WORKDAY ENTERPRISE RESOURCE PLANNING PRE-IMPLEMENTATION AUDIT

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ABSTRACT

Workday is an Enterprise Resource Planning (ERP) software that automates business processes, making transactional information available in real-time. The platform allows users to collaborate across processes and functions efficiently.

In 2020, Sharp HealthCare (Sharp) selected Workday as its next generation ERP partner, consolidating business processes and applications in the Technical, Finance, Human Capital Management, and Supply Chain Management modules. In total, the implementation involved design and build of over 300 business processes, nearly 500 custom reports, and approximately 150 integrations with third-party systems. As of go-live in January 2022, Sharp had over 21,000 active employees and contingent workers accessing the application via web browser or mobile device.

Partnering with the project management team, department leaders, and business process owners, Sharp HealthCare's Internal Audit team (Internal Audit) performed a pre-implementation assessment that included not only review of the design and configuration of business process and information technology (IT) internal controls, but also formal documentation of Risk and Control Matrices (RCMs) for confirmed business process and IT internal controls. Further evaluation included the design, build, and testing of third-party integrations, custom reporting, and data conversions and an assessment of the data governance structure and security framework for user access and segregation of duties across the system.

Below outlines the audit approach to the pre-implementation assessment, including the design and organization of a project plan to manage a large-scale project, tips on how to provide valuable insights to the business as trusted partners, and opportunities to leverage data analytics and visualizations to monitor progress and effectively communicate with key stakeholders.

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AUDIT PROGRAM APPROACH

As with any audit program, effective planning is important, and in a large-scale project, it is critical. Areas to consider during planning include:



Planning and Research

Planning and research for a Workday system implementation included:

- preliminary meetings with the Project Manager to understand status of the project at the time of Internal Audit's involvement, and the implementation roadmap,
- connecting with the implementation partner,
- contacting key network resources such as AHIA Connected Community to knowledge share, and
- reading white papers on similar implementations.

Audit Resources and Third-Party Engagement

Co-sourcing internal audit project teams is a great way to supplement resources and add subject matter experts to support the internal team and the business. With the support of the Chief Audit Executive (CAE) and sponsorship of Executive leadership, Internal Audit engaged a third-party co-source partner for this project, who contributed Workday specific guidance and expertise in business process configuration, automated internal controls, and security.

Internal Audit dedicated a resource to each in scope domain. This supported client-relationship development, offered an intermediary between co-sourced partners and the business, and added value to the project by leveraging existing auditor knowledge and skillsets in finance, supply chain, human resources, and IT processes, specific to the Sharp organization.

Training

Once engaged, Internal Audit's consultants hosted an orientation session with Internal Audit to knowledge share basic Workday terminology and implementation methodology. Training included Workday guiding principles, risk and control development methodology, examples of Workday specific automated and manual controls, and Workday sensitive access and segregation of duties overview.

Independently, members of Internal Audit took the Workday Learning Center Core Concepts, Auditor Basics, and Configurable Security Fundamentals courses.

