Building a Strategic Workforce Planning Capability at the U.S. Census Bureau

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Presentation to the Human Resources Management and Training Workshop

Business Strategy:
Strategic workforce planning project initiated in late 2010 to address concerns about employee skillsets to support the 2020 Census program (e.g., oversight reports)
Objective: Establish a repeatable process of analysis of current workforce competencies versus demand, and implement strategies to close competency gaps
  - Align business needs with workforce competencies
  - Provide insights into changing nature of the work and the related occupations
  - Provide foundation for all human capital management functions, including training, recruitment, succession management, and contracting

Competency Dictionary:
Competency: a skill, knowledge, ability, or behavior that defines successful work performance, including both technical and interpersonal skills
Census Bureau competency model is based on the work of the organization instead of specific occupational series (most assessments focus on one or more Mission Critical Occupations)
  - Competencies cover all Headquarters professional work
  - Competencies align with the work across organization, not just mission-critical occupations, to develop an enterprise-level competency picture
Basic infrastructure such as an organizational framework or work breakdown structure are required for competency dictionary and strategic workforce planning to be useful as a corporate approach to closing competency gaps
  - For the Census Bureau, the emergence of the organizational framework was tightly coupled with enterprise change initiatives such as activity based costing, cost estimation, and shared services
  - We identified and validated competencies associated with key strategic initiatives serve as proxy for changing work and workforce

Conduct “As-Is” Skills Assessment
Competency Assessment: data from employees and supervisors on the current set of workforce competencies (including both federal and contractor workforce). Assessments included 342 technical competencies linked, 22 interpersonal competencies, and 269 products, systems, and technology areas.
  - Few U.S. federal organizations conduct skills assessments and gap analysis at the enterprise level
  - No standard to define “high” demand; results establish a baseline for future demand assessments
  - Relative demand for competencies based on count of organizations (divisions) underrepresented in a competency, as well as eight strategic initiatives
Mandating supervisor responses was necessary to obtain a near 100% response rate critical to preclude response bias
  - About 1,000 supervisors assessed over 3,500 (97%) of Headquarters employees in professional job series so the enterprise results represent a big picture strategic view
  - About 2,600 employees (75% response rate) provided voluntary self-assessments in addition to the supervisor assessments
Data were valid for determining competency gaps but not for other uses such as a skills bank
Division Results and “To-Be” Demand Assessment

Divisions conducted quality checks of competency results to validate the scope of work for each part of the organization. We collected demand data at the division level by identifying which every competency, product, system, and technology area is:

- Under-represented by current federal employees,
- Adequately-represented, or
- Over-represented by having too many proficient employees for the current or anticipated workload.

We recommend a qualitative approach to demand data collection. The results will reveal a quantitative picture. This reduces the problem of managers focusing on numbers of full-time employees when that is often difficult to do.

Gap Analysis

We analyzed competency and demand results by:

- Survey Lifecycle/Mission Enabling and Support Framework components
- Enterprise and directorate levels
- Relationship of strategic initiatives

Distributed proficiency, demand, and succession planning data such as retirement eligibility to Associate Directors. Associate Directors provided their top gap priorities for immediate closure as input for enterprise priorities. The final determination was made by our Deputy Director.

Strategic Workforce Plan

Our Action Plan template includes generic strategies, specific actions, teams, measures, targets, costs, and reporting. We developed a Strategic Workforce Plan for closing priority competency gaps. Success depends on turning generic strategies into discrete steps/action items with quantifiable measures and realistic targets. We recommend being strategic on competencies and targets for closure — select 3-5 to be successful and adjust the plan as needed.

- Incorporate succession management into strategic workforce planning by using both workforce and competency data to determine priority gaps.
- Succession planning data provides indicator of “action plan risk” such as attrition orbench strength risks.
- Provide ranked competency gaps to executives to determine overall priorities.
- Strategies for closing gaps incorporate succession management and characteristics of the workforce, which focuses succession management on competencies and mission priorities.

