THE IT MODERNIZATION IMPERATIVE

We are witnessing a historic shift in IT that only occurs once in a generation. The federal government is poised to embrace application modernization made possible by newer technologies and development techniques. The result will be less costly and more secure systems that better meet customer expectations.

Technologically, we are entering a new era of enablement that is dramatically more accelerated than any previous era (figure 1). This era, in which we no longer have to manage technology on-premises and can rapidly configure new capability, is changing how work is performed. It will significantly increase the speed of delivery while opening doors to completely re-conceptualize government services. This transformative moment is based on a new business model that is driven by platform-based technologies.

According to the President’s FY2019 Budget, the federal government will spend more than 80 percent of the total amount budgeted for IT on Operations & Maintenance (O&M): “This spending includes aging legacy systems, which pose efficiency, cybersecurity, and mission risk issues, such as ever-rising costs to maintain them and an inability to meet current or expected mission requirements.”

Addressing this modernization imperative by harnessing the power of new technologies is one of the great challenges facing federal executives today.

Accenture, a leading professional services company providing a broad range of services and solutions in strategy, consulting, digital, technology and operations, and Appian, the leading provider of a low-code development platform that accelerates the creation of high-impact applications, are working together to help federal executives overcome the burden of legacy IT and modernize their application portfolios.

Accelerating Digital Transformation With Appian Platform

ENTERPRISE LOW-CODE DEVELOPMENT APPROACH TO IT MODERNIZATION

From construction to deployment, a low-code development environment dramatically reduces the amount of time required to design, develop, deploy, and change enterprise applications. With a low-code development platform, instead of coding an application line-by-line, agencies draw it like a flowchart. This makes application development much more conducive to collaboration between business process owners and technologists. And it means agencies achieve results much faster.

Modernization objectives include improving the customer experience, improving system integration, and delivering value quickly. The following features of low-code development platforms accelerate your path to achieving these objectives:

What is a Low-Code Development Platform?

Application development platforms that enable rapid application delivery with minimal hand-coding, and quick setup and deployment.

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Visual Modeling. Application development is expedited with visual representations of processes using standards such as BPMN and DMN. Visual models are easier to understand than traditional displays, which allows citizen developers to grasp application design easily.

Drag-and-Drop Interfaces. Typing out long strands of code is not only difficult, but also time consuming. Low-code allows simple drag-and-drop so developers can create applications visually, resulting in faster time-to-launch.

Instant Mobility. Build once, deploy everywhere. With the explosion of mobile devices like cell phones and tablets, applications must have cross-platform functionality standard in their design. With low-code development this all happens behind the scenes automatically, with no extra effort, coding, or resources.

Declarative Tools. With low-code software, declarative tools are implemented through visual models and business rules. Removing the need to write custom-coding for these mitigates the difficulty of future changes or additions and speeds development times.

Security and Scalability. A low-code platform’s security architecture should comply with industry standards and certifications including FedRAMP, FISMA, HIPAA, SOC 2, and SOC 3. The platform must also provide data redundancy, high availability, disaster recovery, and other key reliability features. Finally, agencies should be able to deploy low-code applications on-premises, in the cloud, or in a hybrid environment without limiting functionality or flexibility.

Rapid Adoption Rates. Low-code applications increase the ease and speed of adoption. For example, the training and skilling cycle is much faster and IT Operations & Maintenance activities are easier to manage.
With these essential features in mind, federal agencies benefit from a low-code development approach in six important ways:

- Improved agility and flexibility
- Decreased total cost of ownership
- Higher productivity
- Better user experience (UX) and customer experience (CX)
- More effective risk management and governance
- Rapid and frictionless application modernization


FEDERAL LOW-CODE DIGITAL TRANSFORMATION SUCCESS STORIES

Acquisition and Procurement Systems Modernization
A large federal agency modernized its acquisition planning and end-to-end procurement planning processes with Appian. The system has thousands of users and interfaces with more than 20 other systems. The agency delivers new application features every two weeks with a combination of low-code and Agile development. The team implemented a new module to support a major federal regulation change within two months.

The agency uses the Appian platform for acquisition planning and provides complete visibility into the status of FAR-compliant acquisition plans in the pipeline. The application shows the completion status of acquisition plans and automates reviews for 11 different approval chains. A procurement request application accelerates the end-to-end procurement process, from initial request through solicitations and contract writing, administration and close-out. The application leverages Appian Records’ enterprise-wide data management capabilities because data integration is central to the agency’s procurement transformation.

Manpower and Recruiting Core System Digital Transformation
A Department of Defense (DoD) organization developed a mobile-enabled system that provides 3,000 recruiters with all the tools they need from the moment they meet an applicant to the time a new recruit leaves boot camp. The system supports command operations and is the DoD’s first cloud-hosted, mobile recruiting solution. The Appian platform has increased staff productivity and responsiveness, helping the DoD more effectively recruit the best candidates.

The development team releases new capabilities every two to four weeks, using innovative low-code, Agile, PaaS, and DevOps technologies. The DoD organization has ambitious plans for introducing artificial intelligence (AI) and robotic process automation (RPA) to improve recruiting and training. AI and RPA tools will enable the DoD to more strategically and effectively use program data to select, place, and educate recruits.
HOW TO ENSURE SUCCESSFUL MODERNIZATION
Low-code platforms are a key application modernization strategy for federal executives. Successful IT modernization efforts have the right combination of Systems Integration and Product expertise tailored to the modernization project. When selecting an IT modernization partner, consider partners who have the following expertise:

- **Customer Engagement Teams** to proactively work with customers and demonstrate the art-of-the possible.

- **Service Design** approaches to facilitate a focus on people and experiences and the ability to co-create with customer.

- The ability to approach an effort in the context of an overall **Application Modernization Portfolio**.

- **Deep knowledge** of the lines of business (e.g., HR, Finance, Grants, or the Mission Area) combined with Product experience, from both the private and public sectors.

- **Strong program management**, change management, cybersecurity, and agile development expertise.

Together Accenture and Appian provide clients with the right combination of experience and capabilities to reduce risk and ensure success.

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 [accenturefederal.com](http://accenturefederal.com)

Appian provides a low-code platform that accelerates the development of mission-critical applications. U.S. government agencies, defense organizations, and many of the world’s largest corporations trust Appian applications to improve manpower and personnel readiness, regulatory and statutory compliance, acquisition management, logistics and asset management, and constituent services.

For more information, visit [Appian Public Sector Solutions](http://www.appian.com/public-sector-solutions)