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Transform Constituent Experiences by Modernizing Your Technology and Your Culture

In recent years, many industries have migrated online, and expectations around customer service and the overall digital experience have skyrocketed. Consumers have become accustomed to quick and straightforward digital processes from the private companies they interact with daily. With accessible mobile applications, intuitive user journeys, and robust customer call centers, many private-sector enterprises invest in digital experiences to delight and keep their customers—and many of these customers expect the same level of service when interacting with government agencies.

As IT leaders in the public sector are likely aware, however, many governments do not currently provide a similarly seamless and straightforward constituent or citizen experience. In fact, in a 2021 survey, federal government customer satisfaction dropped to an all-time low score of 63.4%. Clunky, outdated technology plays a significant role in responders' low satisfaction with public services. Fortunately, this presents a massive opportunity for the IT leaders within the government. The public sector— including federal and local governments— can earn its constituency's trust by providing a compelling, easy-to-use digital experience.

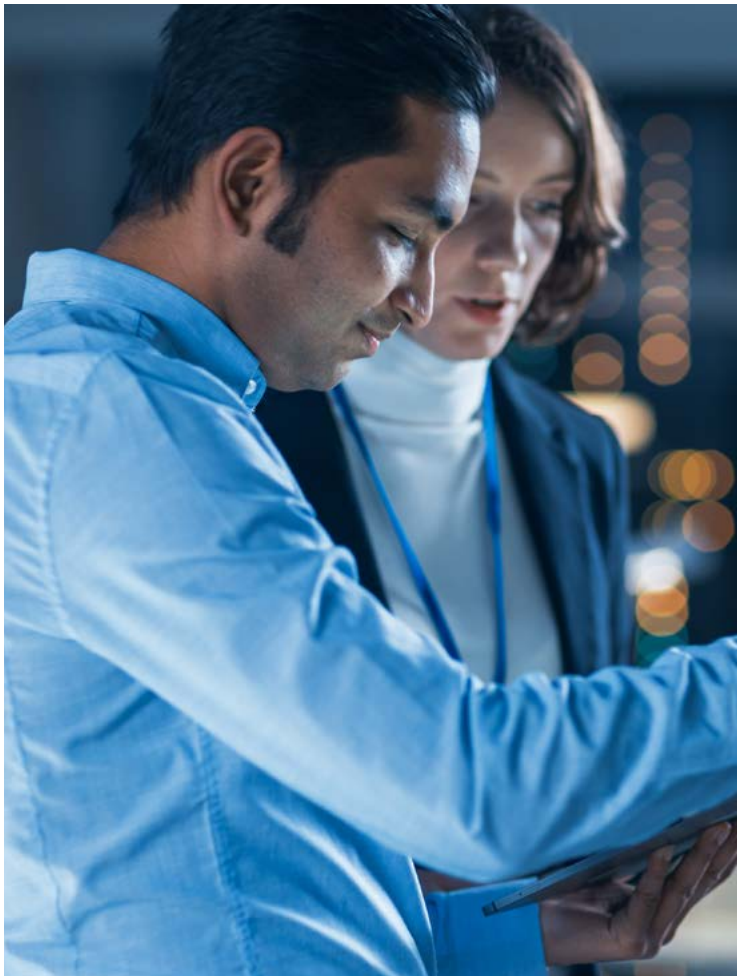
The Opportunity for Public Sector Leadership

With better insight into how public services are leveraged and a better understanding of what would drive the most impact on the daily lives of constituents, public sector technology could begin the iterative change needed to improve and evolve. What would government look like if agencies adopted the tenants of agile development? What would society look like if public services rivaled the user experiences of the private sector?

It's a win-win proposition: IT leaders in the public sector deliver solutions to government agencies so that government agencies can provide solutions to the public. In fact, better digital services could increase citizen engagement broadly.

Modernizing government technology with the power of the cloud allows IT leaders to innovate faster with optimized technologies and processes, can reduce overall IT costs through improving cost efficiencies and margin by shifting from large capital expenditures to operational-based spending, and increases resilience by more effectively managing both known and unknown internal and external risks.