Monitoring and Reporting

Quarterly monitoring and reporting resides with the action plan. We created an additional “Implementation Plan” that defines roles and responsibilities for implementing action items and ongoing processes.

- Roles include competency gap owners, organizational leads, executive management, HR functional areas, and workgroups.
- Plan incorporates organizational change methods into major programs and initiatives, including a communications strategy and appropriate levels of training.
- Monitoring includes periodic environmental scan to determine if sufficient change has occurred to warrant updating overall plan or re-assessing the workforce.
- Build overall strategic workforce planning capability by aligning policies and processes with competencies (e.g., hiring, training).

Project Outcomes

Repeatable process that obtains information about our organization’s present and future workforce needs

- Established a Headquarter’s workforce planning baseline
- Aligned enterprise work with competencies of strategic initiatives
- Established strategies that can be used for any assessment to incorporate workforce data into HR Functions
- Incorporation succession management, leadership and project management competencies into strategic workforce planning
- Provided insights into changing nature of the work and the related occupations via new position descriptions for systems engineering, cost estimation, program and project management
- Provided workforce results to help employees and managers make career and professional development decisions

BOTTOM LINE: Building a new capability is difficult and time consuming, requiring an iterative approach—build a little, test, adjust.

Figure 4: Strategic workforce planning context model

<table>
<thead>
<tr>
<th>Time-frame</th>
<th>Strategy</th>
<th>Human Capital Policies and Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>Use internal resources to close competency gaps and develop current employees</td>
<td>Job rotations and merit hiring based on competencies</td>
</tr>
<tr>
<td></td>
<td>Use external sourcing to close competency gaps through recruitment and hiring to fill vacancies</td>
<td>Corporate hiring program in current format</td>
</tr>
<tr>
<td></td>
<td>Build key competency capability through training and professional development</td>
<td>Job satisfaction and retention management</td>
</tr>
<tr>
<td></td>
<td>Acquire competencies through contracting/level service agreements</td>
<td>Strategic recruitment</td>
</tr>
<tr>
<td>Mid-term</td>
<td>Use external sourcing to close competency gaps through recruitment and hiring to fill vacancies</td>
<td>Risk assessment and mitigation</td>
</tr>
<tr>
<td></td>
<td>Build key competency capability through training and professional development</td>
<td>Individual development plans</td>
</tr>
<tr>
<td></td>
<td>Acquire competencies through contracting/level service agreements</td>
<td>Strategic recruitment</td>
</tr>
<tr>
<td>Long-term</td>
<td>Use internal resources to close competency gaps and develop current employees</td>
<td>Resource balancing</td>
</tr>
<tr>
<td></td>
<td>Build key competency capability through training and professional development</td>
<td>Mentorship</td>
</tr>
<tr>
<td></td>
<td>Acquire competencies through contracting/level service agreements</td>
<td>Technical competency model</td>
</tr>
</tbody>
</table>

Figure 5: Potential strategies for action plans

Description: The strategic workforce planning capability defines the organization’s present and future workforce requirements based on the mission, strategic direction, challenges, resources, fundings, and implementing strategies to meet those requirements.

Key Supporting Competencies:

- Program/Project Management
- Strategic Planning
- Business Analysis
- Strategic Workforce Planning
- Performance Management & Measurement
- HR Policies and Business
- Human Capital Management
- Strategic Workforce Planning
- Workforce Development

High-Level Processes:

- Program/Project Management
- Functional Competency Dictionary
- Employee occupations and demographics
- Strategic initiatives and project documentation and validated competencies
- Validated technical capabilities
- Contractors assigned to divisions
- Certifications
- Products, Systems, and Technology Areas
- Strategies for closing gaps

Supporting Information:

- Strategic Plan/Business Plan
- Functional Competency Dictionary
- Employee occupations and demographics
- Strategic initiatives and project documentation and validated competencies
- Validated technical capabilities
- Contractors assigned to divisions
- Certifications
- Products, Systems, and Technology Areas
- Strategies for closing gaps

