Internal Audit Department
NeighborWorks® America

Audit Review of the PeopleSoft Human Resources Management System Post Implementation

Project Number: HR.PSHRMS.2014

Audit Review of the PeopleSoft Human Resource
Management System Post Implementation

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September 26, 2014

To: NeighborWorks® America Audit Committee

Subject: **Audit Review of PeopleSoft Human Resource Management System Post Implementation**

Please find enclosed the final audit report of the PeopleSoft Human Resource Management system (PS HRMS) Post Implementation. Please contact me with any questions you might have.

Thank you.

Frederick Udochi
Chief Audit Executive

Attachment

cc: C. Wehrwein
        J. Bryson
        T. Bloom
        P. Carey
        P. King
        C. Clark

Function Responsibility and Internal Control Assessment
Audit Review of the PeopleSoft HRMS Post Implementation

Business Function Responsibility	Report Date	Period Covered
Human Resources	September 26, 2014	as of June 1, 2014
Assessment of Internal Control Structure		
Effectiveness and Efficiency of Operations		Generally Effective[1]
Reliability of Financial Reporting		Not Applicable
Compliance with Applicable Laws and Regulations		Not Applicable

This report was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*.

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[1] **Legend for Assessment of Internal Control Structure: 1. Generally Effective:** The level and quality of the process is satisfactory. Some areas still need improvement. **2. Inadequate:** Level and quality of the process is insufficient for the processes or functions examined, and require improvement in several areas. **3. Significant Weakness:** Level and quality of internal controls for the processes and functions reviewed are very low. Significant internal control improvements need to be made.

Executive Summary of Observations, Recommendations, and Management Responses

Summarized Observation; Risk Rating	Management Agreement with Observation (Yes/ No)	Internal Audit Recommendation Summary	Accept IA Recommendation (Yes/ No)	Management's Response to IA Recommendation	Estimated Date of Implementation (Month/Year)	Internal Audit Comments on Management Response
Observation No. 1 Documentation of PeopleSoft Governance Activities Internal Audit could not identify documented evidence to support governance activities over the PeopleSoft portfolio. Risk Rating: (b) (5)	Yes	Recommendation No. 1 Formalize Steering Committee Activities Internal Audit recommends Management formalize the PeopleSoft steering committee activities to ensure strategic goals of all impacted departments are supported. The Committee should be defined by a charter, meetings should be led by agendas, and minutes recorded.	Yes	Management agrees with Internal Audit's recommendation. Information Management intends to formally establish an IT steering committee, in which PeopleSoft portfolio management and other critical corporate applications will be monitored appropriately through input and oversight from organizational leadership and key stakeholders. A proposal is being submitted to NW Officers for consideration for building Enterprise Program Management Office (E-PMO).	FYQ4 FY2015	Internal Audit accepts Management's response.

Summarized Observation; Risk Rating	Management Agreement with Observation (Yes/ No)	Internal Audit Recommendation Summary	Accept IA Recommendation (Yes/ No)	Management's Response to IA Recommendation	Estimated Date of Implementation (Month/Year)	Internal Audit Comments on Management Response
Observation No. 2 Vendor Management Internal Audit could not identify evidence of a vendor management process to address monitoring and performance measuring activities to ensure that NeighborWorks receives the expected services and agreed upon service levels from the vendor. Risk Rating: (b) (5)	Yes	**Recommendation No. 2 Vendor Management Process Implementation and Monitoring Activities** Internal Audit recommends Management implement a vendor management process to include defined service level requirements, measurable deliverables/milestones and monitoring activities. In addition, Management should consider measures to alleviate vendor dependency by promoting documentation requirements for vendor activities and where appropriate engage internal staff and processes.	Yes	Management agrees with Internal Audit's recommendation. Information Management will partner with the procurement office in development, execution and support of the appropriate procurement and System Development Life Cycle (SDLC) processes. This will help us in clearly defining service level requirements, and identifying deliverables and milestones along with appropriate acceptance criteria in the vendor contracts. These additional measures would help us in effectively monitoring and controlling vendor performance for both new application development/ enhancements and application support post implementation for PeopleSoft HRMS and other corporate business applications.	FYQ4 FY2015	Internal Audit accepts Management's response.