Project Scope

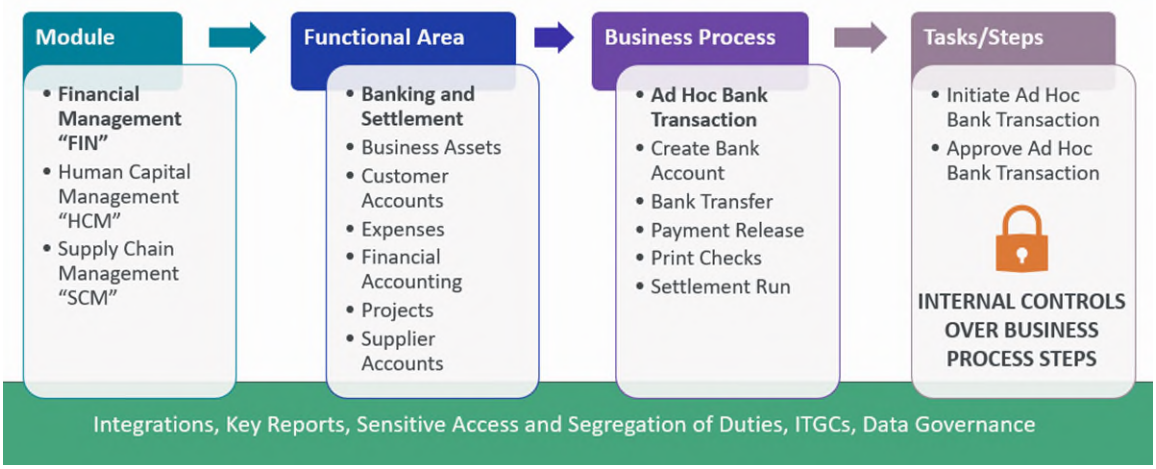
With an objective to assess processes implementation strategies to mitigate the risks to the implementation, Internal Audit focused the project scope by identifying and prioritizing the functional areas with the highest risk and impact to financial statements.

Internal Audit further reviewed historical Internal Audit reports, observations, and action plans, mapping them to in scope functional areas, to align with the business owners on remediation and optimization by way of process transformation and automation.

Sharp implemented three main modules, in a "Big Bang approach" - the Financial Management, Human Capital Management, and Supply Chain Management modules. Underlying these modules was the supporting technical module. These separate modules are interconnected through an object data model and configurable security to create one source for data and one security model for the entire platform.



Each module is broken up into functional areas. Each functional area is composed of multiple business processes, which in turn are constructed on tasks and action steps. Internal Audit reviewed the configuration of controls built into business process definitions as well as the correlating manual controls, dependent on the system.



For example, a threshold for requiring approval on an Ad Hoc Bank Transaction and a routing restriction could be implemented as automated controls, restricting a user from *initiating* an Ad Hoc Bank Transaction

business process event (that meets the criteria for approval) and *approving* the same Ad Hoc Bank Transaction. An IT-dependent manual control would be the approving manager's review of the supporting documentation for an Ad Hoc Bank Transaction prior to selecting "Approve" in the associated Workday task.

Woven into these business processes is the complexity of supporting third-party integrations, custom reports, and object-dependent access to all the above.

Risk Assessment Process

Internal Audit performed a Risk Assessment process by documenting the business objectives for the implementation, identifying risks that could impact the achievement of those objectives, and determining audit procedures to validate the risks are mitigated.

While all large-scale system implementations have unique attributes, the risks associated with these application implementations are largely similar. Key ERP implementation risks identified include:

- Configurations and related reporting might not be adequately configured, thoroughly tested, and validated prior to go-live.
- Configurations could result in incomplete, inaccurate, or fraudulent information.
- Migrated data could be incomplete, inaccurate, or incorrectly mapped.
- Third-party integrations might not all be not identified or sufficiently validated to meet business requirements.
- There could be unauthorized access or loss of sensitive data due to excessive user security access or segregation of duties conflict violations.
- End users might not be adequately trained to adopt and proficiently use the system post go-live.
- IT general controls might not support maintenance of the system post go-live.

Sharp's objective was to leverage this implementation to transform Sharp to be the best and easiest place to work. Internal Audit's goal was to be a value add to the project and provide comfort to the organization that Sharp could reach that goal without (or with limited) business interruption or risk to our organization's assets.

Engaging and Understanding Business Resources

Internal Audit collaborated with the Project Manager to understand the Sharp Workday Governance structure and identified key contacts per functional area. Walkthrough meetings were organized with key contacts to discuss design decisions and internal control design and configurations. These contacts also helped Internal Audit identify key reports used in the performance of controls and the owner of each control as they were developed and documented.

Timeline

The implementation process involved the development of multiple "tenants" or iterations of the system developed. Each tenant was copied from its final version into the next version, iteratively building the system to meet Sharp's business needs.

