Digital Transformation for Federal Agencies
A Holistic Approach

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When agencies successfully embrace digital transformation, they become more customer-centric, agile and value-driven enterprises. But the hard truth is that 80 percent of digital transformation initiatives fail to deliver the expected value. How agencies go about this complex and sometimes daunting task is a challenge. How can an agency choose the right approach to help ensure success of its digital transformation initiatives?

IN THIS PAPER, WE WILL:
• Define digital transformation
• Introduce research that reveals the Nine Digital Competencies shared by organizations that are realizing success in their digital transformation efforts
• Discuss tools and provide specific strategies encompassed in a holistic approach to transformation that can set an agency onto the path of success
• Provide you with a set of questions and a sample roadmap to help ensure you’re choosing the right partner to help design and implement your digital transformation strategy.
According to a January 2018 report by the American Customer Satisfaction Index (ACSI), public satisfaction with federal government services increased in 2017 to 69.7 on a scale of 0-100, its highest level since 2006. The score marked a gain of 1.7 percentage points over 2016’s rating, which itself was an improvement after three years of decline. Of the four drivers of citizen satisfaction that ACSI considers, the federal government’s largest gain was in the timeliness and efficiency of government processes, which showed a 3 percent rise.

That the government’s score increased for the second straight year is an indicator that citizen demands regarding service delivery are not only being heard but are also starting to be met. Sparked by private sector innovators such as Uber, Amazon and Airbnb, citizens have been re-conditioned to a new model of customer service. The digital transformation revolution brought about by these providers has turned what used to be the typical consumer model on its head and, because of that, as previous ACSI surveys had shown, the American public is no longer willing to accept services at the “pace of government.” As a result, federal agency executives are thinking about different ways to engage citizens—as well as their own employees—so that these interactions can be more consistent with everyday life.

Heightened expectations for citizen service is just one of several trends that have intensified to create an imperative for change. At the same time, digital paradigms are converging and maturing into the mainstream, enabling—and demanding—digital transformation in the public sector.

What is Digital Transformation?

It is important to distinguish digital transformation from many other current technology efforts. After all, organizations have been “going digital” for many years (for instance, moving to paperless, mobile and cloud environments). But discrete and disparate implementations of digital technologies designed to improve existing systems and processes more accurately can be described as IT modernization. As author Malcom Gladwell states, transformation is not about improving; rather, it’s about re-thinking.

Practical applications of these transformations in government can already be found. Take, for instance, the Transportation Security Administration (TSA) and its “Curb to Gate” initiative. By leveraging RFID technology and the Internet of Things (IoT) to tag passengers and bags at the airport curb, authorities can track the whereabouts of both and be alerted automatically to abnormal or suspicious activity. Other examples include the U.S. Patent and Trademark Office’s (USPTO) Pre-Search initiative that enlists machine learning to proactively search patent databases and other related documents when an application is received. The U.S. Census Bureau is also planning to implement new methodologies in the way it collects, examines and utilizes data for the 2020 census. In each of these cases, technology is being used to fundamentally change the way the organizations collect, process and act upon the data gathered.
Still, few agencies today have programs that are at the level of TSA, USPTO and Census—and even fewer agencies (or commercial entities, for that matter)—can claim to be truly digitally transformed. Most agencies are behind the curve, and each one must transform at its own rate and follow its own mission-focused path. Like snowflakes, no two digital transformation undertakings are alike. It’s helpful to look at organizations that have already successfully begun the transition to digital transformation to determine the most surgical insertion point to begin, or advance, your own digital transformation efforts.

**DIGITAL TRANSFORMATION VERSUS IT MODERNIZATION**

![Network Diagram: IT Modernization vs Digital Transformation]

- **IT modernization:** Improving discrete systems
- **Digital transformation:** Fundamentally transforming operations through new digital ecosystems

**NINE DIGITAL COMPETENCIES: INDICATORS OF DIGITAL TRANSFORMATION SUCCESS**

2017, CGI conducted in-person conversations with senior business and technology leaders to get their insights on the business and IT trends that are impacting their organizations. We spoke with more than 1,300 leaders across 10 industries around the world, including a number within the federal government. The resulting CGI Client Global Insights report affirmed that meeting citizens’ rising expectations for digital public operations and services had moved digital transformation to the top of government executives’ agendas.

