

Cost-Benefit Analysis Framework

For the Avue Technologies Operations Management Platform

Several components comprise a framework for creating the business case for the Avue Platform. The charts on the following pages illustrate elements of the business case that can be examined to derive the cost savings associated with the Platform. Depending on the modules selected, and the agency's current or envisioned HR service delivery model, certain cost savings are achieved because of the Platform's functionality and the ability of the agency to leverage the technology to eliminate process steps, associated labor, and, in some cases, processing in total. Other cost savings are achieved by Avue's "All-You-Can-Eat" Service Delivery model, all of which is included in the annual fixed-price subscription and includes:

- on-demand staff augmentation to support agency staff and managers in all functional areas of HR (e.g., classification, staffing, EEO, affirmative employment, civil rights, labor-management relations, employee relations, learning management, training, strategic planning, optimization,

WHITE PAPER Cost-Benefit Analysis Framework for the Avue Technologies Operations Management Platform

FY2015

This document provides a framework for understanding the value of the Avue Platform as a management platform for improving the efficiency and effectiveness of agency operations. Included in it are methods for differentiating between the price and total cost of ownership of various alternatives. The framework provides a means of defining and describing the value created by using the Avue Platform and the opportunities presented to close value leaks, free internal capacity, and improve organizational productivity as well as efficiency.

time and attendance, payroll, pay administration, performance management, and personnel action processing),

- the system's continuous innovation model of streaming upgrades and new features and functionality,
- on-demand supply of burstable 'ping, power, and pipe' to the Avue data centers based on usage and concurrent user rates,
- unlimited, on-demand professional services covering project management for deployment (both initial deployment and deployment of new features and functions),
- staff augmentation for special projects such as reorganizations, A-76, and multi-sector workforce analysis,
- continuous monitoring of cyber-security requirements (NIST and FISMA) and addressing POAMs and other enhancements and upgrades to meet new security threats and standards,
- the professional services to develop and continuously monitor and maintain interfaces to third party systems including payroll, finance, project management, and operations management,
- unlimited, on-demand help desk operations for applicants, employees, managers, and HR professionals,
- unlimited, scheduled and on-demand training, including employee town hall meetings, manager and executive briefings, classroom HR training, training using the Avue Platform, Webinars, specialized training for Administrative Officers, interagency Avue client sessions and events, and one-on-one,

onsite, real-time performance support,

- online information sharing, help, and educational tools via the Avue Wiki, online forums, and "shop talk,"
- on-demand concierge services for managers and HR professionals dealing directly with Avue HR Consultants,
- the ability to task any HR activity, such as a job posting or position description development, directly to Avue via the online workflow which interfaces to Avue's Human Resources Consulting Group for processing and completion,
- continuous enhancement of core rules engines and regulatory safeguards in keeping with the issuance of new statutory, regulatory, and programmatic requirements as they change and evolve over time, and
- ongoing and on-demand enhancements to the Avue Federal Occupational Database to reflect new, emerging, and client-unique occupational content supporting classification, staffing, performance management, recruitment, learning management, workforce planning, skills assessment, and all other Avue modules.

These charts are designed to show the cost-benefit analysis of Avue in categories covered in various IT and HR functions including areas where costs are completely eliminated, where labor cost savings or workload reductions can be achieved, where process efficiencies can be gained, where workloads can be decreased, and where program improvements can be attained by virtue of releasing reclaimed internal capacity.

