ACCENTURE FEDERAL SERVICES

ACCELERATING DIGITAL PROCESS AUTOMATION

New Survey Finds Federal Agencies are Constrained by Low Process Maturity
Federal agencies are increasingly measured by their ability to deliver highly personalized services and benefits, administer more complex policies and regulations, and update field operations on a moment’s notice. All of these activities require a far higher level of process agility and intelligence than is common in government today according to the findings of the Accenture Federal Digital Process Maturity Survey. Federal agencies looking to meet these heightened expectations will need to take greater advantage of digital process automation.

To put the challenge into perspective, the survey found that almost six out of every 10 business processes were either fully or partially manual, with just six percent described as fully optimized and digital. Furthermore, just 22 percent described the underlying business rules and logic as well-documented and fully implemented in enterprise systems, leaving many agencies subject to often ad hoc and inconsistent decision-making.
The Digital Shift

Business processes and service delivery were historically designed around the need to serve a broad audience as consistently and efficiently as possible. This one-size-fits-all model meant that the constraints of traditional enterprise systems were not a significant drawback. This was especially true in government due to the policy, statutory and regulatory restrictions that agencies often face.

The growing maturity and pervasiveness of the Internet and digital technologies have upended this model. Today’s audiences expect truly personalized services and experiences drawn from one-to-one engagements. And these increasingly complex online interactions are not limited to only citizen experiences. Government business processes have become more intricate and dynamic with common needs including:

- **Enforcing** very detailed business rules.
- **Responding** quickly to more asymmetrical threats, new legislation and regulations, and continuous operational changes.
- **Shifting** to just-in-time suppliers and leaner inventories.

Federal agencies often struggle to consistently meet these new expectations.

In contrast, consider Amazon, the beloved CX leader with the confusing and cluttered website. Where Amazon distinguishes itself and earns its customer loyalty is in orchestrating the end-to-end process – regardless of who you are, what you want, and where and when you want it delivered.

Web native firms like Amazon are built from the ground-up to thrive in this environment and disrupt the status quo; traditional enterprises and government agencies were not. This relative agility is reflected in the way that enterprise systems have evolved over the years:

**ENTERPRISE APPLICATIONS** (1980’s – Current)
Focused on standardizing core processes (finance, HR, supply chain, customer service) to scale operations; customization came at a high cost; limited integration created functional silos.

**BUSINESS PROCESS MANAGEMENT** (BPM) (Late 1990’s – Current)
Introduced the ability to integrate and orchestrate processes spanning multiple applications and operations; frequent focus on analytics and process management methodologies (Lean, Six Sigma, Total Quality Management) for continuous performance improvement; most often used to optimize flagship enterprise programs due to high cost and skill requirements.
Digital process automation allows federal agencies to extend the strengths of their core or flagship business processes to all their operations. For example, automating every facet of HR – from onboarding and open enrollment to career development and expense reporting – to deliver a consistent, best-of-breed user experience with greater efficiency and control for every interaction. And doing so in a way that is easier to use, faster to deploy and less costly than previously possible with traditional development models.

However, the survey found that significant work is required for federal agencies to achieve this state of end-to-end operational agility and intelligence. Specifically, current digital process maturity is low with many agencies still reliant on swivel chair integration. They also recognize that their failure to modernize puts the mission at risk. As a result, agencies are beginning to pivot to the new and are showing early progress in doing so. By looking at their successes and challenges, agencies can determine the right path forward for their digital transformation efforts.
ABOUT THE SURVEY

To assess the current state of digital process automation within the federal government, Accenture engaged Market Connections to survey 200 federal government executives across both defense and civilian agencies. These were program leaders with mission, business or operational responsibilities for business processes and service delivery within their agency.

Our goal was to understand:

Where do agencies currently stand in their digital modernization efforts for these key functions?

What are the key barriers to modernization?

What functional areas will be impacted, and what technologies will be deployed?