Summarized Observation; Risk Rating	Management Agreement with Observation (Yes/ No)	Internal Audit Recommendation Summary	Accept IA Recommendation (Yes/ No)	Management's Response to IA Recommendation	Estimated Date of Implementation (Month/Year)	Internal Audit Comments on Management Response
Observation No. 3 Reconciliation between Approved and Implemented Requirements A reconciliation was not adequately performed between the approved and implemented PeopleSoft requirements, resulting, in at least one defined requirement not being implemented or otherwise noted as removed from the project goals. **Risk Rating:** (b) (5)	Yes	Recommendation No. 3 **3A. Enhanced Project Methodology** The PeopleSoft Steering Committee project methodology should confirm all requirements are implemented or otherwise addressed to ensure NeighborWorks receives the expected project benefits. **3B. Determine if Other Functionality is Omitted** Review requirements to determine if other functionality was omitted. Present omitted requirements to the Steering Committee to determine actions to be taken. **3C. Implement Logging/Monitoring Activities** Address the omitted requirement by identifying high risk events that should be logged or triggers established.	Yes	Management agrees with Internal Audit's recommendation. Information Management intends to formally establish a change control board that will oversee and prioritize the change requests to PeopleSoft HR and financials. The change control board will ensure the appropriate prioritization based on business justification/need and implementation via internal and external resources.	FYQ4 FY2015	Internal Audit accepts Management's response.

Summarized Observation; Risk Rating	Management Agreement with Observation (Yes/ No)	Internal Audit Recommendation Summary	Accept IA Recommendation (Yes/ No)	Management's Response to IA Recommendation	Estimated Date of Implementation (Month/Year)	Internal Audit Comments on Management Response
Observation No. 4 Security Role Testing Documentation was not maintained to support the performance of security role testing. Risk Rating: (b) (5)	Yes	Recommendation No. 4 Enhanced Project Methodology and PeopleSoft Change Management Enhance change management processes to address the testing of roles when testing changes to issues or enhancements.	Yes	Management agrees with Internal Audit's recommendation. Current change management processes will be enhanced to ensure that role based testing is in place and conducted within the appropriate environment.	FYQ4 FY2015	Internal Audit accepts Management's response.
Observation No. 5 Transitioning from implementation project processes to Ongoing Support Processes. Ongoing support processes were not transitioned from the project implementation processes captured in SharePoint. Risk Rating: (b) (5)	Yes	Recommendation No. 5 5A. Project Methodology – Enhance project methodology to include a defined process to transition project development/implementation activities to ongoing support processes. 5B. Transition of Ongoing PeopleSoft Support Activities Transition PeopleSoft support activities to ongoing support. See observation #6.	Yes	Management agrees with Internal Audit's recommendation. Information management intends to enhance and standardize its project methodology to ensure that appropriate transition from the development to the support team is established and applied within the organization.	FYQ4 FY2015	Internal Audit accepts Management's response.

Summarized Observation; Risk Rating	Management Agreement with Observation (Yes/ No)	Internal Audit Recommendation Summary	Accept IA Recommendation (Yes/ No)	Management's Response to IA Recommendation	Estimated Date of Implementation (Month/Year)	Internal Audit Comments on Management Response
Observation No. 6 Issue Handling/Change Management Documentation Issue handling processes currently employed for PeopleSoft issue resolution and change management do not provide sufficient documentation to support changes made. Risk Rating: (b) (5)	Yes	Recommendation No. 6 Enhancement to PeopleSoft Change Management Processes Enhance PeopleSoft change management processes to address documentation, testing, and approval requirements, and back-out plans. Consider utilizing Information Management change management processes and ticketing systems to ensure NeighborWorks retains appropriate system documentation and history.	Yes	Management agrees with Internal Audit's recommendation. Current system development methodology and change management documentation will be enhanced to address documentation, testing, and approval requirements, and back-out plans.	FYQ4 FY2015	Internal Audit accepts Management's response.
Observation No. 7 Protection of Sensitive Data in the Test Environment PeopleSoft production data is copied into the less secure test environment. Risk Rating: (b) (5)	Yes	Recommendation No. 7 Implement Controls to Protect Risk of Sensitive Data Loss Implement controls to protect the risk of sensitive data loss by scrubbing data elements and/or securing the test environment commensurate with the classification of data functioning as desired.	Yes	Management agrees with Internal Audit's recommendation. Human Resources will identify the sensitive information elements and work with Information Management to ensure that this information is scrubbed before copying to the test environment.	FYQ1 FY2016	Internal Audit accepts Management's response.
Observation No. 8	Yes	Recommendation No. 8	Yes	Management agrees with Internal Audit's	FYQ3 2015	Internal Audit accepts