FACTOR I: POSITION CLASSIFICATION (AOS) MODULE



COST ELIMINATION

1. All agency personnel costs related to maintenance and updates to position description libraries.
2. All contractor costs related to maintenance and updates to position description libraries.
3. All perpetual software licenses, subscription, and maintenance costs supporting the position classification function.
4. All personnel support costs (including contractor costs) related to maintenance and updates to position classification and/or position databases including the development and maintenance of automated position description content, correlated content to support staffing, performance management, employee development, and any other classification related content development.
5. Total personnel action and payroll processing costs to support the position classification function.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. Overall ROM labor cost savings [(A) Take the annual number of positions classification actions multiplied by the current processing labor hours including management time as well as time allocated for Administrative Officers and HR staff. (B) Multiply the same number of actions by the average processing time of 10-12 minutes by managers and/or HR staff using Avue. Subtract B from A = ROM Labor Savings]
2. Workload and labor costs associated with competitive level code determinations for each position.
3. Workload and labor costs associated with organizational chart development and maintenance as well as position management, position control, and position establishment in personnel and/or payroll systems.
4. Workload and labor costs associated with FLSA exemption determinations for each position.
5. Workload and labor costs (or contractor cost) associated with classification reviews or studies, desk audits, and classification appeals preparation and processing.
6. Workload and labor costs (or contractor cost) associated with reorganizations, establishing new organizations, A-76 studies, multi-sector workforce analysis, classification consistency studies, and other major position classification and position management/optimization work.
7. Workload and labor costs associated with identification and tracking of inherently governmental, closely aligned, and mission critical determinations for each position.



PROGRAM IMPROVEMENTS

1. Elimination of any backlogs of classification actions older than 10 days.
2. Streamlined job classification process with substantially improved cycle time releasing additional capacity for position management activities and management support and collaboration.
3. Visibility on the extended enterprise (including employees, contractors, and local national hires) to track, monitor, report on, and set goals for, resource allocations, skills utilization, workload distribution, organizational optimization, and workforce productivity.
4. Scenario planning using online "drag and drop" organizational structure modeling and instant cost computations and modeling.
5. FTE utilization reporting, payroll budget burn analysis, and other real-time management reports.
6. Smoother, more consistent, and accurate support for alternative classification and pay systems.
7. Ability to effectively compare federal salaries to market rates and contractor rates to pinpoint pay compression, pay gaps, and other pay problems that impact retention and recruitment.
8. Ability to engage in continuous classification program process improvement via reports on workload, cycle time metrics, work distribution, and process logjams generated by the online workflow engine.
9. Visibility on various classification actions, including the ability of managers and their administrative staff to independently monitor, track, and check the status of all actions.
10. FLSA exemption determination consistency, accuracy, and auditability.
- II. Employment litigation support for classification appeals and FLSA complaints.

FACTOR 2: RECRUITMENT & STAFFING (RRS) MODULE



COST ELIMINATION

1. All agency personnel costs related to maintenance and updates to vacancy announcement, applicant assessment, and other staffing content libraries.
2. All contractor costs related to maintenance and updates to staffing libraries.
3. All perpetual software licenses, subscription, and maintenance costs supporting the staffing function.
4. All personnel support costs related to maintenance and updates to staffing databases including the development and maintenance of automated assessment instruments, résumé grammar search terms, and any other staffing content development.
5. All personnel, contractor, and software costs to produce and deploy career and recruitment websites, including those for specific or specialized hiring needs.
6. Total personnel action and payroll processing costs to support the staffing function.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. Overall ROM labor cost savings [Take the annual number of staffing actions multiplied by the current total processing labor hours including management time as well as time allocated for Administrative Officers and HR staff. Take the labor hours and subtract 80% = ROM Labor Savings]
2. Workload and labor costs associated (or contractor cost) with assessment questionnaires, rating guides, interview guides, online tests) for each position posted.
3. Workload and labor costs (or contractor cost) associated developing the job posting, posting to USAJobs, conducting broad-based and affirmative employment outreach, updating various agency websites, conducting email outreach, and opening and closing the posting.
4. Workload and labor costs (or contractor cost) associated with applicant review, eligibilities, basic qualifications, competency-based scoring, assessment and referral list generation, and selection management.
5. Workload and labor costs (or contractor cost) associated with notifications to candidates, notifications to management, scheduling rating and interview panels, managing talent pools, creating tentative and final offers, and submitting new hire data to personnel and payroll systems.
6. Workload and labor costs (or contractor cost) associated with entry on duty processing (including logistical support for office space and asset allocations, automatic entry into new employee orientations, all new hire forms processing, supplemental assessments such as background investigations and badging, and email and network access) for both employees and contractors.
7. Workload and labor costs (or contractor cost) associated with offboarding (including logistical support for releasing office space, returning assets, deleting badges, email and network access, processing exit interviews, and releasing the position for recruitment or deletion) for both employees and contractors.
8. Workload and labor costs (or contractor cost) associated with job fair marketing, materials preparation, onsite support, applicant tracking, recruitment event budgeting, recruitment team management, use of hardware or software to manage recruitment events, development of recruitment videos, development of booth signage, and development of adjunct materials used at job fairs and prospect tracking, monitoring, outreach, and management.
9. Workload and labor costs (or contractor cost) associated with reference checking on prospective candidates including contact management, interviewing time, call and callback time, and consolidation and development of results and summaries.
10. All expenses associated with the creation, design, development, and maintenance of custom-branded job and recruitment websites, separately identifying contractor versus personnel support (payroll) costs.
11. All expenses associated with using online recruiting sources and any fees paid for headhunter or other placement services.
12. Workload and labor costs associated with identification and tracking of inherently governmental, closely aligned, and mission critical skills profiles for each position and each new hire or contractor.

