Modernize USDA’s IT - Modernize Data Analytics Capabilities

Goal Leader(s): Gary Washington and Francisco Salguero

Theme: Agriculture
Goal Statement- Modernize information technology and data analytics capabilities across the Department, resulting in a USDA that is customer-focused, evidence-based, and efficient in the use of American taxpayer’s dollars. By September 30, 2019, provide USDA leadership with instant access to key administrative data, allowing the Department to make informed and data-driven decisions.

Challenges
- Decisions are frequently made with static, outdated, or limited information
- There is a lack of access to analytical tools supporting rapid and well-informed decisions
- Data is not integrated or standardized across Agencies or business function
- The authoritative source of data elements are not clear
- The quality of data is often too low to support decision making.

Opportunities
- Develop a comprehensive approach to data management that significantly improves data quality and availability for all internal USDA stakeholders
- Introduce analytical and visualization tools that increase manager and employee capabilities to communicate information clearly and efficiently
- Support greater decision-making that enables the department to better use taxpayer dollars and more efficiently support critical mission functions.
Administrative Dashboard - Conceptual Overview

Provide USDA leaders with instant access to key administrative data that will enable data-driven decisions

**FY18 Dashboard Concept**

**Office of Human Resources Management (OHRM):** Personnel data on skills, hiring, and training data

**Office of the Chief Information Officer (OCIO):** IT data to service key functions through support and enablement

**Office of Procurement and Property Management (OPPM):** Procurement and property data to monitor awards, goals, etc.

**Office of the Chief Financial Officer (OCFO):** Financial data to deliver cost-effective services and programs

**Office of Operations (OO):** Operational data to support infrastructure and administrative services

**Office of Homeland Security (OHS):** Security data to protect information and ensure crisis readiness

**Dashboard Metrics:**
- Key Indicators of Risk
- Status of the Workforce and Key skills
- Summary of Key Investments
- Customer Service
- Cross organization Procurement Spend
- Cross-Mission Financial Management

**Users:**
- Secretary & The Sub Cabinet
- Chief Executive Officers (CXOs)
- Mission Area CXOs
- Mission Area/Agency Business Functions & Staff
## Administrative Dashboard – Governance Structure

### Dashboard Executive Leadership
- Executive Leaders
- Define Business Needs
- Data Owners

#### Chief Information Officer Executive Sponsor
- APG Project Management

<table>
<thead>
<tr>
<th>Office</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of the Chief Information Officer (OCIO)</td>
<td>Data Advisory Board</td>
</tr>
<tr>
<td>Office of Human Resources Management (OHRM)</td>
<td>- Data Identification</td>
</tr>
<tr>
<td>Office of the Chief Financial Officer (OCFO)</td>
<td>- Data Management</td>
</tr>
<tr>
<td>Office of Procurement &amp; Property Management (OPPM)</td>
<td>- Establish KPIs</td>
</tr>
<tr>
<td>Office of Operations (OO)</td>
<td>- Data Quality</td>
</tr>
<tr>
<td>Office of Homeland Security (OHS)</td>
<td>- Compliance</td>
</tr>
</tbody>
</table>

### Data Advisory Board
- Data Identification
- Data Management
- Establish KPIs
- Data Quality
- Compliance

#### Chief Data Officer – Data Management Lead
- Privacy
- IT Security
- Enterprise Architecture

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<tr>
<td>Office of the Chief Information Officer (OCIO)</td>
<td>Dashboard Executive Leadership</td>
</tr>
<tr>
<td>Office of Human Resources Management (OHRM)</td>
<td>- Coordinates between Storage &amp; Visualization</td>
</tr>
<tr>
<td>Office of the Chief Financial Officer (OCFO)</td>
<td>- Deploy and Maintain</td>
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</tbody>
</table>

### Dashboard Execution Team
- Coordinates between Storage & Visualization
- Deploy and Maintain

#### Dashboard Project Manager

<table>
<thead>
<tr>
<th>Team</th>
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<tbody>
<tr>
<td>OCIO Project Team</td>
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<td>OHRM Project Team</td>
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<td>OCFO Project Team</td>
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<td>OO Project Team</td>
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<td>OHS Project Team</td>
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### FY19 Dashboard Consumers
- All Mission Areas & Agency users
- Office of the General Counsel
- Office of the Chief Economist
- Office of Budget and Program Analysis
- Office of Communications
- Office of Partnerships and Public Engagement
- Office of the Executive Secretariat
- Office of Small and Disadvantaged Business Utilization

- Office of Assistant Secretary for Civil Rights
- Office of Congressional Relations
- Office of Inspector General
## Key Milestones

The dashboards will be developed using agile methodology to enable rapid delivery of functionality to the leadership team.