Of course, true transformation is challenging for any organization. Modernization through cloud adoption involves a complex set of distributed activities that must be managed carefully, quickly, and with the appropriate governance in place. Success requires an equal focus on technology, the skillsets of your staff, and operational shifts that address key stakeholder— in this case, constituent—needs. The path toward realizing this future begins with transformational IT leadership.



Leaders Drive Change by Modeling Transformational Behavior, Vision, and Values

Management consultant Peter Drucker once said, "Culture eats strategy for breakfast." That's because the core of successful digital transformation is much more than implementing new workflows or introducing new software. It's a profound pivot toward generative culture in which staff are empowered to ideate, learn, and grow. True generative culture is highly collaborative, creative, and adaptable, and its hallmark feature is a high level of trust.

To support this pivot, management must clearly define its organization's goals and values while promoting innovation, experimentation, and creativity. This will help foster an environment where team members feel safe enough to think outside the box and take risks, eventually leading to new and inventive solutions. Generative culture attracts top talent and reduces attrition, as agile team members feel engaged and appreciated at work and can adapt quickly to the rapid change of the digital era. Yet, in recent Deloitte study, only 34% of Fortune 500 companies made strategic technology investments.

Contact centers have long been a focal point for cost reduction. While contact centers have become more efficient over time, a considerable shift has occurred in the last decade as chatbots and other self-service technology have become prevalent. The advent of automated processing has made the remaining high-touch activities handled within call centers increasingly complex. The increased complexity and unprecedented increases in queries due to natural disasters or economic events can add more stress to call center technologies.

Artificial intelligence (AI) and data analytics can enable call centers to provide an enhanced customer experience. By modernizing call centers, agencies can provide a more intelligent and engaging user journey while automating contact center processes and reducing costs.

Let's look at four actions public sector tech leaders can take to support generative workplace culture:

1. **Shift to a User-Focused, Product-Based Culture**
2. **Prioritize Measurable Goals and Data-informed Decision Making**
3. **Implement Tools and Practices to Retain Talent and Prevent Burnout**
4. **Reframe Security and Compliance to Support Innovation**

1 Shift to a User-Focused, Product-Based Culture

The modernization of technology in the private sector over the past two decades has resulted mainly from a cultural change: From project-based to product-based approaches. In a project-based approach, the team's focus begins and ends with the solution. Adequate attention is not paid to both the problem the solution is trying to solve and the quickly shifting technology landscape. A project-focused process also results in information silos; the developers running and updating the software may not be the same developers who designed and built it. This development model gets bogged down with administrative inefficiencies, bloated processes, and inflexibility, resulting products that are inefficient to the end citizen.

In a product-based approach, a small team owns the entire project from design to launch, and the end-user is front-of-mind during every stage of the process. This customer-focused value stream amounts to quicker time-to-value for customers and constituents, leaner and more streamlined processes, smaller budgets, and greater team flexibility. Many organizations continue to follow suit—according to a recent research study, at least 65% of companies plan to put more emphasis on the end user in their development processes.

One example of a company that has built its culture and processes around its users is Amazon. Amazon's end user focus manifests in how it builds and organizes teams. "Amazon has pioneered the concept of 'two-pizza' teams. A 'two-pizza' team typically has less than ten people, so they spend more time focusing on customer requirements and less on coordination and addressing information silos. It promotes more nimble experimenting and innovating on the user's behalf—one of the biggest priorities of technology transformation," says Hemant Ahire, Principal Solutions Architect, Amazon Web Services (AWS). This "two-pizza model" allows teams to apply learnings rapidly and helps lower the cost of failure to drive value to customers constantly.

Of course, with many small teams working in tandem, the need for leadership to communicate effectively is paramount. After all, is a ready-for-market application really "ready for market" if the marketing and sales team are not up-to-speed? If a new feature is available, but users do not understand it, is it genuinely available? Time-to-value falls apart when the organization is not aligned on the development stage and timeline expectations. As covered in our next section, leaders must define and communicate high-level goals across the entire organization so that each team and individual can track progress toward achieving an end-user-oriented goal.