FACTOR 2: RECRUITMENT & STAFFING (RRS) MODULE



PROGRAM IMPROVEMENTS

- I. Significantly reducing the number of job postings by using open-continuous postings (all grades, all locations, all specializations, combined internal/external postings) and significantly reducing cycle time between receipt of request to selection – from days/months to minutes.
2. Ability to engage in continuous staffing program process improvement via reports on workload, cycle time metrics, work distribution, and process logjams generated by the online workflow engine..
3. Visibility on various recruitment and staffing actions, including the ability of managers and their administrative staff to independently monitor, track, and check the status of all actions.
4. Better quality and more cost effective outreach with applicant sourcing data, cost tracking, and source effectiveness data.
5. More comprehensive understanding of the flow rate of applicants, sourcing demographics, and points of failure and success for prospective candidates and selectees.
6. Increased capacity for HR collaboration with management including supporting capabilities provided online to help close the ‘participation gap’ between hiring managers and HR in the staffing process.
7. Increased capacity for focused recruitment to meet special hiring initiatives (e.g., veterans, disability outreach) and direct program support through specialized web and recruiter tools.
8. Well-documented hiring actions with complete audit trails and compliance documents electronically generated and maintained in both online and archival form.
9. Embedded adherence to the Merit System Principles and Uniform Guidelines on Employee Selection Procedures (UGESP) including automatic generation of candidate assessment questionnaires, crediting plans, behaviorally-based interview guides, competency assessment instruments, and job analysis worksheets that clearly show the linkages between job requirements and assessment criteria and meet content validity requirements of the UGESP.
10. Unlimited ready pools of candidates that ‘opt-in’ to the agency talent pool and can be targeted for outreach and job posting notifications with the ability to filter candidates and search both structure applications and attachments (like résumés, CVs) using Google search of the talent pool.
- II. Solid DEU adherence and case file preparation with pre-audit assessments prior to OPM audits, post-audit analysis and reporting, and onsite support during audits.
12. Online surveys for applicants, triggered when each application is submitted, track applicant satisfaction with the process and system usability as well as perceptions of the employer for analysis, reporting, and process improvement strategies.
13. Online surveys for managers, triggered when each selection is made, track manager satisfaction with the process and system usability as well as assessment of candidate quality for analysis, reporting, and process improvement strategies.
14. Elimination of any backlogs of staffing actions older than 30 days.