As a benchmark for digital transformation of business processes, we defined a framework for measuring overall maturity:

**MANUAL**

Paper exchange or email integration with ad hoc execution

**INTEGRATED**

Standardized and integrated but still requiring significant manual processing

**AUTOMATED**

Integrated and automated with limited manual intervention for exception handling as needed

**OPTIMIZED**

Integrated and automated with active use of performance monitoring and analytics for continuous process improvement

**DIGITIZED**

Integrated, automated and optimized, with the added ability to dynamically reconfigure workflow and business rules to address ad hoc requirements (e.g., automated adjudication for exception handling, redirecting workflow due to surge in demand)
SURVEY FINDINGS

The State of Federal Business Processes

Agencies acknowledge gaps in their business process maturity. However, relative contentment with the status quo may limit digital process automation over the near-term.

Most Federal Business Processes Serve External Audiences
While specific use cases vary, more than 80 percent of service or business process interactions are with external parties. These audiences include citizens (26%), other non-federal government agencies (24%), other federal agencies (16%) or industry (15%). Just 18 percent are contained within the agency itself. This is significant as working across enterprise boundaries often introduces a higher degree of complexity in orchestrating end-to-end business processes.

Automation is Limited
Fifty-eight percent reported that the vast majority of their business processes were fairly immature, requiring either significant (46%) or complete (12%) manual processing. Another 23 percent automated their business processes but had yet to take active steps to shape and improve performance using analytics.

Majority of Business Processes

<table>
<thead>
<tr>
<th>MANUAL</th>
<th>INTEGRATED</th>
<th>AUTOMATED</th>
<th>OPTIMIZED</th>
<th>DIGITIZED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper exchange</td>
<td>Standardized</td>
<td>Integrated &amp; automated;</td>
<td>Integrated &amp; automated;</td>
<td>Integrated, automated &amp;</td>
</tr>
<tr>
<td>or email</td>
<td>&amp; integrated, but</td>
<td>automated; limited manual</td>
<td>active use of performance</td>
<td>optimized; added ability</td>
</tr>
<tr>
<td>integration</td>
<td>requiring</td>
<td>intervention for exception</td>
<td>monitoring &amp; analytics for</td>
<td>to dynamically reconfigure</td>
</tr>
<tr>
<td>with ad hoc</td>
<td>significant</td>
<td>handling, as needed</td>
<td>continuous process</td>
<td>workflow and business rules</td>
</tr>
<tr>
<td>execution</td>
<td>manual processing</td>
<td></td>
<td>improvement</td>
<td>to address ad hoc</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>requirements</td>
</tr>
</tbody>
</table>

12% 46% 23% 12% 6%
In contrast, just 12 percent reported the use of integrated analytics for continuous process improvement and performance monitoring. And only six percent described their business processes as digitized – “integrated, automated and optimized, with the added ability to dynamically reconfigure workflow and business rules to address ad hoc requirements.”

**Full Value of Operational Data Not Being Realized**
Just 30 percent describe the operational data supporting their business processes and service delivery as high value, meaning that it is highly accessible, integrated and well-structured.

For the vast majority (62%) of federal agencies, operational data offers moderate value, meaning that it is collected and trusted but poorly structured for analysis – for example, missing appropriate meta-tagging and categorization. This is significant as it limits their ability to improve performance and offer more intelligent services. Another eight percent describe it as limited value with questionable quality and veracity and stored in silos with minimal interoperability.

**Automated Business Rules Only Partially Implemented**
A similar trend is evident in the maturity of the system-based business rules and logic supporting business processes and service delivery. The majority (55%) of respondents said decision-making criteria was reasonably well-documented but only partially integrated within their enterprise systems. Another 23 percent report even more significant gaps due to their reliance on legacy technology and/or ad hoc decision-making. Overall, this meant that 78 percent of respondents were often unable to fully automate their business processes.

**Meeting Expectations But Not Setting Them**
Despite these gaps, the vast majority reported that they were meeting or exceeding performance objectives. They ranked highest in customer satisfaction (76%), and data quality and processing error rates (74%), with their ability to meet or exceed expectations for transaction (72%) or operational costs (65%) trailing modestly.

This is surprising given the federal government’s low marks for customer service when measured against other service providers in regular surveys conducted by Forrester, ForeSee and others. Given the rise of what Accenture’s Fjord consultancy describes as “liquid expectations,” where audiences use their best service experiences as their personal benchmark, this suggests that performance standards within the federal government should be raised.
Digital Expectations Target Real-World Challenges

Agencies are pursuing digitalization of their business processes, but their goals are often more fundamental than transformational. In this context, business continuity concerns are cited as a top risk from not modernizing.