A US state's health insurance needed an upgrade, and decision-makers wanted to reduce the capital costs of replacing an aging infrastructure while disrupting and improving the customer experience. AWS and Deloitte worked with the state to migrate 7.7 million user accounts and 200,000 staff accounts using AWS Snowball to Elastic Block Store, Elastic File System, and Amazon Simple Storage Service (S3) for cloud storage.

The 500 project personnel navigated the challenges of this project through virtual work, all while navigating the shifting complexities of the COVID-19 pandemic. The engagement resulted in a material increase in system performance while keeping user experience and functionality on track.

2 Prioritize Measurable Goals and Data-informed Decision Making

Social scientists have long studied and offered guidance for how to best set and achieve goals. Even far back in human history, our greatest minds theorized how best to achieve stated objectives. According to a quote from Confucius (551-479 BC), "When it is obvious that the goals cannot be reached, don't adjust the goals; adjust the action steps." More recent research suggests that individuals who write down their goals are 50% more likely to achieve them than those who don't. Both the ancient and modern principles point to two critical leading practices for setting and achieving goals:

Impact Mapping

Designed specifically for software development, impact mapping helps teams define goals and document the plan for achieving them. Creating documentation and plans makes it more likely that the goals will be achieved and connects individual contributions to broader company-wide objectives.

Objectives and Key Results (OKRs)

OKRs consist of objectives (high-level company goals) and key results (measurable outcomes which lead to associated objectives According to best practices, ORKs should be challenging, public-facing, and regularly reevaluated to "adjust the action steps" and ensure accountability.

Both of these concepts focus on the prioritization of activities and the measurement of results. In other words, these models require a precise method for measuring and mapping progress toward each goal. If progress—an exceptional experience for the sector's constituency—cannot be measured, leaders must define a different goal.

The question then becomes, how can IT leadership get the data necessary to measure efficacy and success? Or, how can an organization use the data it already has to measure its effectiveness and success? The existing legacy applications used in the public sector have inherent challenges using monolithic architectures and outdated technology stacks that do not lend themselves to measurement. For example, by modernizing the cloud for mission-critical workloads such as data & analytics, organizations can make strategic decisions based on concrete data points, metrics, and statistical models. These decisions drive key business outcomes by leveraging insights from a centralized data lake and visualization that helps leadership interpret the data.

Once an organization can effectively measure its application's efficacy, it can hold itself accountable and iterate to improve when goals are unmet. By improving goal-setting practices and ensuring goals are measurable, leadership can kick off a virtuous cycle of innovation and betterment— all with the constituent experience in mind.

For the Tennessee Department of Human Services (TDHS), Deloitte and AWS successfully migrated a critical child support program by modernizing the agency's legacy infrastructure that needed platform and technology upgrades.

Deloitte built out environments on the AWS Cloud to host the re-platformed mainframe-based application. The state agency can now use data to prioritize improvement and incrementally modernize their application, as well as integrate with state-wide shared services and technologies based on the business priorities of the agency.

3 Implement Tools and Practices to Retain Talent and Prevent Burnout

Attrition is expensive. It costs US businesses one trillion dollars each year. One of the major causes for attrition in the tech sector? Burnout.

According to a 2023 report that surveyed more than ten thousand full-time workers, nearly half of those surveyed reported experiencing burnout, characterized by workplace stress, exhaustion, and decreased productivity. Burnout persists as a serious problem, especially in the technology sector, where the need for continuous learning and fast-paced work can lead to cognitive overload. Burnout also sees high levels in government where IT workers have to support complex legacy systems that cannot keep pace with the constituent demand for better experiences. So, how can tech leaders limit burnout and its effects? Organizational leaders should consider the following solutions to support engineering and technology teams.

1. Platforms

Essentially orchestrated cloud container data service "as-a-Service"—effectively reduce burnout, limit cognitive load, gently enforce requirements through environment constraints, and they generally enable engineering teams to build software more efficiently. In short, platforms improve the effectiveness of development teams. In one study, average software deployments increased from one and a half to six per week using platforms.