FACTOR 3: ONLINE AD HOC AND SKILLS SURVEYS (AOS MODULE)



COST ELIMINATION

1. All agency personnel and contractor costs related to maintenance and updates to required surveys such as the bi-annual employee climate survey, including contract development and administration costs.
2. All agency personnel and contractor costs related to maintenance and updates to workforce skills surveys used to create skills inventories, conduct gap analysis between on-board and projected skill requirements, conduct succession planning, produce workforce strategic plans, link skills to job duties and classifications, and conduct multi-sector workforce analysis for such purposes as meeting OMB requirements, determine insourcing/outourcing needs, and create contractor skills inventories.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. Avue provides full staff support (including subject matter experts) for the development of survey questionnaires, analysis of the results, report writing, and the development of published reports and briefing materials for agency use. This can be delegated in total to Avue or performed in collaboration with the agency's staff.
2. Avue provides full staff support (including subject matter experts) for the integration of skills survey data into the desired Avue Platform features such as the online organizational charts, bench strength charts, pipeline analysis reports, resource allocation reports, workload distribution analysis, operations reviews, position management tracking, training needs assessments, employee development plan, performance plans, and other displays or access points in the Platform.
3. Avue surveys, whether the ad hoc survey or the 'always on' online skills survey, allow decentralization of the effort to capture information and provides a means for employees to self-manage career information (in the Avue Career Portfolio and the Avue Performance Portfolio) and make updates along with automatic, system-generated updates that pull learning management, career development, performance management, and workload data into these Portfolios for a labor-free updating process.



PROGRAM IMPROVEMENTS

1. Using the online survey allows senior management access to information from or about the workforce crucial to support decision making and it increases collaboration between the human capital and mission critical business units of the agency.
2. Integration of data generated by these surveys as well as other workforce and workload data allows senior managers to use the Avue Command Center (online) and the Avue Command Console (iPadTM) to see the status, distribution, health, productivity, and capacity of the workforce in a central executive dashboard display, with drill-down capability, for real-time executive decision support.
3. Using real-time data eliminates the problem of a static image of the workforce where the aging of one-time surveys and skills capture efforts inhibits efforts to create and promote an agile, highly responsive, and deployment-ready workforce capability.
4. Using real-time data ensures the data quality is much higher and providing a means of searching both structured (questionnaire-based) and unstructured (document-based) data allows for more accurate and targeted data mining and reporting.
5. Use of Avue's online survey capability allows agency's to administer ad hoc surveys around a specific program area, operational need, workforce deployment, or other real-time needs of the agency.

FACTOR 4: DATA EXCHANGES AND INTERFACES (AOS MODULE)



COST ELIMINATION

1. All contractor costs associated with building and maintaining interfaces between the current classification, staffing, on-boarding, off-boarding, and electronic official personnel folder (eOPF) systems in use between other systems, such as OPM systems, or incumbent personnel/payroll systems.
2. All contractor costs associated with building and maintaining interfaces between Avue and incumbent personnel/payroll systems.
3. Total support personnel (payroll) costs associated with building and maintaining interfaces between current classification, staffing, on-boarding, off-boarding, and electronic official personnel folder (eOPF) systems in use between any other systems, such as OPM systems, and/or incumbent personnel/payroll systems.
4. All contractor and personnel costs associated with software 'wrappers' built around various systems to web enable, add functionality, custom configure for agency or a component, exchange data, or build a solution around a 3rd party product, including federalizing COTS applications.
5. System interfaces, such as to payroll or financial management systems, must be developed and maintained to have a seamless transition from HR to other functions. Interface development and maintenance traditionally increases the total operating cost of the solution. This cost is included in Avue's fixed-price, annual subscription.
6. All the personnel and contractor costs associated with the various eOPF systems in use in the agency and the costs associated with all hardware, software, and associated expenses.
7. All the costs of any interfaces existing with any of the HR or personnel/payroll systems in use to transfer data back and forth between these systems and any eOPF systems.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. All labor costs associated with preparation of documents for inclusion in the eOPF.
2. All labor costs associated with redundant data entry into multiple systems.
3. All labor costs required to input data into various systems or run data uploads that require quality control checks and error resolution.