Rather than taking a retrospective approach to reviewing the implementation, Internal Audit worked in real time, in parallel with the business. Sharp's implementation partner for Workday, was Workday, who developed a timeline with the Sharp Project Manager and Module leads. Internal Audit used this timeline to build the project plan to align procedures with the design, build, and validation of the new system.

Internal Audit held kick off meetings with each module lead to introduce the Internal Audit co-source partners, explain the project objectives and scope, and discuss the layered timeline.

"Divide and Conquer"

Once the audit program was complete, Internal Audit leveraged the resources across the Internal Audit team and co-source partners, and broke out fieldwork by module (FIN, SCM, HCM, and TECH). Internal Audit delegated more complex and high-risk process areas to the co-source partners, who are Workday controls subject matter experts.

THE AUDIT PROGRAM

Internal Controls

Internal Audit reviewed each in scope functional area such as Banking and Settlement, Procurement and Contracts, and Benefits taking into consideration the risks inherent to the process to identify controls and gaps in controls.

Leveraging Workday's business process framework, Sharp made a purposeful effort as an organization to not "lift and shift" existing processes, but rather to automate controls as much as possible, and to move away from manual, paper intensive legacy processes. It was very important to use Workday's inherent abilities to configure internal controls into processes.

Internal Audit held walkthrough meetings, participated in design meetings, and reviewed supporting documentation to:

- review legacy control processes,
- review process design documentation within Workday design workbooks,
- read and understand the functional specifications and related documentation for the in-scope Workday functional area,
- determine adequacy of control design for risk mitigation and compliance requirements,
- review Workday delivered reports and required custom reports to be developed to support Workday IT dependent manual controls, and
- document risk and control matrices ("RCM"), including identified gaps, and considerations for each in scope functional area. As needed, Internal Audit made recommendations on additional configurations to minimize the number of manual processes addressing risk to the business, heavily leveraging the system's ability to restrict approval routing to prevent initiators from approving their own transactions.

Due to the iterative nature of implementing Workday, there was a sense of trying to hit a moving target. Prior to go-live, once controls were agreed on, Internal Audit took screenshots of the configuration of each control, for example, a screen shot of a business process definition or account posting rule. Internal Audit performed validation procedures in the post-go-live review to confirm that changes to the configuration of key controls did not change in the production environment.

Key Reports

To validate the development and testing of key reports, Internal Audit collaborated with management and reviewed supporting documentation to understand the process to identify key report requirements from Workday and confirmed:

- an inventory of key reports was documented,
- stakeholder needs were considered in the identification of reports,
- report requirements could be met with an out-of-the-box Workday report or if custom report creation is required. In the event Workday was unable to customize out-of-the-box reports to meet requirements for a key report, a work around was designed and tested, and
- a process was in place to validate reports meet requirements prior to go-live.

Third-Party Integrations

To validate the development and testing of third-party integrations, Internal Audit inquired of management and reviewed supporting documentation to understand the strategy for third party integrations in the Workday implementation and confirmed:

- a process to identify and develop an inventory of data integrations associated with the impacted processes was established,
- prioritization of inventory for implementation was created and documented (i.e., flow diagrams),
- a process was in place to validate third party integrations meet requirements prior to go-live,
- critical integrations were added to risk and control matrices, and
- a process was in place to validate third party integrations meet requirements post go-live.

Data Conversions and Governance

To validate the availability and integrity of data converted and stored within Workday, Internal Audit reviewed and documented:

- the documented inventory of data objects, including identification of data not planned for migration and the retention strategy for legacy data for the 11 systems Workday replaced, data rules and attribute mapping, data cleansing plan, and business ownership for validating data and formally signing off on each conversion and
- data governance processes to understand how Workday transactional data would be available, complete, and accurate to a data user.

Testing Validation

To validate each tenant build and integrated testing methodology and execution were effective, Internal Audit inquired of the Project Management team and reviewed the Workday implementation testing methodology to confirm:

- test plans were developed, tracked, the right people involved in the testing,
- testing entry and exit and expectation and result criteria were clearly defined and then satisfied and approved,
- testing addressed the full range of business scenarios (end-to-end processes) with coverage across the entire project life cycle, and
- an effective defect management and prioritization process exists and is utilized.

