Microsoft

Government digital transformation:
4 strategies for success

The world has dramatically changed in the past few months. The way we work, and live, has also changed. Governments have had to pivot to move to remote work and remote governing even as they struggle to understand the future after the global health pandemic. These recent events have shown that digital technology and data have become indispensable tools for governments as they adapt to changes across their organizations. Many government leaders are reassessing their plans and imagining a future where technology is seen as a key tool in helping their agencies handle and overcome the challenges caused from the pandemic.

Microsoft is committed to helping governments get the tools they need to overcome their challenges. We are also committed to helping the world stay connected, secure, and productive through the crisis and beyond.
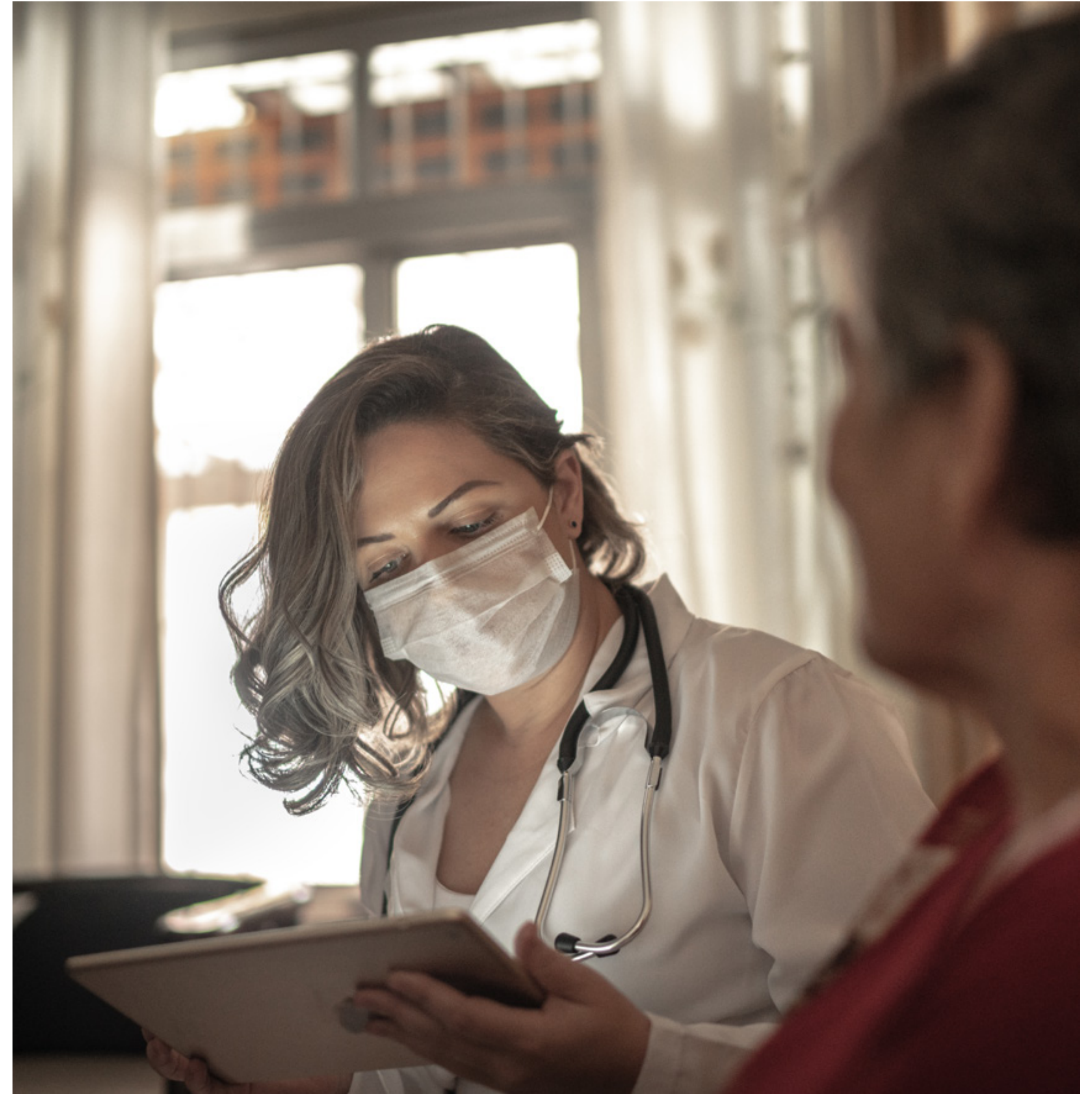
Who should read this?

