Project Completion Report

PeopleSoft 9.2 Upgrade and Cloud Migration

March 2018
Summary Metrics

- **Budget**: 10% under
  Green = less than 10%, Yellow = between 10% and 20%, Red = more than 20%

- **Schedule**: 0 months late; funding extended to keep consultants during a longer stabilization period
  Green = less than 10%, Yellow = between 10% and 20%, Red = more than 20%

- **Total Value Achieved**: 100%
  Green = 90%, Yellow = between 80% and 90%, Red = less than 80%

- **Open Serious Defects**: 0
  Green = 0, Yellow = between 1 and 3, Red = more than 3

Major Benefits Achieved

- Upgrade to version 9.2 of PeopleSoft HCM and latest Tools version
- Adoption of the new UI, including fluid navigation and mobile pages
- Migration to the AWS Cloud

Key Success Factors

- Move off-premise, stay current with PeopleSoft, improve user experience, mobile adoption

Areas for Improvement

- Continue to adopt new mobile pages and functionality as delivered by PeopleSoft
- Reduce AWS costs
### Objectives

1. **Remain Vendor Supported**  
   - Upgrade before 9.1 support ends in Sep'17, so that we can continue to receive tax, legal and regulatory updates, critical patches, program updates and fixes and security updates.
2. **Significantly lower future maintenance and upgrade cost**  
   - Oracle’s newly transformed maintenance and functionality delivery process will result in significantly lowering the cost of future upgrades and updates.
3. **Migrate infrastructure off-premise (a HUIT strategic vision)**  
   - Move to cloud and benefit from scalability and high availability at reduced cost.
4. **Enhance User Interface and Increase Productivity**  
   - Intuitive, streamlined and guided self-service transactions
   - Personalized dashboards and Work-centers for Super users
   - Embedded real-time analytics
   - Global, free text search
   - Streamlined navigation
5. **Mobile applications for self-service**  
   - Avail new mobile capabilities to deliver self-service applications

### Guiding Principles

1. **Reduce upgrade cost and train internal resources**: Use internal resources as much as possible for the upgrade and use minimal external resources as backfill.
2. **No new modules**: The technical upgrade would be an as-is upgrade and no new modules will be implemented at this time.
3. **Support long term goals of HHR, FAD and HUIT**: Include goals like agile adoption (where ever applicable for an upgrade project), cloud deployment and mobile applications as part of this upgrade project.
4. **User involvement**: Involve business users in testing as early in the process as possible to test the new User Interface.
5. **Retire Customizations**: Make conscious effort to retire customizations where ever possible.

### Key Performance Indicators

1. **Pass PeopleSoft Certification matrix requirements**
2. **Reduced maintenance cost**  
   - Reduce future upgrade cost by 50%.
3. **Off-premise migration**  
   - No footprint left in Harvard Data Center for HCM application.
   - High Availability and redundancy
   - Superior DR solution with improved RTO, from 48 hours to less than 30 minutes.
4. **Enhanced User Interface**  
   - Feedback from Business users.
   - Reduction in the number of clicks to perform a transacation.
5. **Mobile Adoption**  
   - Increase in the number of mobile users.
   - Increase number of features available on mobile.
Vital Statistics

- Project Name: PeopleSoft 9.2 Upgrade and Cloud Migration
- Project Manager(s): Michelle Piccioli
- Functional Area: HR Systems
- Sponsor(s): Marilyn Hausammann, Tom Hollister

### Timeline Planned and Actual

<table>
<thead>
<tr>
<th>Phase</th>
<th>Planned Start</th>
<th>Actual Start</th>
<th>Planned Finish</th>
<th>Actual Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>9/1/2015</td>
<td>9/1/2015</td>
<td>12/31/2015</td>
<td>11/30/2015</td>
</tr>
<tr>
<td>Implementation</td>
<td>2/1/2016</td>
<td>12/1/2015</td>
<td>6/30/2017</td>
<td>12/21/2017*</td>
</tr>
</tbody>
</table>

*The project went live on time (April 2017) but we extended the project funding to cover a longer stabilization period*

<table>
<thead>
<tr>
<th>Phase</th>
<th>FY16 Total Approved</th>
<th>FY16 Budget</th>
<th>FY16 Actual</th>
<th>FY17 Total Budget</th>
<th>FY17 Actual</th>
<th>FY18 Total Budget</th>
<th>FY18 Actual</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>$382,000</td>
<td>$382,000</td>
<td>$366,560</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$15,440</td>
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<tr>
<td>Implementation</td>
<td>$2,634,324</td>
<td>$840,229</td>
<td>$415,365</td>
<td>$1,794,095</td>
<td>$1,527,396</td>
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<td></td>
<td>$417,737</td>
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</table>

Change Request(s)

<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Did the achieve projected savings or income?