Internal Audit reviewed test scenarios to confirm:

- there was sufficient testing of the documented internal controls,
- testing was completed per the defined test scenario and support was documented, and
- progress was monitored on the test scenarios throughout end-to-end testing to ensure the results were clearly documented. Internal Audit further validated the testing for a sample of internal control-related test scenarios, third-party integrations, key custom reports, and data conversions.

Sensitive Access, Segregation of Duties, and IT General Controls

IT processes for review were scoped based on risks related to a typical system implementation review.

Given the complexity of the Workday security model and the speed at which Sharp needed to assess the system, Internal Audit leveraged the consultant's proprietary tool to assess sensitive access areas and abilities in the system that create segregation of duties conflicts. Internal Audit documented a draft Sensitive Access and Segregation of Duties (SA/SoD) framework with the business and used the agreed upon framework as the basis for the subsequent SA/SoD assessments. Review and action steps to address access and segregation of duties conflicts identified was a time consuming, manual process. As such, the consultants ran this analysis pre- and post-go-live to support the business review of the execution of the implemented security model.

Based on discussions with Management, Internal Audit drafted a risk and control matrix for IT general controls addressing:

- application maintenance and change control,
- logical access, and
- computer operations. Internal Audit also reviewed and discussed the annual review of Workdays multiple SOC reports as a SaaS provider and business ownership of that review and follow-up to ensure applicable user entity controls are in place and operating at Sharp.

Lastly, Internal Audit reviewed the plan for organizational change enablement and end-user training, including the training of our IT teams to support the system post-go-live.

INTERNAL AUDIT PROJECT MANAGEMENT

The pre-implementation project for our internal audit team was 15 months long and continued in post-implementation work. To support this extensive project, involving all areas of the business and multiple consulting parties, organization and communication were a priority.

Examples of communication methods used included:

- an assigned a project manager liaison for Internal Audit work to assist with connecting with the right contacts and assisting with follow-up and document coordination,
- weekly internal touchpoints and twice weekly with consultants to make sure the approach and message were consistent,
- bi-weekly status update emails to the stakeholders with recent accomplishments, outstanding items, changes, and next steps,
- the CAE was a participating member of the Workday Executive Steering Committee, which met monthly to provide executive sponsors with an update on progress,
- a shared file system with the stakeholders to track the progress of the audit program, document requests, meeting requests, open items and decisions, and the documented risk and control matrices,
- independent access to the implementation tenants and test scenario tracking system to reduce the time burden on our stakeholders, and
- regular stakeholder touchpoints with the module leads and with control owners (sometimes weekly) through go-live.