Summarized Observation; Risk Rating	Management Agreement with Observation (Yes/ No)	Internal Audit Recommendation Summary	Accept IA Recommendation (Yes/ No)	Management's Response to IA Recommendation	Estimated Date of Implementation (Month/Year)	Internal Audit Comments on Management Response
User Access provisioning and Review Active (unlocked) accounts were identified for terminated users and PeopleSoft delivered/default accounts not required for production services. Risk Rating: (b) (5)		8A. Periodic User Access Reviews Conduct periodic access reviews that address the appropriateness of assigned access to users and for system or default accounts. 8B. Review Assigned Vendor Access Review access issued to the PeopleSoft support vendor to determine if the current level of access is essential. If so, define and implement monitoring activities to provide oversight into the actions performed by this account.		recommendation. Information Management will ensure a periodic access review of system users and will work closely with departmental managers and human resources to verify the need for active/enabled accounts.		Management's response.

Risk Rating Legend:

Risk Rating: HIGH
A serious weakness which significantly impacts the Corporation from achieving its corporate objectives, financial results, statutory obligations or that may otherwise impair the Corporation's reputation.

Risk Rating: Moderate
A control weakness which could potentially undermine the effectiveness of the existing system of internal controls and/or operational efficiency, integrity of reporting and should therefore be addressed.

Risk Rating: Low
A weakness identified which does not seriously detract from the system of internal control and or operational effectiveness/efficiency, integrity of reporting but which should nonetheless be addressed by management.

Management Response to Audit Review of the PeopleSoft HRMS Post Implementation		
# Of Responses	Response	Recommendation #
12	Agreement with the recommendation(s)	1,2,3A-C,4,5A-B,6,7,8A-B
0	Disagreement with the recommendation(s)	N/A

Background

In 2009, NeighborWorks Management embarked on a PeopleSoft Implementation project to implement the PeopleSoft Enterprise Suite of applications including, the General Ledger, Accounts Payable, E-Procurement (Purchasing and Task Orders), Payroll, and Human Resources modules. As of the date of this review the following components of the Human Resources Management System have been implemented – Personnel Information, Payroll/Compensation, Benefits/Beneficiaries, and Time Reporting.

Internal Audit contracted the services of **(b) (4)** to conduct a Post Implementation review of the Human Resource module with special emphasis on security. The observations and recommendations noted within this report are a result of the procedures performed by an **(b) (4)** consultant, see the consultant profile at Appendix A.

Objective

The objective of the audit was to identify opportunities for improving the implementation approach, and to make detailed recommendations on methods for improving this approach for future implementations. Specifically, this review was structured to address three primary goals:
- To evaluate the PeopleSoft HRMS implementation project approach/methodology;
- To review the business, security and technical requirements to determine if they were addressed during the implementation; and
- To evaluate the HRMS roles and responsibilities.

Scope and Scope Limitation

The scope of this audit included a review of the PeopleSoft application implementation project activities, change management processes, and application access administration.   Due to changes in key personnel involved in the implementation project, heavy reliance was placed on the implementation project documentation.

Methodology

To assess the effectiveness of the implementation project methodology, we reviewed the implementation and project team documentation. Due to personnel changes, many key resources involved in the implementation project are no longer with NeighborWorks.

Authoritative guidance for the review was obtained from the ISACA publication *Security, Audit and Control Features Oracle PeopleSoft*, 3rd Edition and project methodology best practices were derived from the Project Management Institute Project Management Body of Knowledge (PMBOK®) guide.

Observations and Recommendations

Observation No. 1 – Documentation of PeopleSoft Governance Activities and Decisions

The Office of the Chief Financial Officer (OCFO) is the primary sponsor of the PeopleSoft project and has led the organization's PeopleSoft implementation process and subsequent support. During the implementation, a PeopleSoft Steering Committee was established and the CFO served as the Committee's chairperson. Recent departure of key leadership left the Committee without a chairperson (as one has not yet been named) and it is unclear if the Committee remains active.

The Committee operated informally and documented agendas or minutes to record the Committee decisions were not maintained. In the absence of such documentation, the appropriateness of the participants, the frequency of meetings, and the content covered could not be fully assessed. The Committee's informality does not provide NeighborWorks® Management transparency into the decisions made by the Committee.

Recommendation No. 1 –Formalize Steering Committee Activities

Internal Audit recommends Management formalize the PeopleSoft Steering Committee activities to ensure strategic goals of all impacted departments are supported. The Committee should be defined by a charter, meetings should be led by agendas, and minutes recorded.