This white paper is for government leaders and IT decision-makers seeking to become more agile and responsive, enhance services, empower citizens, and reduce costs using modern technology. These goals take on new urgency in a climate where protecting public health, promoting inclusive economic recovery, and ensuring operational continuity are more important than ever. At the same time, it is critical to ensure systems are highly secure and resilient even during rapid change.

In our work with many government leaders around the world, we have noticed common challenges they face when attempting digital transformation—as well as strategies frequently employed by those who achieve success. By sharing what we've learned, we hope to provide new strategies for making digital transformation initiatives successful.
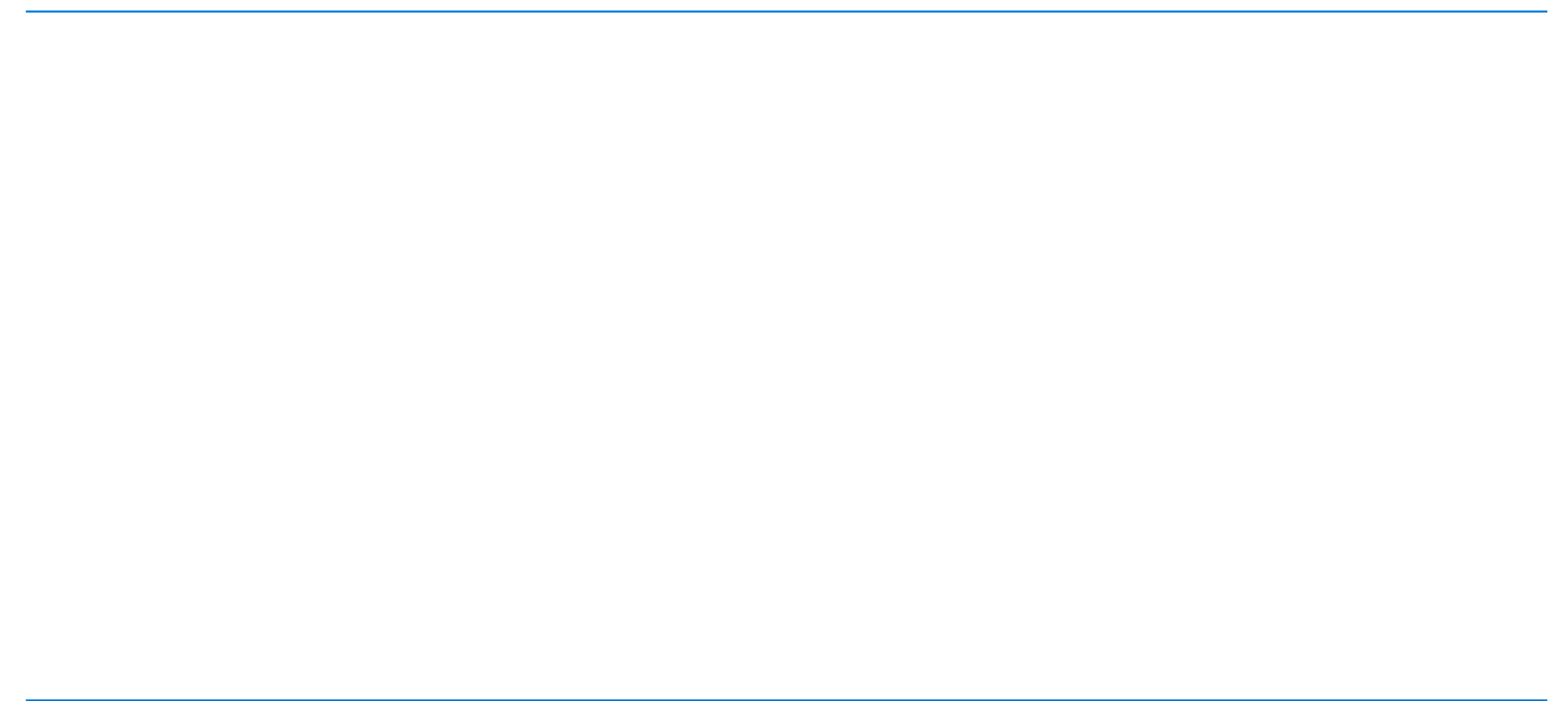
Thanks to modern technology, governments have an unprecedented opportunity to create greater value for society—improving public health, engaging citizens, promoting economic recovery and growth, and ensuring continuity of operations.

