearly no intervention from their HRIS team. With Smart, Cardinal has reduced their update testing time by 775%, cut the number of staff involved in update testing to 2, and significantly increased their depth and breadth of test coverage by a factor of 8867%, all while supporting new Workday projects in line with company growth.

### Truly hands-free test automation

“Comparing Kainos Smart to the previous ‘automation’ tool is like night and day,” says Sam. “I was sceptical when I heard that building the automation and onboarding would be done remotely and that we’d be ready to run our first automated tests after just six weeks, but that was exactly the case. The whole process was seamless from start to finish. Our tests were ready for review after just two weeks and the Smart team provided excellent hand-over documentation, so our team has been able to expand our test packs since.”

Crucially, Kainos Smart solved Cardinal’s test data challenges and delivered the low-maintenance automation they’d been looking for. “Smart’s synthetic test-data generator has basically eliminated our test data issues,” says Sam. “We use it in the vast majority of our tests to generate synthetic workers that mirror the data profiles of our existing worker population. This means no more false test failures and no time wasted hunting for workers that fulfil test criteria for retesting. And there’s practically no test maintenance. Smart is always in sync with changes made by Workday, and if we make changes to an existing BP and Smart detects that during testing, it’s just a simple click to tell Smart ‘Yes, this is the new, approved process. Make this the new baseline.’ And the automation script updates. That’s it.”

### Year-round protection and peace-of-mind

With Smart, Cardinal has finally been able increase its testing capacity to match its growing testing requirements. The Kainos Smart team runs now Cardinal’s HCM, Payroll and Security tests every week, providing valuable analysis of issues found. During Workday’s bi-annual updates, its functional teams are no longer removed from core tasks, and the number of hands-on testers involved in update testing has reduced to just 2 people total.

“Being able to reduce our testing effort, freeing people’s time for strategic work, and truly being able to run them every week and see what’s going on in the system has been huge improvement for us,” says Sam. “We’ve never been able to do anything like that before.”

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“As of Workday 33, our time spent testing has shrunk from 5 weeks to just 4 hours of effort,” she continues. “We ran a total of 4,699 HCM tests, 685 Payroll and 10,303 Security tests during the update. And those hours weren’t solely on running our automated tests. That was a mix of running our Smart tests, researching errors, fixing issues in our configuration, adjusting packs, plus carrying out some manual testing that we still do.”

“That massive increase in coverage has really helped us mitigate risk,” she adds. “For example, Smart recently identified a critical security issue before it entered production. We had made a configuration change that accidentally opened up compensation within a security role that shouldn’t have been able to see it. Had Smart not highlighted this and it had gone live, a large body of our population would have been able to see compensation for employees they shouldn’t have had access too, and we would have had a big issue on our hands.”

“Smart is just awesome. It really allows us to focus on other things. We truly appreciate the partnership with Kainos, and knowing support is only an email or call away is super reassuring—my only wish is that we had implemented Smart sooner!”