Yes. Upon completion of the upgrade we confirmed our strategy to continue to stay current by applying patches and tools upgrades on an annual basis, and to continue to adopt new functionality as delivered by PeopleSoft. This strategy matches what we have been doing in past years and, more importantly, it ensures that we will not have to do a major upgrade again. Instead we are conducting annual mini-upgrades, such as the one being deployed in May 2018. The annual savings reflect the cost avoidance of costly upgrades every 4 to 5 years.
Objectives Realization

• **Problem or Opportunity Statement:**
  - **Stay Supported:** PeopleSoft HCM 9.1 would become unsupported in Sep’17 at which point we would stop receiving tax, legal and regulatory updates, critical patches, program updates and fixes and security updates. Upgrade to HCM 9.2 would ensure that we stay supported.
  - **Continuous Functionality Improvements and reduced cost of future upgrades:** Up until the current release of PeopleSoft (HCM 9.1), functionality improvements were made available only in the next major release and so would be available to customers after they go through a costly upgrade once every 3-4 years. Starting with this proposed upgrade (HCM 9.2), functionality updates can be selectively and incrementally consumed on a frequent basis in the timeframe that works for us, thus reducing the maintenance cost and cost of future upgrades.
  - **Enhanced User experience:** PeopleSoft has lagged behind the industry in user interface. As an example, the annual survey conducted by Prof. David Malan and feedback from FAS Faculty Standing Committee on IT pain points show that our users share a similar viewpoint. PeopleSoft had addressed this in HCM 9.2 on multiple fronts and users will experience a simple, intuitive and productivity increasing features.
  - **Retire Customizations:** Functionality provided in new releases means some of our customizations can be retired. One such functionality is the Direct reports configuration which allows us to set up different employee-to-manager reporting relationships based on the type of a transaction. Lowering the number of customizations reduces maintenance cost and cost of future upgrades.
  - **Migrate Off-premise:** HUIT’s vision is to migrate existing applications off-premise. Bundling the off-premise migration and the upgrade would mean the testing effort can be combined resulting in cost savings. Additionally, with a hosted solution we expect to have improved disaster recovery, contracted better performance and increased application up-time.

• **Problem Resolved or Opportunity Realized:**
  - The project solved each problem as predicted: we now are on a supported version of PeopleSoft, we are adopting new functionality on a continuous basis therefore eliminating the need for future upgrades, we have improved the user experience by adopting the new navigation and mobile pages and will continue to do so over time, we have retired customizations, and we migrated PeopleSoft to the AWS Cloud in the spring of 2017, one of the first major enterprise application to do so.
Benefits Realization

• **Anticipated Benefits:**
  – Stay Supported
  – Continuous Functionality Improvements and reduced cost of future upgrades
  – Enhanced User experience
  – Mobile pages for self service users
  – Migrate Off-premise

• **Achieved Benefits:**
  – The project achieved all anticipated benefits.

• **Other Benefits**
  – Our strategy to adopt the new UI during the upgrade was complex to implement but turned out to be the right strategy. In fact, we were among the first organizations to adopt the new fluid navigation, which resulted in Harvard being invited to participate in the Oracle/PeopleSoft Customer Advisory Board and having access to PeopleSoft executives and strategists. We now are in the position to influence the road map of the product.
Features and Requirements Delivery

Did the project deliver all planned features and requirements?
• Yes

List any planned features/requirements that were not delivered.
• None

List any significant changes to scope.
• We had one major increase in the project scope that was given to us by our Executive Committee and that we were able to implement without additional cost but with a significant increase in the existing staff workload. After the start of the implementation, we decided to completely embrace the new mobile UI, take advantage of as many delivered mobile pages as possible, and completely remove the “old” navigation. This created some concerns among our user community regarding the level of change but turned out to be a significant improvement for our user experience.
Project Quality

Below are the numbers during the stabilization period. The critical incidents were performance related issues in AWS cloud. For a project with major application update in addition to the migration to AWS cloud, the number indicate a project of high quality.

<table>
<thead>
<tr>
<th>Product Defects/Bugs</th>
<th>Closed</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Medium/Low</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

Summarize any remaining open critical defects and project issues.

<table>
<thead>
<tr>
<th>Description</th>
<th>Owner</th>
<th>Date Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWS Cost Control</td>
<td>Mike Landino</td>
<td>In progress</td>
</tr>
</tbody>
</table>
Transition

Ongoing Governance

• The product owner is Isabelle Modiano
  – We are following the same governance model as we had prior to the upgrade – see next slide

Ongoing Support

• The service owner is Mike Landino
  – We are keeping the same team/structure as before the upgrade. We have a team of functional analysts working with a team of developers. Both teams are in ATS Enterprise Apps under Mike Landino.
  – The support team was the team that implemented and tested the upgrade, and therefore was trained during the project.

Communication and Engagement

• We had a strong communication and engagement plan. As in past upgrades, we engaged Mary Ann O’Brien to lead the communication for the upgrade. In addition, the use of videos to train users was very helpful. We also used our User Acceptance Training sessions to engage, inform and train our users.
Lessons Learned

Surprises:

• Implementing the new fluid navigation was more complex than first anticipated.

• The cloud operations readiness was significantly delayed and critical MVPs did not get completed until 2 weeks before our go-live; many tasks were postponed until after our go-live, which thankfully did not impact our users.

Best Practices:

• We re-used our strategy and project plan from our past upgrades, this was helpful as we made improvements with each upgrade. Our governance structure was key in guiding us during the project and providing the needed support.

• We started to use the Agile Methodology at the beginning of the project, but it would have been better to have an experienced Scrum Master and more practice within the team before the project started.

Lessons Learned:

• If we had to do this project again, we may not decide to do anything differently.

• When the project started, we wish we had known that the migration to the cloud was much more complex than anticipated.