Most federal agencies are in the early stages of their digital journeys, either exploring new technologies or implementing discrete projects. But, faced with increasing pressure to operate more efficiently under tightening budgets, 81 percent say they are intent on becoming digital organizations to better meet increasing citizen expectations and enhance their own mission capabilities, despite the fact that 55 percent were constrained by legacy technology or lack of agility.

One key insight uncovered—both in these interviews and in CGI’s ongoing work with clients in commercial and government sectors worldwide—is a common thread...
among the organizations that have been showing positive results as they progress in digital transformation: They demonstrate strength in nine specific areas or digital competencies:

1) **A MISSION-DRIVEN DIGITAL STRATEGY**
   While citizens may be intensifying the need for change, a commitment to digital transformation must be mission-driven and clearly articulated through senior leadership.

2) **LASER-FOCUS ON CITIZEN-CENTRIC SERVICES**
   The public is setting the pace and expectations for defining what is valuable. Leaders must orient their thinking and priority setting around the recipients of government service.

3) **A PERVASIVE DIGITAL CULTURE**
   The most difficult part of becoming a digital-first organization is the cultural change that is required. Mapping out cultural and personnel plans to ensure digital changes are embedded and actionable is critical.

4) **PROGRAMMATIC INNOVATION**
   While most government organizations have a mandate to innovate, too few have the resources or flexibility to achieve their goals. In order to truly enable digital transformation, innovation must become part of the organization’s DNA.

5) **AGILE EVANGELISM**
   More than 66 percent of industry leaders in the CGI Client Global Insights report indicated that using agile for faster delivery was an increasing priority, but it takes an empowered leader committed to agile to communicate this priority throughout a large organization.

6) **INSIGHTS-LED DECISIONS**
   Organizations must use constituent, system and device data and feedback to gain valuable insights in order to ensure decisions are made with ample information; otherwise, the “HiPPO” system (Highest Paid Person’s Opinion) will continue to dominate.

7) **HYBRID IT ADOPTION**
   Roughly 30 to 40 percent of technology projects today are cross-functional and done in agile sprints. The remaining 60 to 70 percent of projects still use traditional waterfall approaches. This mix of methods will continue to swing more toward agile as digital transformation forces faster, real-time thinking and collaboration. In the interim, successful organizations will operate in a hybrid model.

8) **A RIGOROUS SECURITY APPROACH**
   Agencies must integrate cybersecurity into their value propositions. The threat of reputational and political damage through data loss or privacy breaches makes security a high priority.
9) **SHARED SERVICES MODEL**

The federal government is increasingly turning to a shared services model for cost-effective IT procurement that can also create access to the most innovative solutions available in the market.

The Nine Digital Competencies are not a one-size-fits-all checklist to achieving digital transformation success, but they serve as a guidepost by which executives can begin to assess an agency’s areas of strength and weakness as they design their unique digital transformation strategy.

**HOLISTIC APPROACH TO SUCCESSFUL TRANSFORMATION**

In order to embark on a successful digital transformation initiative, one must have the right technology pieces in place. That’s a logical assumption. But technology is only part of the answer. It takes a change in perspective that permeates the organization to fully realize the possibilities.

**A HOLISTIC APPROACH CAN PROVIDE THAT PERSPECTIVE SHIFT, BY:**

- Utilizing recent, relevant research to demonstrate the elements in successful implementations of digital transformation
- Looking at cultural changes that affect every aspect of your organization—from technology to your organizational model to your business model—to help ensure that all the critical factors are being adequately addressed
- Accounting for where an agency is along the digital transformation continuum and allows for assessment and implementation from that point, rather than risking a costly redoubling of efforts or taking a one-size-fits-all approach
- Demonstrating methods for selecting the right partner, one that possesses a proven track record of helping clients build their digital transformation strategies, anticipates their needs, and can share their thoughts on how to achieve digital transformation

Achieving the promise of digital requires transformation across three key areas: **Strategy & Organizational Change**, **Business & Process Transformation**, and **Technology Transformation**. This holistic approach differentiates agencies who successfully employ digital transformation practices from those who struggle. It’s a tricky proposition. All three factors must align just right to make effective digital government a reality.