Most Agencies Attempting to Modernize
The vast majority of federal agencies are pursuing or have undertaken genuine efforts to modernize and digitize business processes and service delivery. Only six percent reported having no plans or efforts currently underway. Notably, no one reported that they evaluated but declined to pursue.

Bottom Line Focus Behind Efforts to Digitize
Day-to-day concerns take precedent over strategic realignment for the future in motivating agencies to digitize their processes and service delivery. These drivers include improve quality and reliability (44%), reduce operational costs and/or generate other cost savings (35%), provide better customer experience (31%) and accelerate service delivery/shorten overall process (31%).

In contrast, broader objectives that may be viewed as transformative (or less immediate) garnered less support. They include generating faster or more actionable insight (18%), creating more adaptive/leaner operations (15%), developing more innovative products and services (12%) and taking advantage of new delivery or engagement channels (10%).

Compliance-related activities, including meeting new mandates (25%) and improving cybersecurity/privacy protection (21%), landed firmly in the middle.
Streamlining Processes a Key Functional Focus
Given the state of business process automation in the federal sector, it was not surprising that reducing the number of manual interventions/process steps (47%) was the top functional objective for respondents. This was followed by accelerating end-to-end processing (37%), expanding the use of automated business rules management to reduce errors and improve consistency (36%) and simplifying how end-users interact with systems to share input and enter data (36%).

Functional objectives deemed secondary included improving how systems and/or case workers generate output for end-users (30%), creating more insightful and timely performance monitoring and alerting (29%) and making more relevant or contextual information available to case workers and customer service representatives (23%).

Failure to Digitize Risks Ability to Deliver Critical Services
Just four percent believed that there would be no significant impact if their agency failed to digitize processes and service delivery. In contrast, the top three responses – an inability to meet performance objectives (41%), fully support escalating program demands (30%) or meet heightened user demands (27%) – indicate core concerns about maintaining business continuity. As the pace of operations continues to accelerate, these challenges are likely to grow.

Other concerns included increased processing or transactional costs (26%) and increased cybersecurity or digital trust vulnerabilities (25%). Less of an impact would be the inability to comply with regulatory mandates (18%).

Funding, Legacy Tech Leading Barriers to Digitizing Processes
The biggest reported barriers to digitizing processes and service delivery are a lack of funding (38%) and legacy technology (36%). Other barriers include compliance or regulatory constraints (24%), contractual constraints and vendor lock-in with current service providers (22%), information silos (22%), lack of organizational consensus (22%) and poor data quality (20%).

Human capital issues – lack of talent, workforce rules and lack of executive leadership/buy-in – were not viewed as significant constraints.
Enterprise Programs Lead the Way

The fact that digital transformation is being pursued at the enterprise level is not surprising, as it coincides with a push towards shared services and cost savings. However, the extent that mission, business and operational executives report that they are leading these efforts, as opposed to their IT peers, was unexpected.

Agencies Pursuing Enterprise-Level Approaches
The vast majority (70%) of process modernization projects are being led at the enterprise level, either entirely (36%) on an agency-wide basis or in concert with local program offices (34%). Only 30% of projects are being pursued independently at the process level.

Program Leadership Often Driving Change
IT appears to have a limited role in leading these initiatives on either a standalone (20%) or hybrid (11%) basis. Rather, the vast majority (65%) of efforts are being led by program (30%) or executive (35%) leadership, and this number jumps to 76% when hybrid responses are included. While active executive and program participation are critical, equally important is the full involvement of IT leaders in this process.

No Consensus on Modernize vs. Replace Legacy Platform
Respondents are split between the most effective strategies for updating the current IT environment. Nearly half (46%) believe modernizing existing systems (reengineer and/or re-platform) to meet current expectations and requirements would be more effective compared to 45% who support replacing existing systems entirely with new modern systems.
Many Factors Driving Success

There isn’t a silver bullet for transforming and digitizing operations. Rather, integrated approaches that bring together people, processes and technologies appear to drive the most sustainable success.