2. Open-source software

Incredibly cost-effective, makes knowledge transfer across companies easy, and benefits from the continuous input of leading experts. Companies across many industries use open-source tools, and this includes:

- Automated Security Scanning
- Infrastructure-as-Code (IaC)
- Continuous Integration/Continuous Delivery (CI/CD)
- Continuous Monitoring and Logging
- Automated Deployment and Security Patching
- SAST and DAST Tools
- Data Encryption and Tokenization

Stealth ships that show up as fishing boats on enemy radar. Submarines that go 20 years without refueling. And catapults that accelerate fighter planes to 170 mph in two seconds. While technology fuels the modern US Navy, an elevated challenge was staring them down: modernizing how it trains sailors to operate that modern equipment.

A key to the Navy's war-fighting capabilities – the shipboard network called Consolidated Afloat Networks and Enterprise Services (CANES) – had just two classrooms with physical network equipment needed to train all the Navy's CANES system administrators. Compounding the challenge, the physical training equipment was expensive to maintain and could only be maintained at baselines that were long eclipsed in the fleet. To create more classrooms would require more equipment that required too much physical space, upkeep, and maintenance. Having one set of equipment also limited each sailor's opportunity to get hands-on experience managing and performing all their required tasks.

The Navy badly needed to increase the capacity of its IT Training environment and eliminate the need for physical hardware in a classroom. It also wanted to keep pace with technology and provide sailors with virtual CANES environments that could be updated and deployed as efficiently as possible.

Using AWS cloud, Deloitte collaborated to create a powerful and secure IT training system for sailors that is virtually limitless. Leveraging AWS CloudFormation, Amazon Machine Images, Amazon EC2 Bare Metal, VM Import/Export, AWS security tools, and custom configurations, Deloitte transferred multiple variation of the CANES shipboard network onto AWS GovCloud, enabling the Navy to provide a learning infrastructure accessible to multiple users concurrently and at many locations.

With multiple CANES variants available in the cloud, the Navy can give every sailor the same network they will operate on their future ship or submarine while quadrupling the number of training sites world-wide. As a result, the Deloitte team has helped the Navy expand capability to nine training sites around the world with round the clock training of CANES sailors, improving readiness and mission delivery.

4 Reframe Security and Compliance to Support Innovation

To the non-developers of the world, "security" is another word for "safety," but in the field of software development, it's more akin to "compliance." Particularly for those in the public sector, compliance can feel restrictive—counter the creativity and innovation generative leaders want to foster in their staff. However, constraints can be reframed to promote rather than hinder innovation.

Digital modernization calls for a new understanding of security as a feature that enables rapid innovation. Consider seatbelts and airbags as an example. These safety features do not slow down drivers but rather give drivers the confidence to travel faster and farther.

By making security and risk a core development program, rather than thinking of it as merely another requirement, leaders can enable their organization's agility goals. Modernization efforts to achieve greater security also improve product quality and— most importantly—increase the privacy and safety of citizens. Technology leaders should embed security into their digital transformation process early on to develop secure cloud environments and applications that facilitate game-changing transformation. Technology should be "secure by design," not an afterthought.

A large financial services organization was looking to improve their security posture. Through a series of workshops, Deloitte identified use cases that then informed automation capabilities Deloitte engineers built using agile methodology. Now, more than 90% of the organization's infrastructure security has been automated.