**Strategy & Organizational Change** are critical to both the development and the long-term health of a successful digital transformation. When developing and executing a strategy, agency executives should consider the following principles to help guide their organization:

- **Determine your path**: At the outset of a digital transformation an agency must establish and implement well-rounded digital transformation strategy with consideration for the organizational model, the impact to mission, the agency’s readiness to enable cultural change, prioritization of initiatives and integration of digital and physical channels.
- **Align IT strategy with mission**: Develop a comprehensive technology strategy that takes into account transformational goals, the impacts of organizational change and considers a wide breadth of digital channels and technologies.
- **Hire and nurture digital employees**: The success of an agency's digital transformation is directly tied to its people, processes, and technologies. In a digital culture, technology is embraced, information is flowing, and employees readily seek and adapt to innovation. While most employees live digital lives outside the office, digital culture doesn't always translate into office culture. Agencies must encourage and enable their workforce to go digital within the office to meet the needs of citizens.

- **Foster collaboration and innovation**: The seeds for innovation exist not only within every organization, but also within the individuals that support your mission on a daily basis. The key is cultivating that type of innovation within your teams. Strong leaders not only find a way to continually increase an organization’s ability to innovate, but also to cultivate a culture of innovation through constructive interactions with its teams.

As well, there are a number of **Business and Process Transformation** considerations that must be taken into account with the Holistic Approach. These are proven private sector methods that should be embraced and adhered to in the new digital government model:

- **Put the citizen first**: We live in a digital world. Today’s citizens are used to accessing information quickly and easily, and on any device. To satisfy citizen expectations, your agency should take a best practices approach to customer experience design. Technologies should become citizen-centric to improve users’ digital experiences.

- **Leverage digital insights**: Agencies have an increasing amount of data at their fingertips. With all this available data, agency leaders need to figure out how to effectively harness and transform it into actionable intelligence. Using today’s digital tools can help turn data into usable information that can help you better understand and optimize operations.

- **Employ automation and artificial intelligence**: As machine learning progresses and artificial intelligence sharpens, the possibilities for automation are rapidly expanding. As robotic process automation matures, the potential goes beyond what was imagined just a few years ago. Existing capabilities include leveraging digital labor in the 24/7 performance of system and service desk functions, and interfacing with citizens via an avatar that demonstrates both intelligence and appropriate emotional responses, among others. Make sure to use this to your advantage.

- **Embrace and achieve connectivity**: Digital transformation is driven by data. With IoT, organizations now have access to data beyond the physical boundaries of the organization. This empowers organizations to obtain data tied to the mission and operations at the source. As an IT leader, take concrete measures to ensure that connectivity is abundant throughout the organization, and that the data is collected, quickly analyzed, and acted upon.

Last but not least, **Technology Transformation** acts as the foundation of digital transformation. The right sets of strategies, tactics, and tools can allow an organization to strengthen its IT capabilities to the point that it is prepared for a transition to the digital environment:

- **Evolve the IT strategy**: Agencies embarking on digital transformation will need a comprehensive approach to address the organization’s wide range of IT goals/objectives as part of implementing an effective IT strategy. Utilizing a phased, end-to-end approach that factors in all aspects of the IT enterprise and then deploys the right tools and methodologies to execute them can make all the difference.

- **Prepare to become more agile**: Digital transformation requires rapid response and constant evolution without sacrificing quality. Becoming more agile and automating both
software delivery and infrastructure helps ensure the type of organizational change where new software can be introduced rapidly, frequently and more reliably.

- **Adopt/leverage a hybrid strategy**: Agencies are under pressure to keep up with the digital revolution enabled by cloud computing. Adopting a hybrid IT strategy can help agency leaders transform and scale with innovation.

- **Enhance cybersecurity**: Technology is enhancing and transforming the entire enterprise. However, technological progress has also created new avenues for malicious hackers, making it critical that agencies protect sensitive data. Ensuring that the agency scales up to a set of solutions that can adequately assess, monitor, and protect against threats is a must.

### THE HOLISTIC APPROACH

This holistic approach looks both outside your organization—to provide you with a clear picture of what successful organizations are doing—and inside (at strategy and organizational changes, business and process transformations and technology transformations) to ensure a 360° view and roadmap for digital transformation success. Looking through the eyes of executives who embrace the competencies that lead to successful implementations also helps alleviate the pain of trying to tackle transformation in one big bite.