PROGRAM IMPROVEMENTS

1. Providing system interface support on Avue's unlimited, all-you-can-eat, on-demand model significantly reduces project and financial risk and eliminates traditional problems associated with project or requirements scope creep.
2. Providing system interface support on Avue's unlimited, all-you-can-eat, on-demand model frees internal IT capacity while providing a basis for strong collaboration between the agency and Avue.

FACTOR 5: WORKFLOW AND PERSONNEL ACTION PROCESSING

(AOS MODULE — THE AVUE SERVICE AND PROCESSING OR ASAP WORKFLOW ENGINE)



COST ELIMINATION

1. All costs associated with maintaining, enhancing, and additional development of the 'request for personnel action' software associated with incumbent personnel/payroll systems.
2. All costs associated with maintenance of and data entry into cuff records maintained by business units and HR to provide a means of status checking, reporting and having visibility on all in-flight transactions, workload distribution, staff assignments.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. All labor costs associated with calls and callbacks for status checks, cycle time burn on data entry into systems and logs, and resolution of discrepancies between logs and status reports.
2. All labor costs associated with NOA determinations, SF52/50 preparation, and personnel action data entry for processing. All labor costs required to input data into various systems or run data uploads that require quality control checks and error resolution.
3. All labor costs associated with creating reports about transaction status, estimated timeframes for completion, and workload management.
4. All labor costs associated with distribution or flow of actions to various business process participants.
5. All labor costs associated with data entry into various systems or run data uploads that require quality control checks and error resolution.



PROGRAM IMPROVEMENTS

1. Ability to engage in continuous HCM program process improvement via reports on workload, cycle time metrics, work distribution, and process logjams generated by online workflow engine.
2. Significantly increased accuracy in personnel action processing by automatic generation of the correct NOA and data fields required to feed personnel/payroll systems for proper action processing and error resolution prior to final transaction processing.
3. All costs associated with workflow wrappers and tools associated with cost for development and support of wrappers, itemizing contractor and agency personnel (payroll) support.

FACTOR 6: INFORMATION ASSURANCE (AOS MODULE)



COST ELIMINATION

1. All contractor and personnel costs allocated to Information Assurance activities for ongoing system security testing, POAM resolution, reviewing NIST800-53 controls, assessing risk, and table top testing to complete an annual review and create or maintain an Authorization to Operate in order to be in compliance with the agency's FISMA assessment and reporting requirements.
 2. All costs for archiving data captured and collected and transmitting such data for download, possession, and retention by the agency, separate from the system.
 3. All contractor and personnel costs associated with SAS 70 preparation, publication and reports to demonstrate continued compliance with the standard including performance metrics, audit results, vulnerability reports and corrective actions.
 4. All contractor and personnel costs allocated to the development and maintenance of a Privacy Management Plan which explains requirements regarding personal information associated with any and all data sources containing Personally Identifiable Information (PII), confidential data, or all data protected by the Privacy Act.
 5. All contractor & personnel costs allocated to Section 508 compliance including ongoing testing as system is upgraded.
6. All contractor and personnel costs allocated to Information Assurance activities for all HR systems, system wrappers, and interfaces including SSAA, SSP, C&A, and ATO development and maintenance. Avue provides each client with a C&A package that covers the Avue Boundary and includes the following documents:
 - Definitions, Laws, and References
 - Security Test and Evaluation Plan and Procedures
 - Risk Analysis Methodology, Past Assessment Results
 - System Security Policies
 - FIPS 199 Categorization Template
 - System Rules of Behavior for General & Privileged Users
 - Template Banner Statements To Use On Login Page
 - Contingency Plan
 - Incident Response Plan
 - Security Awareness Training Plan, Staff Training Records
 - Control Test Artifacts
 - Configuration Management Plan
 - Privacy Management Plan and Previous Assessments
 - Run Book for Hardware and Software Inventories

FACTOR 7: AVUE TRAINING (AOS MODULE)