Most Important Factors Impacting Digital Process Modernization
The top four factors listed as very important include: Workforce training and upskilling (72%), measurable program objectives (68%), real-time analytics & performance monitoring (63%) and organizational or workflow redesign (62%).

Noteworthy were the total number of items deemed “very important” to project success, underscoring the need for an integrated, strategic approach. These additional factors included cross-agency governance (50%), agile & iterative software development (48%), commercial best practices (48%), business process reengineering methodologies (48%) and design thinking and other qualitative, user-focused research (47%). Digital centers-of-excellence (40%) are important, though less so compared to other factors.

What percentage of respondents marked the following factors for ensuring the success of the modernization initiatives supporting their digital processes and service delivery as very important?
Top Technologies for Digital Process Modernization

When it comes to technologies important to a long-term digital process and service delivery strategy, self-service reporting & data visualization (62%), digital process automation platforms (62%), and cloud-based systems of record (60%) are most likely to be viewed as extremely or very important.

Given the survey focus, the relatively poor performance of robotic process automation (26%), and to a lesser extent AI & machine learning (40%), was somewhat surprising. This may indicate confusion to the terms’ exact meaning, recognition of gaps in their immediate readiness to automate business decisions and leverage data to this extent, or a genuine lack of interest in the technologies.

How important are the following technologies to your organization’s long-term digital process and service delivery strategy?

- Self-service reporting & Data visualization
- Digital process automation platforms
- Cloud-based systems of record
- Cloud infrastructure
- Self-service technologies
- Predictive and Streaming analytics
- Multi-channel user experience (UX)
- Cloud-based systems of engagement
- Artificial intelligence & Machine learning
- Robotics process automation

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50% 55% 60% 65%
A Go Slow Approach to Digital Process Modernization

Notably, no technology was either operational or being piloted within a majority of agencies. Top contenders included cloud-based systems of record (27% operational, 21% piloting), self-service technologies (30% operational, 17% piloting), cloud infrastructure (26% operational, 21% piloting), and digital process automation platforms (28% operational, 18% piloting).

Given their prioritization, relatively low adoption of robotic process automation (eight percent operational, nine percent piloting) and AI & machine learning (11% operational, 10% piloting) was not surprising. However, similar scores for multichannel UX (18% operational, 12% piloting) and natural language interfaces (14% operational, 12% piloting) suggests that agencies are either not investing in user experience or face constraints in implementing.

What’s also noteworthy is the general uncertainty surrounding all technologies. Combined responses for unsure, evaluated or piloted but declined and not considering ranged from 23% (self-service technologies) to 61% (robotic process automation). Forty-five percent of respondents having no current interest in Multichannel UX stood out as well.

Which technologies have you already considered or adopted to support your long term digital process and service delivery strategy?
RECOMMENDATIONS

With a handful of exceptions, the survey found low business process maturity across the federal government. Few processes are automated let alone optimized, operational data is not being widely leveraged and fully-integrated business rules are the exception. With the vast majority of these business processes externally focused, these performance gaps are widely felt.

Most agencies view a failure to digitize as a business continuity risk and are pursuing efforts to modernize their business processes. However, they are often prioritizing incremental improvements over transformational outcomes. The risk with this approach is they fail to catch-up, as mission requirements, user expectations and technology capabilities continue to grow at a rapid pace.

Federal budget realities often drive these more modest approaches. According to the survey, funding gaps were the top constraint on modernization. Furthermore, complying with budget requirements can lead agencies to pursue more near-term approaches as the expense of long-term transformation.

**Digital Process Automation Accelerates End-to-End Transformation**

Digital process automation can close this gap. Digital process automaton achieves this by bringing the benefits of end-to-end process automation and orchestration to the thousands of tasks that define the enterprise. By making it easier to integrate these functions together within an adaptive framework, agencies benefit from increased operational agility and real-time intelligence.

Digital process automation accelerates transformation by:

- **Providing** the rigor and structure that is missing from many transformation efforts.

- **Engaging** mission, business, operations and IT stakeholders around the existing business processes and services that already define how the agency actually operate and execute its mission.

- **Enabling** a shift in perspective from inside-out to outside-in where services are built around the needs of users and the mission, and not system constraints.