In the end, the shift from yesterday’s government-to-citizen delivery model to tomorrow’s is significant, and achieving the attributes attained by those who employ the Nine Digital Competencies is not a simple process. The barriers to attaining a digital transformation are real, but using the holistic approach can make these more manageable. Success requires changing everything: processes, tools and technology, as well as reconfiguring parameters for success. In other words, it’s not just about going from point A to point B; it’s about using a 360° approach to fundamentally change the way government works, from a slow-moving bureaucracy to a nimble, customer-focused organization.
CONSIDERATIONS FOR DESIGNING THE RIGHT ROADMAP WITH THE RIGHT PARTNER

The exact nature of an agency’s digital transformation journey depends heavily on the degree to which it engages directly with its constituents. However, no matter the current level of engagement, every journey needs a good roadmap. Successful digital transformation is a well-planned journey that can result in a citizen-centric enterprise in which digital information is the lifeblood of the operation. This approach continuously collects, integrates and analyzes data on program output and citizen needs to turn that information into actionable insight. But a poorly-planned and executed digital transformation strategy can also end in disaster: a boondoggle that misses all the marks.

ELEMENTS OF AN EFFECTIVE ROADMAP INCLUDE:

- Running digital awareness sessions with the leadership team to galvanize support and provide a common view on the digital opportunities/threats
- Performing an enterprise value assessment to quantify operational impacts
- Establishing a critical information assessment to enable the IT aspects of the transformation
- Launching citizen experience studies to confirm key segments and program opportunities
- Undertaking digital maturity assessments to ensure the agency, culture and programs are set up for success

An effective digital strategy can transform an agency, driving efficiencies in current services and uncovering new opportunities to achieve operational excellence. The right digital strategy can identify opportunities such as transformational outsourcing to optimize your operations, thereby reducing costs and creating a more agile enterprise ready to respond creatively to changing citizen preferences.

Now that we know what the picture should look like—from the Nine Digital Competencies—and we know what pieces are necessary to form the right picture (following the holistic approach and drawing the right roadmap), we need to consider how to finally make those pieces fit together—or, rather, how to choose the right partner to help agency IT leaders form the clearest picture of your organization’s path to digital transformation.

The right transformation partner should possess a proven track record of helping clients build and execute their digital transformation strategies, providing a roadmap that focuses on value, insight and experience—one that can assist you wherever you are along your journey, whether you’re at the start or already have a strategy in place and need help with its evaluation and implementation.

HERE ARE SOME QUESTIONS TO ASK WHEN SEARCHING FOR THE RIGHT PARTNER:

- **Mission focus**: Is your potential partner providing a clear definition for your digital strategy that aligns to the mission?
- **Operational impact**: Can the partner develop a clear business case that will help you identify value upfront, enabling you to predict the operational and cost efficiencies you can expect from your digital investment?
• **Cultural change:** One of the most difficult parts of becoming a digital-first organization is the sea change required in building a digital-first culture. Can your partner adequately map out the required cultural and personnel change plans to ensure digital changes are embedded and actionable throughout your organization?

• **Prioritized imperatives:** Is your transformation partner able to identify a range of operational imperatives—opportunities that already exist in your agency to achieve mission excellence, reduce costs and improve efficiency—and work with you to decide which levers to pull first?

• **Integration of digital and physical channels:** It’s easy to get stuck in the gap between digital and physical channels. Can the partner you choose engage citizens using the most appropriate channels while—at the same time—achieving the right balance across channels?

• **Using digital enablers:** Across the board, digital leaders and game changers are employing digital enablers—such as data analytics, IoT, cloud computing, automation, mobility, social media and more—to accelerate their transformation journeys. Can your chosen partner use these enablers to create a more citizen-centric culture, develop people and technology in support of a more agile digital future, and design new operating models that leverage greater connectivity and digital insight—each embedded with robust cybersecurity?

**IN SUMMARY**

New technologies have changed the way citizens expect services to be delivered to them, whether those services are from the public or private sector. Embarking on a journey to digital transformation will help ensure that you can not only meet the needs of citizens, but also help improve your efficiency, decision-making and reach, all of which go into providing an improved user experience for citizens.

Drawing from our work with clients around the world, we have identified Nine Digital Competencies common to organizations that are implementing successful digital transformation initiatives. Utilizing a Holistic Approach throughout an agency’s digital execution can help them get closer to achieving those best practices. But digital transformation is a highly complex endeavor, and understanding these aspects alone isn’t enough.

It’s possible for an organization to succeed at digital transformation on its own, but the path is difficult. An experienced partner utilizing the right mix of solutions and executing on a well-developed strategy, can make the endeavor much less daunting.