Program Summary

DoIT provides and supports the infrastructure and custom development for NIU’s core human resources system:

- The PeopleSoft Human Resources Management System (PS-HR) provides core functionality for payroll, job and position management, base benefits, and federal and state reporting.
- Distributed division, college and department offices use campus reports and queries to support local workforce management including job, position and budget tracking.
- Over 8,000 faculty, staff, and student employees access HR Self-Service through the MyNIU portal to view their paycheck, W-2 data and verify their personal information.

NIU licenses, but has not implemented, the PeopleSoft Time and Labor module for time tracking and absence management or the ePerformance module for online performance evaluation and approval workflow.

Criterion 1: Importance to University Mission / Operations

Importance to Mission

While human resource systems are not directly attached to the teaching, learning and research activities at the heart of a university, they are essential to the recruitment, management, and retention of faculty and staff. This program configures, customizes, and supports the enterprise-class human resource applications that streamline operations and save the valuable time that must be dedicated to providing a high quality educational environment.

Importance to Operations

Human resource management is essential to any organization and the HR system provides the framework for making informed data driven decisions. The HR system touches every student employee, graduate assistant, and staff member who manage their personal information and view paychecks. HR staff use the integrated framework to manage contracts, benefits and payroll functions.

Moreover, state and federal reporting requirements depend on the accuracy and availability of the HR systems. The PeopleSoft Human Resources Management System (PS-HR) is used by all 213 university departments for position management, job management, and payroll time and benefit reporting.

NIU licenses these PS-HR modules: Absence Management, ePay, ePerformance, eProfile, , Human Resources, Payroll, Time and Labor. The system incorporates data from distinct operational entities and through shared data provides the foundation for business process efficiencies.

Efforts are underway to streamline coordinated business processes and improve efficiencies. These include implementing workflow, ePerformance, eProfile, Absence Management and Time and Labor.

Program Portfolio

Without the framework of the integrated human resources system, NIU’s HR data would be stored in separate systems. With an integrated system, however, information flows from departments to HR where the Contracts, Benefits and Payroll modules seamlessly integrate.
Program Synergy

As the enterprise human capital management system, the HR system integrates with both the Financial Management System and the Student Administration System to provide reliable source data. While DoIT manages the HR implementations, infrastructure, maintenance and development projects, the data and process owners use these foundational tools and applications to facilitate business operations throughout the university.

Criterion 2: Quality / Effectiveness

Functions and Services

DoIT is responsible for ensuring the university HR systems function properly and provide a stable, reliable and highly available 24x7 environment for NIU’s business operations. Over 26,300 current and past university employees conduct business in the HR system with over 178,000 logins annually.

In 2014, DoIT developers received over 160 new programming tasks to process data requests, manage system customizations, resolve bugs, design, develop and maintain custom programs. In addition, DoIT managed a campus-wide project to upgrade both the underlying PeopleTools architecture and PS-HR.

Additionally, NIU has licensed the Absence Management, ePerformance, eProfile, and Time and Labor modules for several years, but has yet to implement them. Instead, manual processes and disparate local systems abound to track employee time and benefits usage. These practices are inefficient and risky, allowing for double data entry, reporting deficiencies, and potential non-compliance with federal and state regulations. Business cases for immediate implementation of Absence Management, ePerformance, and Time and Labor have been approved by the IT Steering Committee and are awaiting funding and available staff resources.

Measures of Quality

An IT governance structure approves and prioritizes projects, providing direction and acts as an auditing body to assure projects align with NIU priorities. The PeopleSoft Sub-Committee governs the implementation, enhancement and efficient use of enterprise administrative systems including approving system-impacting customizations, establishing priorities and allocating resources.

Quality and accountability in any human resource system is critical:
1. Applications must be current, supportable and comply with federal and state regulations.
2. System availability is measured against both planned and unplanned downtime.
3. Mean Time to Resolve (MTTR) is measured by the time between the reporting and the resolution of an incident.
4. Number of incidents reported per application.
Evidence of Quality

1. PS-HR is current and supportable. Moreover, security roles are reviewed, approved and assigned to assure separation of duties; documented programming standards and approval procedures promote best practices; and audited testing is completed during all upgrades.

2. PS-HR availability is 98%. This does not meet any professionally accepted standard but the number remains low because functional offices do not want to test on Sundays, extending the outage windows during every upgrade.

3. In 2015, the Mean Time to resolve PS-HR incidents was 98 hours (4 calendar days). The great majority of these incidents were about user access and not the health of the system itself.

4. The number of recorded and resolved incidents remains low, even with staff reductions.

Quality Improvement

Improvement projects include: developing system maintenance schedules, enhancing reporting capabilities, implementing licensed modules, identifying and removing duplicate systems, and continuing dialogs with Oracle to reduce staff support hours while improving reliability and response time.

Notably absent from the portfolio of features that should be present are manager and employee self service. These functions, combined with the missing data in the "Supervisor" field help to perpetuate a reliance on inefficient paper-bound processes at NIU.

Criterion 3: Productivity / Efficiency

Scope of Program

DoIT supports NIU’s campus-wide implementation of the PeopleSoft Human Resources Management System (PS-HR). NIU currently licenses modules for: Absence Management, ePay, ePerformance, eProfile, Human Resources, Payroll, and Time and Labor. DoIT also supports the complex architecture of web servers, databases and application servers that underlie these enterprise-class systems.