The purpose of a portfolio steering committee is to ensure that the application provides the intended value and that development and support activities for the solution are aligned with management's strategic direction. Representatives from the impacted business units, information technology, information security, and compliance functions (including Internal Audit as an observer) should be sufficiently represented. Succession planning for the Committee's leadership should be defined to ensure the continuity of the committee.

Observation No. 2– Vendor Management

NeighborWorks has engaged the services of up to four different vendors to assist with the implementation phases and support of the PeopleSoft application since inception. Currently, PeopleSoft application support is being performed by a third party vendor. Internal Audit did not identify evidence of a vendor management process to address the establishment of measurable deliverables and milestones and monitoring activities to ensure NeighborWorks® receives the expected services and agreed upon service levels from the vendor. In addition, Internal Audit inquired with Management regarding the separation of the previous vendors, noting that various reasons were provided; however, no measured metrics or documented evidence showing the vendor was not meeting contractual obligations existed.

Management has informed Internal Audit that continued vendor support is expected as a Request for Proposal (RFP) has been issued to identify a new vendor. As of June 9, 2014, a contract has not been executed; however, HR Management indicated that the new vendor should be engaged before the end of July. A plan to transition from the existing vendor to the new vendor has not yet been determined or documented.

Recommendation No. 2 – Vendor Management Process Implementation and Monitoring Activities

Internal Audit recommends Management implement a vendor management process which should incorporate defined service level requirements, measurable deliverables, and milestones. In addition, monitoring and performance measuring activities should be established to measure vendor compliance.

Management should also consider measures to alleviate vendor dependency and explore opportunities to engage Information Management or other appropriate NeighborWorks® staff in the process to promote cost savings and the continuity of operations. Examples may include adhering to IM processes for change management activities or using IM resources to perform routine tasks such as query writing.

Observation No. 3 – Reconciliation between Approved and Implemented Requirements

Based on our review, Internal Audit noted that a reconciliation was not adequately performed between the approved and implemented requirements, resulting in at least one requirement not being implemented. There is no evidence that the requirement - - - DB R.1.11 – Log event triggers to notify admin when a user defined database condition or set maximum/minimums are exceeded - - - was implemented. Discussions with the database administrator and the support consultant did not identify logging or monitoring activities.

Omission of requirements may not provide the organization with the expected benefits of the implementation.

Recommendation No. 3A – Enhancement to Project Methodology

Project methodology should confirm all requirements are implemented or otherwise addressed to ensure NeighborWorks® receives the intended benefits from implementations and upgrade. The project team should reconcile the defined project requirements with the implemented functionality. If requirements are omitted or postponed, the decisions should be determined by the Project Steering Committee and documented.

Recommendation No. 3B – Determine if other functionality is omitted

Internal Audit recommends, management review initial requirements to determine if other items were not implemented. Omitted requirements should be presented to the Steering Committee to determine if the need remains and what actions should be taken to address these omitted requirements.

Recommendation No. 3C– Implement Logging/Monitoring Activities

Logging activities should be pursued to enhance the control structure. Triggers of high risk events should be implemented when existing access controls or other PeopleSoft functionality do not provide sufficient risk coverage. One example would include tracking changes made to roles or permission lists. Information Security should be notified as granting additional capabilities to roles may present security or segregation of duties concerns. Note that a periodic access review process typically examines who is assigned the roles, but often does not look at the composition of the role.

Observation No. 4 –Security Role Testing

Application roles may not be sufficiently tested to verify controls to segregate functions are effective. Review of the implementation project test plans did not identify the security levels or roles required to perform the test plans. The functional testing did not indicate the desired role that should or should not be able to perform the task being tested. Test plans to confirm the boundaries of these roles were also not identified.

Recommendation No. 4 – Enhanced Project Methodology and PeopleSoft Change Management

To ensure that security configurations enforce desired requirements, test plans should identify the intended roles needed to execute the tests. Testers should be assigned appropriate roles to perform only the functions being tested (i.e., Superuser or administrative roles should not be used to test functions intended for less powerful users.) Test environments should be configured with the same roles expected to be configured in production. Subsequent testing for issue resolution should also include the testing of security roles to confirm they are functioning as desired.

Observation No. 5 – Transitioning of Ongoing Support Processes

The SharePoint list established for User Acceptance Testing (UAT) is still used to log issues and support requests. A review of this UAT list found a total 1190 issues logged for all PeopleSoft modules since implementation. Transparency into the costs and efforts required to implement versus support the information system are lost when comingling ongoing support issues with implementation issues.