This is fundamental to delivering better customer experiences (CX) that fully meet user expectations. However, it is also part of a broader shift towards using business objectives and requirements to design enterprise services versus relying on default system configurations that constrain performance.
Bringing it Together for Sustainable Success

Digital process automation is best viewed as a set of technologies for the rapid and collaborative development of targeted capabilities for enabling the end-to-end user journey. Sitting at the crossroads of design thinking and agile software development, it provides an adaptive framework for automating processes and tasks and infusing them with intelligence. With a focus on speed and ease-of-use, digital process automation strives to digitize more enterprise functions more quickly to accelerate digital transformation.

Digital Process Automation builds upon digital platforms as the emerging foundation for agency operations. These cloud-based, low-code/no-code development and configuration environments allow diverse computing resources to be brought together quickly and easily via APIs to create new customer-centric apps, services and processes. Equally important, they give mission, business and operations stakeholders a direct role in solution development, working iteratively and collaboratively with IT to design and refine process flow, user interfaces and more. The ability to quickly reconfigure and redeploy these capabilities make digital platforms ideal for agile development projects.

As discussed in Accenture’s Federal CIO Playbook: IT Modernization, cloud-based digital platforms can also accelerate IT modernization by shifting to an OpEx funding model that reduces the need for large, upfront investments. Digital platforms are also a potential remedy for shadow IT, allowing agencies to maintain a centrally managed but locally configured IT resource.

In many cases, enterprise applications remain the underlying building blocks for digital systems, providing key functional capabilities via APIs. Staying current while controlling customization will allow agencies to take greater advantage of the more frequent advancements that vendors are delivering.

Service design is used to define the end-to-end user journey, as it is often the “lingua franca” for large, complex digital transformation initiatives. This design thinking approach is increasingly being used as either an enhancement or replacement for traditional business process reengineering methods in building process-based solutions. Similar to Human-Centered Design (HCD), it brings a consistent user focus to every interaction across multiple timespans, ensuring that service delivery is designed around the needs of the user and not the constraints of the systems.
The old adage “what gets measured gets managed” is truer than ever, as the threshold for transforming analytics and insight into rapid and sustainable performance improvements has never been lower. Integrated analytics are critical for closed-loop processing with real-time performance monitoring and continuous optimization. Self-service analytics can empower business users to drill-down to specific challenges that they are best equipped to analyze and resolve.

Increasingly, Artificial Intelligence (AI) is being used to further automate decision-making within business processes. Additional functions can be delegated for system execution via robotic process automation (RPA) for simple transactions or with machine learning used to derive more complex business rules. Intelligent automation also takes advantage of AI-based natural language interfaces, such as chatbots, to extend “touchless” servicing while streamlining user interactions.

To achieve desired speed and scale, DPA requires both new skills sets and mindsets (think DevOps). In addition to consolidating scarce skills, Centers-of-Excellence (COE) can serve as ‘software factories’ creating the reusable components that allow agencies to accelerate their overall velocity. As one example, Accenture worked with Schneider Electric to create a digital services factory that has slashed the time required to create and deploy new services by 80%.

While there isn’t a one-size-fits-all approach for federal agencies seeking to embrace digital process automation, the pieces of the puzzle are both well-known and well-defined. In other words, the threshold for sustainable digital transformation has never been lower.
ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world’s largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 469,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

ABOUT ACCENTURE FEDERAL SERVICES

Accenture Federal Services, a wholly owned subsidiary of Accenture LLP, is a U.S. company with offices in Arlington, Virginia. Accenture’s federal business has served every cabinet-level department and 30 of the largest federal organizations. Accenture Federal Services transforms bold ideas into breakthrough outcomes for clients at defense, intelligence, public safety, civilian and military health organizations. Learn more at www.accenturefederal.com.

AUTHORS

Dave McClure
Principal Director, CIO Advisory Services, Accenture Federal Services

www.linkedin.com/in/damcclure/
@drdavemcc

Malcolm Jackson
Principal Director, CIO Advisory Services, Accenture Federal Services

www.linkedin.com/in/malcolm-d-jackson/
@maljack1

CONTRIBUTORS

John Conley, Kathy Conrad, John Low, Chase Mizelle and Paresh Patel.