<table>
<thead>
<tr>
<th>Key Milestones</th>
<th>Milestone Due Date</th>
<th>Milestone status</th>
<th>Change from last month</th>
<th>Owner</th>
<th>Anticipated Barriers or other Issues Related to Milestone Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot OCIO Dashboard</td>
<td>Q1FY18</td>
<td>Complete</td>
<td></td>
<td></td>
<td>N/A; milestone complete</td>
</tr>
<tr>
<td>Implement CXO Governance</td>
<td>Q1FY18</td>
<td>Complete</td>
<td></td>
<td></td>
<td>N/A; milestone complete</td>
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<tr>
<td>Pilot Executive Dashboard</td>
<td>Q2FY18</td>
<td>In Progress</td>
<td></td>
<td></td>
<td>No major barriers or risks at this time.</td>
</tr>
<tr>
<td>Deliver OCIO Dashboard</td>
<td>Q2FY18</td>
<td>In Progress</td>
<td></td>
<td></td>
<td>No major barriers or risks at this time.</td>
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<tr>
<td>Deliver OHRM Dashboard</td>
<td>Q3FY18</td>
<td>In Progress</td>
<td></td>
<td></td>
<td>No major barriers or risks at this time.</td>
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<tr>
<td>Deliver OCFO Dashboard</td>
<td>Q3FY18</td>
<td>Not Started</td>
<td></td>
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<td></td>
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<tr>
<td>Deliver OO Dashboard</td>
<td>Q4FY18</td>
<td>Not Started</td>
<td></td>
<td></td>
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<tr>
<td>Deliver OPPM Dashboard</td>
<td>Q4FY18</td>
<td>Not Started</td>
<td></td>
<td></td>
<td>Data can be very complex and will require effective integration with business units.</td>
</tr>
<tr>
<td>Deliver OHSEC Dashboard</td>
<td>Q4FY18</td>
<td>Not Started</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliver Executive Dashboard</td>
<td>Q4FY18</td>
<td>Not Started</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Deploy Technical Infrastructure</td>
<td>Q4FY18</td>
<td>Not Started</td>
<td></td>
<td></td>
<td>Technical infrastructure will require considerations to ensure privacy and security.</td>
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<tr>
<td>Expand Capabilities to Mission Areas</td>
<td>Q1FY19</td>
<td>Not Started</td>
<td></td>
<td></td>
<td>No major barriers or risks at this time.</td>
</tr>
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In FY18Q1, substantial progress was made to support USDA’s ‘Modernize Data Analytics Capability’ Agency Priority Goal.

A ‘CXO Dashboard’ project governance structure was developed and implemented in order to effectively manage the project and ensure that timelines and outcomes continue to be accessible and relevant to stakeholders.

Additionally, a pilot dashboard, displaying IT spending across the Department, was developed for USDA’s Office of the Chief Information Officer. The process to develop the dashboard was highly iterative in nature and resulted in valuable conversations addressing how data should be tracked and reported across the office. This pilot was reviewed with leadership across Departmental Administration and was very well received.
Development will be measured via the creation of functional dashboards that address CXOs’ business needs and contribute to data-driven decisions.

- In total, 7 dashboards will be deployed/enhanced by the end of FY18 (6 CXO dashboards, 1 Executive Dashboard)
  - Baseline in FY18, as of 9/1/2017, = 0 Dashboards

Accessibility will be measured by tracking dashboard traffic from users that are accessing data to generate better insights for business decisions across the Department.

- Increased usage of the dashboards by 50%
  - Measurement of dashboard usage:
    - Number of distinct users per month
    - Number of dashboard views
  - Leverage system data, measure quarterly
  - Baseline = FY17 OHRM dashboard usage
Our Change Approach is a three-phased approach to activate various stakeholder groups across the organization.

- Initiate communications with leadership buy-in from USDA Leadership and CXOs
- Develop campaign to spread awareness of the analytics project.
- Create and distribute training and communications.

Phase 1: Outreach
Socialize purpose and goals of the analytics project by conducting a stakeholder assessment. Create a logo and mission statement and deploy multi-staged campaign to attract and spread awareness of the dashboards. Channels include emails, newsletters, boards, etc.

Phase 2: Institutionalize Governance
Design and invite members to join the new Analytics Governance Board and equip leaders with the steps to deal with and address change across agencies.

Phase 3: Training and Communications
Create training material (FAQs, User Guides, Backlogs) and communications to help deploy and support analytics. Create change measurement/tracking through adoption rates on dashboards.