Patent Public Advisory Committee Meeting

OCIO Update

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Chief Information Officer
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The Business Problem

“In 2008, The aging IT infrastructure of the USPTO represented a serious challenge, which if not addressed, would continue to degrade IT services to the point that the mission of the agency itself was jeopardized.”

source: CIDP August 2008

Major Initiatives Included:
- Organizational Strengthening
- Process Standardization
- Data Center Stabilization
- AIS Stabilization
- Desktop Stabilization
- Service Desk
- Disaster Recovery
- Telecommunications Stabilization
- Enterprise Architecture
Plan of Action and Execution

- Developed the Road Map CIDP and obtained USPTO management approval in August 2008
- Organized the work to be done in 10 programs, which eventually led to the definition of 163 projects
- Established cross-functional collaboration and status reporting practices
- Completed 111 projects, with another 17 at various stages of completion. All projects are expected to complete this calendar year.
- Current budget variance from plan is a favorable -7.2%
### Program and Projects Summary

<table>
<thead>
<tr>
<th>All Years Programs</th>
<th>Active</th>
<th>Cancelled / Suspended</th>
<th>Completed</th>
<th>Total Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Strengthening</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>7</td>
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<tr>
<td>Process Standardization</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>10</td>
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<tr>
<td>Data Center Stabilization</td>
<td>3</td>
<td>9</td>
<td>25</td>
<td>37</td>
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<tr>
<td>AIS Stabilization</td>
<td>0</td>
<td>5</td>
<td>14</td>
<td>19</td>
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<tr>
<td>Desktop Stabilization</td>
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<td>17</td>
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<tr>
<td>Service Desk</td>
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<td>4</td>
<td>6</td>
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<tr>
<td>Disaster Recovery</td>
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<td>5</td>
<td>12</td>
<td>18</td>
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<tr>
<td>Telecommunications Stabilization</td>
<td>4</td>
<td>1</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>Enterprise Architecture</td>
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<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Capital IT Hardware</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>14</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>17</strong></td>
<td><strong>35</strong></td>
<td><strong>111</strong></td>
<td><strong>163</strong></td>
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</table>

Data as of Sept. 24, 2012
### Executive Summary - Total for Portfolio ($'000s)

<table>
<thead>
<tr>
<th>#</th>
<th>Program Name</th>
<th>Planned Totals</th>
<th>Actual Totals</th>
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<td>1</td>
<td>Organization Strengthening</td>
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<td>Data Center Stabilization</td>
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<td>Service Desk</td>
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<td>Disaster Recovery</td>
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<td>Telecommunication Stabilization</td>
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<td>Enterprise Architecture</td>
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<td>10</td>
<td>Portfolio Support - Planning &amp; Coordination</td>
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<td>Capital Hardware Replacement</td>
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<td>Totals</td>
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<td>Portfolio Variance</td>
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<td>-7.6%</td>
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Major Successes

**Strengthening the OCIO Organization**
- Implemented a simplified OCIO organization structure
- Developed a Strategic Human Capital Implementation Plan
- Identified critical staff skill gaps and implemented training programs to address them
- Improved Staff Performance Appraisal Plans
- Implemented Executive Information System (EIS) as the OCIO financial system

**Process Standardization**
- Implemented an updated Systems Development Life Cycle (SDLC), compatible with both waterfall or Agile development
- Implemented an Enterprise Project Management System (EPMS)
- Implemented an OCIO Policy Management function
- Developed and implemented IT Infrastructure Library (ITIL) processes for Incident, Problem, Service, and Event Management
Major Successes Cont.

Telecommunications Infrastructure

✔ Implemented PTONet III, the first complete upgrade to the PTO campus, network security infrastructure
✔ Implemented the CIO Command Center, which established a centralized monitoring, performance and security center dedicated to the rapid diagnosis and response to suspected incidents or outages
✔ Completed a Voice Over Internet Protocol (VOIP) phone replacement project
✔ Completing projects to deploy Unified Business Collaboration Tools

Data Center Infrastructure

✔ Addressed power shortfalls for the Data Center
✔ Established the architecture, the physical and logical mapping of all components, and migration/expansion plans for the Data Centers
✔ Replaced a substantial portion of the obsolete infrastructure through Capital Hardware Plans (servers, storage, etc.) - 52% replaced, 54% virtual
Major Successes Cont.

### Desktop

- Adopted the required Federal Desk Core Configuration (FDCC) framework and practices
- Established desktop baselines and architecture
- Established desktop rights management
- Implemented improvements to USPTO’s patch management process
- Completed other projects for Windows XP SP3 upgrade, Symantec Endpoint Protection, IE 8 upgrade, PTOFAX 2.0, and the Desktop Management Tool Set.
- Completed projects to implement Universal Laptops with compliant Windows 7 baselines

### Service Desk

- Completed selection and implementation of a Service Desk tools suite (Remedy), compliant with established IT Infrastructure Library (ITIL) processes
- Completed implementation of the IT Service Management (ITSM) tool for incident and problem management
- Completed ITSM projects for release, service, governance, change, etc.
**Enterprise Architecture**
- Developed an enterprise Service Oriented Architecture strategy and plan
- Developed an enterprise architecture governance process and implementation plan
- Completed implementation of enterprise architecture tools such as Troux and GEARS

**Disaster Recovery**
- Selected an alternate processing site for disaster recovery and implemented infrastructure necessary to support disaster recovery operations, including Internet and network connectivity
- Implemented the data bunkering of USPTO critical data to the Boyers site
- Tested failover capability for some applications to Boyers, and implemented supporting configuration management tool sets
Applications (AIS)

- Identified systems for analysis of root cause failures and implemented recommendations for architecture, design, and other enhancements to these systems.
- Replaced the end of life HP-UX Servers for 22 systems.
- Completed numerous projects enhancing existing systems, based on the recommendations of root cause failures analysis.
- Implemented an improved USPTO Public Access Internet website, e-Newsletter, Infrastructure Code Table upgrade, metrics, and other enhancements.

Other

- Established a strong and very successful OCIO capability for the delivery of large, multi-year, multi-program information technology infrastructure efforts.
- Institutionalized portfolio, program, and project management practices (processes, templates, tools); along with practices for cross-functional collaboration, and reporting at the OCIO.
The Road Map will end on September 30, with a few balance projects completing by year end.

Management and enhancement of the IT infrastructure portfolio will continue under the auspices of:

- Capital Hardware IT Replacement Portfolio
  - End User
  - IT Facilities
- Enterprise Infrastructure Portfolio
  - Multiple Programs

These portfolios will continue with established portfolio, program, and project management; and cross-functional collaboration and reporting practices.

Foundation is now sound, focus is on system replacement.

Never Again