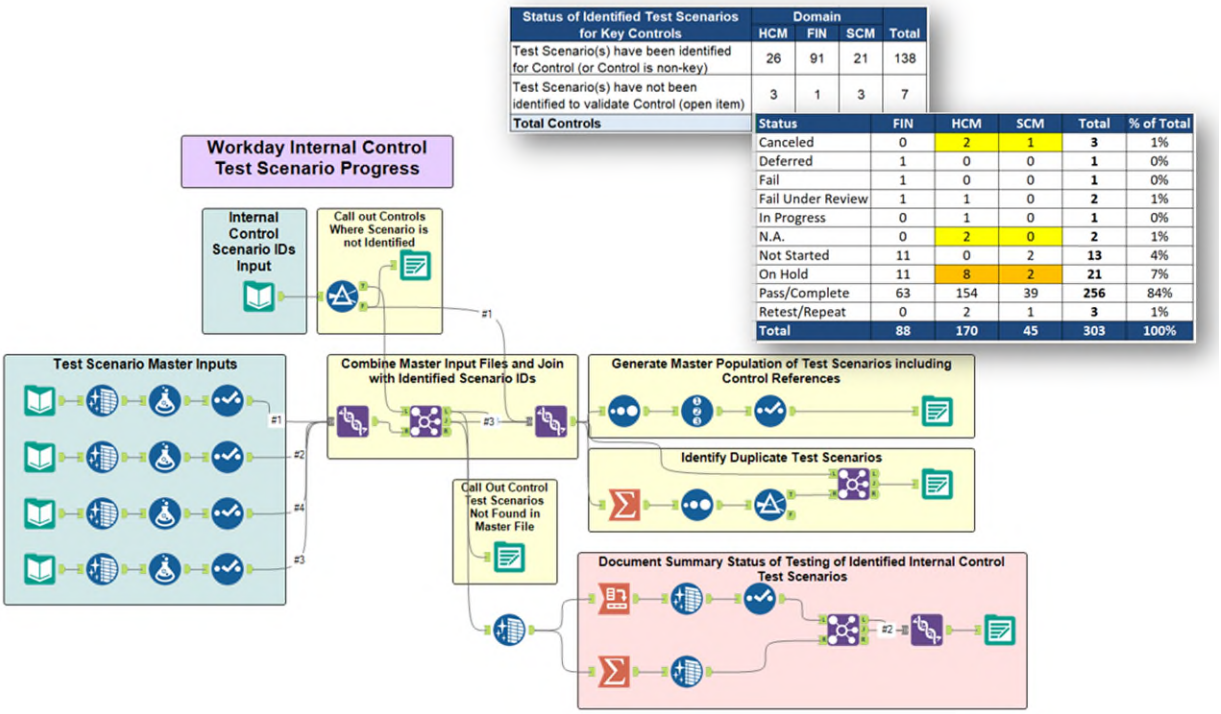
USEFUL REPORTING

Monitoring Progress and Access with Analytics

Internal Audit leveraged analytics and visualization tools such as Alteryx ©, Microsoft PowerBI ©, and Microsoft Excel © throughout the assessment and into reporting processes. To reduce repetitive work, Internal audit built an analytic procedure to track progress of the specific test scenarios mapped to the documented internal controls.

On a bi-weekly basis (sometimes more frequently when nearing testing deadlines), instead of performing the same filters and review of test scenario ID's, Internal Audit downloaded current files and re-ran the analytics workflow to provide a summary status to stakeholders on progress made testing key internal controls.

For the security access and segregation of duties analysis, the consultants provided a web-based dashboard using Microsoft PowerBI to summarize the results and allow for drilling down for further discussion. Module leads were provided access to the dashboards and exported supporting data to make business decisions and resolved identified sensitive access and SoD conflicts.



Status of Identified Test Scenarios for Key Controls	Domain HCM	FIN	SCM	Total
Test Scenario(s) have been identified for Control (or Control is non-key)	26	91	21	138
Test Scenario(s) have not been identified to validate Control (open item)	3	1	3	7
Total Controls				

Status	FIN	HCM	SCM	Total	% of Total
Canceled	0	2	1	3	1%
Deferred	1	0	0	1	0%
Fail	1	0	0	1	0%
Fail Under Review	1	1	0	2	1%
In Progress	0	1	0	1	0%
N.A.	0	2	0	2	1%
Not Started	11	0	2	13	4%
On Hold	11	8	2	21	7%
Pass/Complete	63	154	39	256	84%
Retest/Repeat	0	2	1	3	1%
Total	88	170	45	303	100%

The Audit Report

Lastly, when it came time to report out on the pre-Implementation phase of the project, Internal Audit highlighted the incredible work the Sharp project team performed on the implementation and emphasized the review procedures performed in an impactful, visual executive summary. To do so, Internal Audit used simple analytics tools for reporting in Excel and Word to make key points stand out.

Over the **last 15 months**, taking a risk-based approach, Sharp's Internal Audit Services participated in **over 150** Workday pre-implementation meetings including Kick-off meetings, Customer Confirmation Sessions, Test Scenario Meetings, and IT and Business Process Walkthroughs across HCM, FIN, SCM, and TECH domains.