COST ELIMINATION

- I. All training expenses paid to contractors for human resources training in personnel functions associated with modules under subscription with the agency supporting these functions.
2. All the costs associated with the development of training materials and the delivery of training in the functional areas including travel, publication of training materials, providing hosting for webinars, instructors, and, is needed or desired, training facilities and equipment.
3. All costs associated with training to support the deployment including internal resources or separate contracts or orders for acquisition of training.
4. All costs associated with training to support ongoing operations of the solution, to accommodate management and employee turnover, new HR hires, or expanded deployments, including internal resources or separate contracts or orders for acquisition of training.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

- I. All labor costs normally associated with training to support deployment are redirect to continue ongoing service delivery to the agency.



PROGRAM IMPROVEMENTS

- I. Online help is interactive, screen sensitive, and include online tutorials and other forms of digital knowledge sharing so that agency managers and HR professionals are able to expeditiously navigate the business process.
2. Continuous training support, for the life of the contract, ensures all users are knowledgeable of system features and functionality and are able to efficiently handle administrative responsibilities.
3. Online help is interactive, screen sensitive, and include online tutorials and other forms of digital knowledge sharing so that agency employees and applicants have a good user experience.

FACTOR 8: HELP DESK (AOS MODULE)



COST ELIMINATION

1. All costs of providing help desk support to applicants for employment with the agency including all hardware, software, and call center expenses.
2. All costs of providing call center support to hiring managers, administrative staffs, and human resource personnel including all hardware, software, and call center expenses.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. All current labor costs associated with calls, including call center escalation of calls to HR for more in-depth responses and lookups regarding the status of actions.
2. All current labor costs associated with generating reports on call center activities, call volume, call response time, subject matter categories, and associated monitoring and tracking.
3. All current labor allocated to answering questions of both an HR and technical nature (such as lost passwords).



PROGRAM IMPROVEMENTS

1. Questions and answers are posted online in the Avue Community Forums for users preferring online help.
2. In-depth HR information is provided in the online Avue Wiki to provide user self-service and to reflect current regulations and requirements.
3. Online Avue Community Forums allow HR professionals and recruiters to directly engage with large pools of applicants to answer questions, encourage participation and job application submittal, and present the employer favorably.
4. Avue Shop Talk allows a private forum for managers to engage with each other, HR, and Avue to get assistance, discuss important workforce issues, share knowledge, and get direct support from the Avue Concierge needed.
5. Managers and HR professionals will be provided more in-depth help support on both technical and HR functionality issues.

FACTOR 9: REPORTS AND DATA VISIBILITY (AOS MODULE & ACC & C MODULES)



COST ELIMINATION

1. All costs associated with reporting current and historical HR activities and transactions and any associated separate software or contractor or payroll provider dependencies to access data, create reports, extract data, or use data outside the system for other purposes.
2. All costs associate with the creation and tools to create standard reports including software or contractor or payroll provider dependencies to access data, create reports, extract data, or use data outside the system for other purposes.



LABOR COST SAVINGS, WORKLOAD REDUCTIONS & PROCESS EFFICIENCIES

1. All labor and contractor costs associated with training on report generation tools, generating reports, configuring reports, conducting data analysis, preparing report data for presentation, submitting required reports to EEOC, OPM, DOL, and OMB, and other such activities.



PROGRAM IMPROVEMENTS

1. Using real-time data eliminates the problem of a static image of the workforce where the aging of one-time data capture efforts inhibits efforts to provide high data quality to executives for better decision support.
2. Using real-time data and providing a means of searching both structured (questionnaire-based) and unstructured (document-based) data allows for more accurate and targeted data mining and reporting.
3. Visibility on the extended enterprise (including employees, contractors, and local national hires) to track, monitor, report on, and set goals for, resource allocations, skills utilization, workload distribution, organizational optimization, and workforce productivity.
4. Ability to engage in continuous HCM program process improvement via reports on workload, cycle time metrics, work distribution, and process logjams generated by the online workflow engine.
5. Real-time, graphical data displays such as executive dashboards, program management dashboards, key metrics graphs, interactive organizational charts, projections based on embedded analytics, and other similar management and HR decision support and information systems provide management with critical workforce information, literally, at their fingertips supporting faster, higher quality decision making.