Recommendation No. 5A– Enhance Project Methodology Addressing Transitioning of Support Activities

Project methodology should include defined processes to ensure support is transitioned from project processes to ongoing support. These processes should address how open project issues are handled and should define a clear cutoff point and/or date. Subsequent issues should be addressed in the ongoing support processes. See also Observations #3 and #6.

Recommendation No. 5B–Transition to Ongoing Support Activities

Current PS support activities should be transitioned to robust change management processes. See Observation #6.

Observation No. 6 – Issue Handling/Change Management Documentation

The issue handling process currently followed for PeopleSoft issue resolution and change management does not provide NeighborWorks® with sufficient documentation to support the changes made to the application. Resolution information is not consistently captured for all changes and a central repository for change documentation was not identified.

A review of the SharePoint UAT list found a total 1190 issues logged for all PeopleSoft modules since the implementation. Of these, 1158 have been resolved. Of the resolved items, 597,

or 51%, have a status that indicates 'Resolved' but neither a date resolved or resolution description entry was found.

A central repository for all changes to the PeopleSoft application was not identified. Internal Audit requested changes implemented within the last 90 days. Fourteen migration forms were received from HR and 17 from IM. Only seven of these forms were found in both the HR and IM information.

The Migration forms do not reference the UAT ticket, nor is the Migration Form attached to the UAT listing. Only six migration forms had sufficient information to match to UAT tickets. Migration activities are performed by the IM database administrator yet IM helpdesk tickets are not opened to record these activities.

Recommendation No. 6 – Enhancement to PeopleSoft Change Management Processes
Change documentation should be retained to provide NeighborWorks with a comprehensive record of all issues and changes related to the application. Internal Audit recommends Management enhance PS change management processes to address documentation, testing, and approval requirements, and back-out plans. Management should consider utilizing Information Management processes and ticketing systems to ensure NeighborWorks retains appropriate system documentation and history.

Observation No. 7 – Protection of Sensitive Data in the Test Environment
The PeopleSoft test database is populated by copying data from the live production database. This database contains sensitive data that include social security numbers and employee salaries. Scrubbing or altering of the data is not performed when these transfers are made nor are monitoring controls in place to track access to the data. Unauthorized access to employee or other sensitive data may be obtained as the test environment does not enforce the same level of controls as in place with the production environment.

Recommendation No. 7 – Implement Controls to Protect the Risk of Sensitive Data Loss
Internal audit recommends that management define and implement controls to protect the risk of sensitive data loss by scrubbing data elements and/or securing the test environment commensurate with the classification of data functioning as desired. This may include scrubbing sensitive data fields, restricting access to the test environment, auditing (logging), and/or monitoring of access to sensitive data fields.

Observation No. 8 – User Access Provisioning and Review
Active (unlocked) accounts were identified for terminated users and PeopleSoft delivered or default accounts not required for production services. Some of these accounts are assigned high-levels of authority, for example the PeopleSoft support vendor currently has full access to all pages (HCPPALL) within the Human Resource module. This level of access assigned to the (b) (4) consultant is rather excessive given the scope of responsibility/tasks required of the consultant. A quarterly access review process was described; however, evidence for the completion of this review was not available. In an environment where migration activities are performed by the IM staff and the production database replicated in the test environment, high-level access to the production environment as provided to a third party vendor would not be required.

Access to the PeopleSoft application is synced with Active Directory (or network) accounts. The risk of the delivered accounts being used is low as corresponding network accounts may not be established. The risk for terminated users, however, is higher as network accounts have been created and may still be active.

Recommendation No. 8A – PeopleSoft User Access Reviews
Management should conduct periodic access reviews that address the appropriateness of assigned access. Access should address the appropriateness of the assigned user access (i.e., needed for job function, segregation of duties) and the access granted to system or default accounts. Processes to review default accounts during implementations or upgrades should be established.

Recommendation No. 8B – Review Currently Assigned Vendor Access
The PeopleSoft support vendor access should be reviewed. If the current access is determined to be essential, monitoring activities to provide oversight into actions performed by this account should be defined. See also Observation #3.

Conclusion

The PeopleSoft portfolio supports key financial and human resource functions at NeighborWorks America. The review of the Human Resource module implementation has identified that improvement opportunities exist in the processes to maintain the application, ensure access to the system and provide assurance on data integrity and security. In addition it would provide opportunities for improvement in future module implementations to the PeopleSoft portfolio.

Appendix A – Consultant Profile