Supporting Technologies:

- Data Collection Tools (e.g., CAT, CAT, E-LIANT, UCAT)
- Database (HR/ES)
- Applications (HRMS, OHRM, UCAT)
- Analytic Software (e.g., report generators)

Operational Metrics:

- Supervisor supervision and employee assessment at least 85 percent
- 85 percent of divisions conduct quality checklists
- 80 percent of divisions provide demand data
- At least 3 directors develop action plans
- Workforce trends for enterprise priorities are brought into alignment
- Tracking significant current and future needs and hiring and contractor acquisition strategies address the demand
- Estimated strategy costs align to projected additional workforce needs

Figure 6: Strategic workforce planning capability summary

Additional Success Factors

Executive champion with invested commitment from senior leadership is number one along with involvement and direct support from all levels of management including mandatory supervisory assessment of their direct reports to ensure a balanced picture of workforce skillsets.

Tight alignment to organization’s business strategy; the resulting strategic workforce plan should reflect the HR response to the business strategy, rather than just looking as an incremental increase in the “as is”. We used transformative initiatives as the proxy for the “to be” work. Strategic workforce planning is about the “to be” future state.

Building the SWP capability requires a team that includes members with HR subject matter knowledge, data analytic proficiency, database and application developers, strategic knowledge; having the lead working for the Director provides visibility and access.
Overview of Competency Assessment Results

Overall Results of Competency Assessments

Competency gaps are concentrated more heavily in Mission Enabling and Support work rather than Survey Lifecycle work. Given that mission-enabling work is applicable to a broad range of workforce occupations, it is not surprising that these gaps apply to a larger number of divisions and employees.

Competency Gaps and Strategic Initiatives

Top-ranked competency gaps are broadly in line with competencies linked to strategic initiatives that change the way the Census Bureau does business.

<table>
<thead>
<tr>
<th>Competency Gap</th>
<th>Information Technology</th>
<th>Shared Services</th>
<th>Adaptive Survey Design</th>
<th>Enterprise Data Collection and Processing</th>
<th>Strategic Initiative</th>
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</thead>
<tbody>
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<tr>
<td>Program and Project</td>
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<td>✓</td>
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<tr>
<td>Management</td>
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<td>✓</td>
<td></td>
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<tr>
<td>Budget and Cost</td>
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<td>✓</td>
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<tr>
<td>Estimation</td>
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<td>✓</td>
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<tr>
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<tr>
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<tr>
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<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Figure 7: Competency gaps by component of the Census Bureau work breakdown structure (Survey Lifecycle/Mission Enabling Support Framework)

Figure 8: Competency gaps and strategic initiatives

Specific Competency Gaps

Supervisors in the underrepresented divisions rated their employees at an average proficiency between novice and intermediate level (bottom half of bubble chart).

Program/Project Management and Budget/Cost Estimation competencies are underrepresented in the largest numbers of divisions (right half of bubble chart).

These supervisors also assessed more employees for these competencies than any other competencies (bubble size in chart).

Therefore, specific competency gaps for Program and Project Management and Budget and Cost Estimation appear to be due to relatively low proficiency levels in the federal workforce as opposed to staffing shortages.

This contrasts with other underrepresented competencies for which supervisors did not assess nearly as many employees, but for which the average proficiency ratings were also low (bottom left of bubble chart). These competency gaps affecting fewer divisions indicate that divisions have some unique requirements for closing technical competency gaps.

Figure 9: Specific competency gaps

Each data point represents a single technical competency, plotted by the number of divisions underrepresented (x-axis) and average employee proficiency rating for that competency in underrepresented divisions (y-axis). A proficiency level of one indicates a basic/novice level; three is intermediate, and five is advanced/expert. Bubble size indicates the number of employees assessed in underrepresented divisions.