14 business process functional areas reviewed

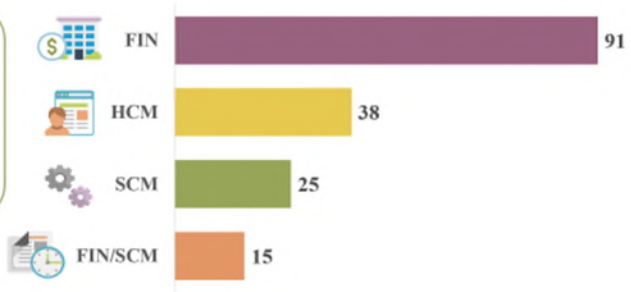
169 documented business process internal controls

47% Automated internal controls, 39% Manual, and 14% IT Dependent Manual

69% Preventive internal controls and 31% Detective

Identified and monitored progress on **over 300 test scenarios** in End-to-End testing covering all 169 documented internal controls and validated testing for a sample of 20 internal control test scenarios.

Business Process Internal Controls by Domain



Sharp IA performed a Security Access ("SA") and Segregation of Duties ("SoD") assessment of:

21,465 Active Employee and Contingent Worker accounts across

663 Active Security Groups

1,966 Active Domain Security Policies

429 Active Business Process Definitions

82 documented SoD controls

Recommended leading practice for **testing documentation** and **validation of completeness and accuracy of custom reports.**

Samples reviewed for key TECH functions:

10 Key integrations

12 Key custom reports

15 Data conversions

LESSONS LEARNED

The top five lessons learned from this project include:

1. Workday is a new system for Sharp. That means, most stakeholders were learning at the same time as the Internal Audit team. This parallel learning curve is often unique to implementations, and stakeholders had not learned enough about the system or tested enough yet to commit to certain recommended decisions related to the design of controls.
2. Internal Audit faced challenges working with stakeholders on the appropriate timing for audit procedures. Given the constant changes in the iterative development process, the business preference was to start the audit later. Having a seat at the table during early discussions provides value and a perspective of internal controls during the build, rather than as an afterthought.
3. Internal Audit found a discrepancy between testing expectations communicated from the Implementation Partner to the business. There was a perception by the business that they could build, test, and fix (repeat) all the way up to go-live. However, in reality, testing hard stops did exist and the business was not always ready for them.
4. The pending decisions and issues identified during Internal Audit's work were tracked in a shared file, managed by Internal Audit rather than in the Project Management Risks, Actions, Issues, Decisions, and Questions (RAIDQ) log used by the business. From an Internal Audit project management perspective, having an issue tracked in the RAIDQ for each recommendation would have made follow-up with the stakeholders more cohesive rather than having a separate place for them to track decisions.
5. Sharp's process transformation and system implementation integrated system configured internal controls that did not previously exist or were not enforced in legacy systems. Post-implementation, this forced accountability was an organizational shift. In hindsight, further procedures validating the organizational change management and communication plan may have helped confirm the business was prepared for large changes to process and policy.

CONCLUSION

Internal Audit followed up on open items from this project as part of a post-implementation Workday review. These open items were included in the test procedures, in addition to further procedures to ensure that Workday was working as intended and that users had the resources needed to complete their tasks. A survey of both the implementation team and general users was sent out to gauge employee reaction to the implementation process. This information was used by leadership to determine any areas for improvement and how future implementations can be optimized in management, development, workforce utilization and communication with relevant parties. Sharp's Internal Audit team will present on the Workday Post-implementation review at the 2023 AHIA Annual Conference in Seattle Washington.

ABOUT AHIA

The Association of Healthcare Internal Auditors (AHIA) is a network of experienced healthcare internal auditing professionals who come together to share tools, knowledge, and insight on how to assess and evaluate risk within a complex and dynamic healthcare environment. AHIA is an advocate for the profession, continuing to elevate and champion the strategic importance of healthcare internal auditors with executive management and the Board. If you have a stake in healthcare governance,

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