The DoIT support team includes:

- system analysts/programmers that support the software development lifecycle including analysis, design, programming, testing and production support. During 2014 this team received more than 160 new project and task requests in addition to upgrading PeopleTools.
• database administrators that manage application and Oracle database tuning, backups, web and application servers, and application administration including maintenance and problem resolution. PeopleSoft DBA’s manage over 3,000 active tables in the HR database.
• server administrators that manage the operating systems on the engineered system hardware.
• access management staff that apply security roles to users.
Productivity Comparison

NIU is an institutional member of the Higher Education User Group (HEUG): a forum for universities to discuss best practices and participate in Oracle/PeopleSoft education sessions. NIU is consistently in the top 25% of HEUG schools with regard to system maintenance, application and PeopleTools versions.

By comparison with the Student system, the functional offices that use the HR system are somewhat disengaged from the professional development and product advisory groups that guide offices who use PeopleSoft. This is a contributing factor to the slower adoption and lower product maturity in this area.

Resource Comparison

NIU's current staffing level allows it to keep current with maintenance priorities, but we are not staffed to support business improvement initiatives. Many schools use technical consulting services to perform upgrades, maintenance and implementation of large and specialty projects. NIU has always implemented these initiatives internally, thus saving money but reducing capacity for custom programming and enhanced feature requests.

In comparison to the chart, Emory University has 10 PS-HR developers and 1.5 application DBAs.

Cost and Revenues

This is not a revenue generating program. Staff costs have decreased by 1 developer who has not been replaced since 2011. Oracle/PeopleSoft software licensing costs remain constant with negotiated caps of a 0% uplift for FY2014 through FY2020. Additionally, a negotiated 0% uplift on hardware support runs from FY2016 through FY2020.

Hardware refreshes are regularly required to replace obsolete and aging servers that are no longer supported. In 2011 NIU purchased Oracle’s Exadata hardware for the production and development databases and Oracle’s Exalogic engineered system to replace the web and application server hardware.

Funding for this service is split between DoIT and other NIU funding sources. Some of this external-to-DoIT funding has been removed, making hardware replacement and data protection uncertain. DoIT will pay $180,000 extra this year to have extended maintenance on backup solutions that are past their life cycle.

Criterion 4: Internal & External Demand

External Demand

The PeopleSoft Human Resources Management System (PS-HR) interfaces with several external organizations including the Internal Revenue Service, the State of Illinois, the Illinois Board of Higher Education (IBHE), the Illinois
Central Management Services (CMS), and the State Universities Retirement System (SURS). The system must be at a current level of maintenance in order to produce the annually changing IRS-required W2, 1042 and Affordable Care Act (ACA) reporting. The State of Illinois also requires record retention policies that have an effect on system storage requirements as well as system interfaces and delivery requirements.

Finally, the HR system undergoes regular external audits and must be available with access and reporting requirements met to facilitate the needs of the audit.

**Internal Demand**

Internal demand originates with the university constituents who require system access, initiate programming requests and generate reports.

- All NIU departments rely on the PS-HR system to manage and track their staff hours, benefits, and payroll.
- Beyond the HR division, other NIU departments use PS-HR. For example, Institutional Research receives an interface to provide external reporting and the Academic Analysis and Reporting department provides data to the external benchmarking data system Academic Analytics.

In order to comply with the federal and state regulations, PS-HR must remain current in order to receive the vendor-supplied functionality updates for IRS and governmental reporting requirements.

Development staff are also required to respond to increasing data and custom report requests and configure new system functionality to support increasing regulatory compliance requirements.

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**Criterion 5: Opportunity Analysis**

**Cost Savings Opportunities**

Cost savings can be realized by implementing automated testing for maintenance and upgrades. Defining and developing baseline test cases that are repeatable and can be run automatically will eliminate hours of testing by functional users thus freeing them to work on other priority projects.

Implementing workflow within PS-HR will reduce the time delay that currently exists with manual paper based approvals. Delivered workflow functionality and frameworks have not yet been configured and implemented.

Implementing the currently-licensed Time and Labor and Absence Management modules will improve the end-to-end processing of time entry and benefit usage recording. The current process relies on Excel spreadsheets and requires both additional storage and manual approvals. Moving to Time and Labor will reduce time spent on reporting, facilitate ACA time-tracking compliance, reduce reliance on shadow systems, and remove redundant storage requirements and storage-based security overhead.

Further integration with the PeopleSoft Student Administration system must eliminate the duplication of person information that is currently maintained separately within HR and Registration and Records.

**Future Revenue / Resources**

This is not a revenue generating program.

**Improvement Opportunities**
As mentioned above, we have the ability to operate in maintenance-mode only. The university must decide whether it needs to change the way it does business, particularly in its central offices. If the answer is yes, then additional functional and technical staff are needed in equal measure in order to redesign and implement business processes in the central systems.

Additional areas for improvement to enhance support include the implementation of Time and Labor, Absence Management, ePerformance, eProfile, data warehouse, workflow, the addition of dedicated business analysts, implementation of Exalogic hardware for web and application servers, increased monitoring of systems and servers. Improving the self-service functionality and providing expanded access to the HR system will reduce dependencies on shadow systems. This will reduce time spent on dual data entry, minimize errors, enhance work efficiencies and improve adherence to data security policies.

Finally, development of a university business practice for centralized approval and review of all software system purchases would minimize the redundancy of licensed system functionality and reduce costs. A concerted effort to review all licensed business systems and cross reference functionality would unearth redundant features and eliminate the need for duplicate systems and the expense of supporting the hardware, software and man hours needed to operate those system.

**Opportunities in the Field**

Printed W-2 advice and printed payroll advice are both outmoded concepts that should be eliminated. This can be accomplished with minimal effort. Opening Manager Self Service, Employee Self Service, and allowing departmental edits to the "Supervisor" field" would save thousands of hours per year in meaningless paper shuffling. Finally, we should make time to adopt mobile-friendly interface functionality that is just now becoming available.

Current staffing levels are not sufficient to expand services to improve support and respond to implementation requests for additional features including workflow, work centers, real time reporting and new projects.