Addressing the HR Demand-Capacity Gap & Using Technology as a Force Multiplier



frequently overlooked element in determining ROI for various HR solutions and service delivery alternatives is the delta between current HR capacity and the future demand for HR services. As is illustrated in the table below, by taking into account data about current service levels and analyzing retirement, attrition, and productivity metrics, the organization can get a representation of future demand against current capacity – which incorporates the current business processes, technologies, HR staffing levels, and HR service delivery models used at the present time. Modeling the data helps agencies understand the limitations of

continuing the present-day course of action in real terms and captures the underlying value of making changes to current operations in a data-driven manner. The table below is from an actual agency and the data used to generate the model was provided by that agency. Interestingly, in analyzing government-wide FedScope data, the ratio of HR staff to hiring productivity shows that, in the federal sector, one staffing specialist, on average, hires 12 new employees a year – or one a month. If you take the average loaded cost of a federal HR specialist, the cost per hire in HR labor alone is approximately \$11,500 per hire – and that is before you get to any other costs, including contractor expenses.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Total Agency Population	196,674	196,406	195,855	189,284	183,530	179,527	178,308	177,759	177,308
Agency Workforce By Years of Service									
3 or Less	14,487	13,598	13,560	13,105	12,706	12,429	12,345	12,307	12,275
More than 3	182,187	182,822	182,310	176,193	170,837	167,111	165,976	165,465	165,045
Losses by Segment of Population									
3 or Less	4,948	4,987	4,973	4,807	4,660	4,559	4,528	4,514	4,502
	34%	37%	37%	37%	37%	37%	37%	37%	37%
More than 3	9,409	11,803	11,770	11,375	11,030	10,789	10,716	10,683	10,656
	5%	6%	6%	6%	6%	6%	6%	6%	6%
Retirements									
	6,841	7,362	7,342	7,095	6,880	6,730	6,684	6,663	6,646
%age of Total Workforce Retiring by Year	3%	4%	4%	4%	4%	4%	4%	4%	4%
Total Losses By Year									
Normal Attrition + Retirements	21,198	24,153	24,085	23,277	22,570	22,077	21,928	21,860	21,805
Change in FTE Between Years (Reductions)	8,569	268	551	6,571	5,754	4,003	1,219	549	451
Ext. Hires Required to Maintain Desired FTE Balance	12,629	23,885	23,534	16,706	16,816	18,074	20,709	21,311	21,354
Actual External Hiring Capacity (Actual External Fills)	2,903	2,903	2,903	2,903	2,903	2,903	2,903	2,903	2,903
Difference Between Losses and Actual Accessions	(9,726)	(20,982)	(20,632)	(13,804)	(13,913)	(15,172)	(17,806)	(18,408)	(18,451)
Backlog of Vacancies (Unfilled Authorized FTE)	(9,726)	(30,709)	(51,340)	(65,144)	(79,057)	(94,229)	(112,034)	(130,443)	(148,893)
Agency Metrics									
Estimated # of Days to Fill Positions Internally	128								
Estimated # of Days to Fill Positions Externally	143								
Actual Average # of Days to Fill a Position	299								
Actual Total Number of Placement Actions Last Year	10,367								
Actual External Fill Actions Last Year	2,903								
Actual Internal Fill Actions Last Year	7,464								

Another aspect of the HR demand-capacity gap that is worth examination is the dispersion of HR authorities and activities in the agency. Most agencies have developed extensive networks of that we have come to call “shadow staff” – typically found in the GS-301 or GS-343 series – or Administrative Officers or Program Analysts.