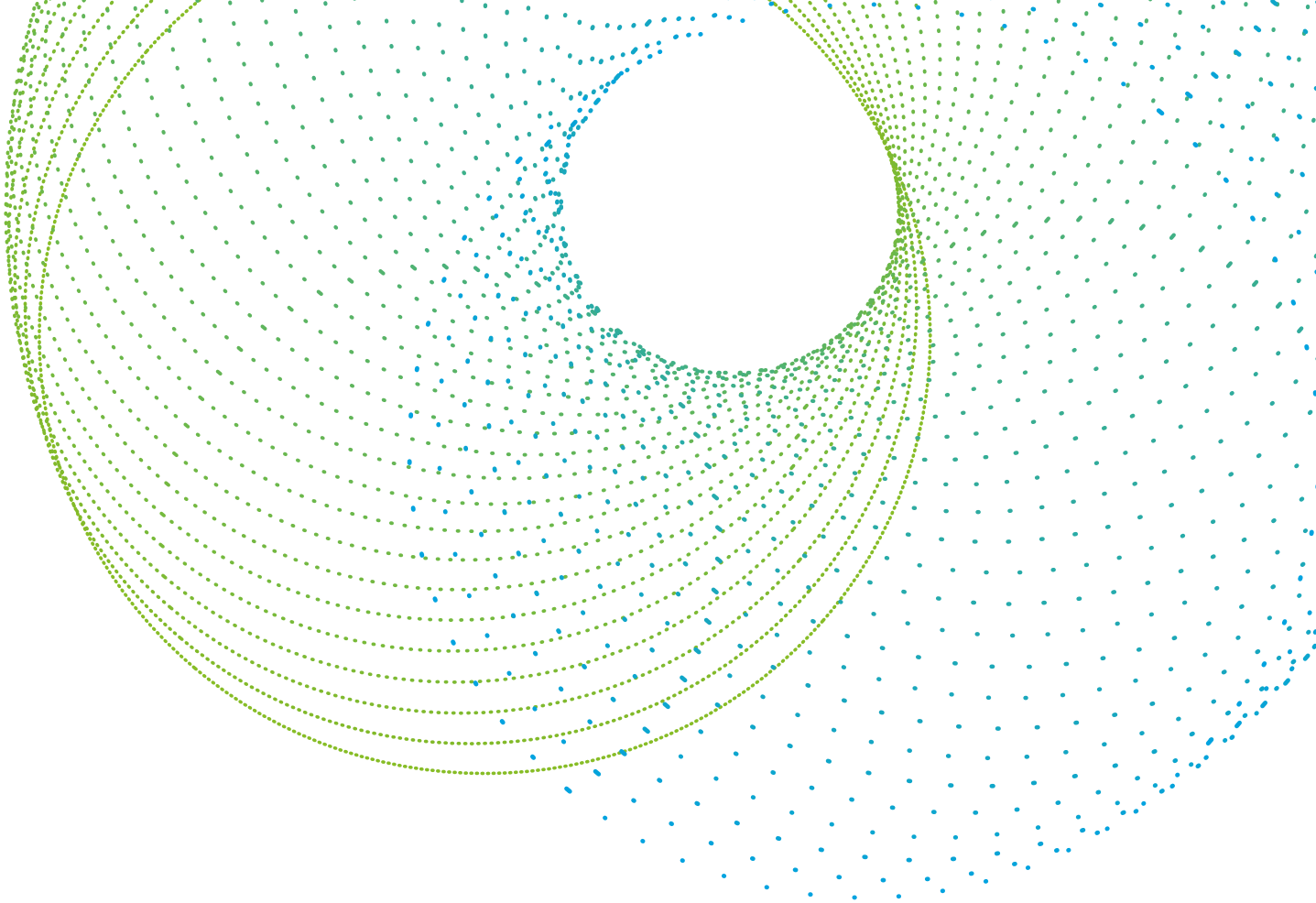
Additionally, the team can create new production ready environments with supporting cybersecurity guardrails in less than 3 hours. All of these improvements allow the IT staff to focus on improving the digital customer experience while still ensuring security is maintained.

Maximizing the Cloud + Culture Opportunity

Citizens desire government agencies that inspire trust and deliver on the promise of improving quality of life, and IT leaders aim to support federal and state governments as they achieve this vision on behalf of their constituency. Technology leaders in government, therefore, must deliver the speed, agility, and security of the private sector. Incorporating cloud transformation as part of their operational strategy can boost development speed, reduce complexity, and make funds available for other uses, enabling the government to deliver better services and run more efficiently.

However, this can only be achieved with a necessary culture shift that puts the constituent at the center of transformation. By focusing on iterative modernization continuously informed by data and constituent needs, government technology leaders can effectively implement and utilize the promise of the cloud. The user-focused modernization process will help empower developers and engineers to be bold and creative, to not just to meet constituent expectations, but exceed them. By switching to a constituent-focused culture, government agencies can build trust with their constituencies, improve citizen engagement, and better serve their communities at large.

Interested in learning more about how Deloitte and AWS collaborate to help government agencies and improve public outcomes? Visit our website.



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