These shadow staffs conduct extensive HR activities, largely manually, in their role as the official liaison between the business unit manager and the HCM office. These staffs do not usually have access to the same technologies that HCM staff use and, therefore, consume significant labor in the process of completing their assignments. They also maintain redundant records systems to track and monitor the work as it flows to the HCM office. Once in the HCM office, the work is reviewed, edited, changed, and processed in further duplication of effort. Extensive disagreements may occur between HCM and shadow staff that consumes significant cycle time as well as labor hours to resolve.

In addition, the shadow staff acts as a buffer between HCM and the managers and executives, often distorting communications leading to rework in various HR transactions because expectations are not clearly understood and management participation is usually not engaged until too late in the process.

Any business case or cost-benefit analysis should factor in the presence of this shadow

organization. Only by inclusion of these costs and analysis of any business process inefficiencies created by them, can productivity be measured and tracked accurately.

Another form of shadow staff that has become increasingly popular is the use of contractors to augment on-board staff in the agency. Contractor costs for HR services runs approximately three times higher than the cost of agency employees to perform the same activity.

Just as with business unit shadow staff, contractor staffs may perform work that is later ‘corrected’ by internal HCM staff and we see the same duplication of effort result. However, it is not unusual to see contractor staff performing functions, such as strategic workforce planning, that are at the very top of the valued activities in senior management’s eyes. In these instances, agency employees are not offered opportunities for job and career enrichment and can often be found relegated to activities such as data entry, processing, and error correction which are low on the HCM value chain.

Over time, this results in loss of expertise, employee turnover, and increasing dependencies on very expensive support from outside the organization.

Contractor costs should be examined and, in using the term contractor, costs for services provided on an interagency basis – that is

from a different federal agency – should also be examined in the very same fashion.

Whether the work is done by federal employees or private sector employees should remain undifferentiated because the cost is always higher for the agency doing the outsourcing. Various administrative costs are “loaded” to the labor rate of the individual actually providing the service and, in many cases, the work outsourced to a different federal agency is then, in turn, outsourced to the private sector for actual performance.

Avue’s Platform is designed to eliminate outsourced service costs entirely. When it comes to internal shadow staff, the Platform is designed to allow engagement, participation, and monitoring from all parties involved in the business process at any time. This also allows business unit shadow staff to use the same technologies as the HCM organization, eliminating manual labor, assuming the agency HCM office chooses to delegate that work out to the shadow organization. If not, request submittals and tracking are provided online so that labor associated with cuff records and other similar activities maintained or performed in the business unit can be eliminated.

A popular metric to track in HCM is the “servicing ratio” – that is, the number of HR staff supporting the employee population in the agency. The government-wide average servicing ration is around 1:50 – one HR

FTE for every 50 employees. However, the ratio is misleading as it does not represent the presence of shadow staff or outsourcing, whether to the private sector or another federal agency.

For example, in one federal agency, the servicing ratio appears to be 1:219. However, when the outsourced provider is incorporated, the ratio falls below the government average to 1:33. When the Avue Platform is deployed with the goal of acting as a force multiplier, the actual servicing ratio, outsourcing included, can achieve levels as high as 1:2,000.

The cost-benefit analysis of the Avue Platform should take into account the costs associated with present day practices, technologies, shadow staff, and outsourcing.

The total benefit can be achieved by a blend of maximizing the Platform’s capability and creating an HCM vision that establishes dual targets of increasing value to mission critical operations and reducing costs.

As many industries in the United States have come to realize, technology can be a significant force multiplier.

ACRONYMS

eOPF: Electronic Official Personnel Folder

FISMA: Federal Information Security Management Act

FTE: Full Time Equivalent – Or 2080 hours of work per fiscal year.

HCM: Human Capital Management

HR: Human Resources

IT: Information Technology

NIST: National Institutes of Standards and Technology

NOA: Nature of Action Code

ROM: Rough Order of Magnitude

SF52: Standard Form 52, Request for Personnel Action

SF50: Standard Form 50, Notification of Personnel Action