Digital transformation also supports greater resiliency in the face of crisis and change. For example, cloud-based solutions can easily scale to meet demand and speed rollout of new services. Modern IT architectures can be adapted to new circumstances quickly. The cloud makes it easier to capture and share data to support highly secure scientific and organizational collaboration.

However, government organizations face challenges bringing their digital visions to life. Their budgets may be limited in scale and restricted to certain activities. They must navigate complex procurement and approval processes. Training and upskilling existing workforces while attracting new talent remains a challenge—especially with increasing reliance on remote work and remote government. They must also ensure cybersecurity and resiliency.

Success is within reach

What are the secrets of success? In this white paper, we examine how government organizations can remove digital transformation roadblocks to serve more citizens, increase efficiency, and make a bigger difference in people's lives.

Challenges to government digital transformation

The following three factors are common challenges faced by government agencies as they modernize:

• Aligning IT and the business of government

• Budget constraints

• Risk
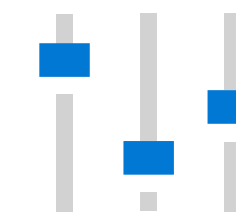
Aligning IT and the business of government

In their desire to maintain a compliant, secure environment, government IT organizations can be perceived by business decision-makers as gatekeepers, causing leaders to go outside the organization.

These disconnects can become especially pronounced when IT departments lack visibility into the outcomes desired by business decision-makers, or when those decision-makers feel they must be experts in technology to get anything done. Focusing on communication and alignment among IT, finance, and departmental leadership can help each contribute their best.
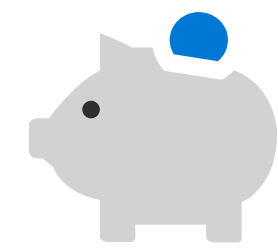
Budget constraints

Governments face limited budgets and complex budgeting processes. They must be accountable to the citizens whose money is being spent. They must also remain true to the reason revenue was collected, as well as the priorities of the community as reflected in procurement rules—including appropriate checks and balances. As governments prepare for the most difficult fiscal climate in generations, spending must be thoroughly examined and justified.

Overlapping jurisdictions, budgetary silos, distinctions between operational and capital expenses, and the sheer complexity of preparing and approving budgets in a public context can all limit the speed of transformation.

At the same time, modern technology can also reduce costs. In many cases, investments are more than outweighed by the savings. New approaches increase flexibility and serve more people at lower cost. They simplify management and free resources to focus on improving citizen engagement and service.

Sometimes challenges also contain the seeds of opportunity. Changes or crises can unlock funding unexpectedly. Having a clear vision about where you're headed from an IT perspective can help you make the most of these prospects even when the window of opportunity may be limited.

Risk

A business might lose money or customers if its new digital initiative fails. For a government agency that's responsible for public health, environmental quality, transportation, justice, or human services, the stakes can be a matter of life and death.

Government organizations are designed to persist, so they can deliver services and protect the public beyond individual leaders, programs, and initiatives. They must consider the track record of any new approach, as well as the appropriate levels of redundancy, before a new technology can take its place in the government's ecosystem. Because organizations are dealing with the most sensitive data, cybersecurity, privacy, and compliance must be maintained to the highest standards.

At the same time, modern digital technologies can increase security, resiliency, and continuity in their technology choices. Brittle, monolithic, or outdated systems can be riskier to maintain than to re-platform or replace. Periods of crisis highlight these challenges. It's easier to modernize during a period of calm than it is to try to rapidly increase the number of COBOL programmers on staff to deal with a sudden spike in demand.

Governments must also meet high certification and compliance standards. A limited but reliable technology system will always be preferred over one that is promising, yet unproven. However, being too conservative can create opportunity cost, downtime, and lack of scalability. Taking advantage of shared responsibility in the cloud can greatly simplify compliance challenges so government organizations can focus on citizens and services.

Strategies for success

To translate ideas into action, governments can draw inspiration from one another, private industry, and partners with a broad vision of technology value. Many aspects of successful change are less about technology and more about culture, planning, collaboration, and budgeting. In this section, we look at four keys to successful transformation.

Clarifying your vision

The traditional approach to government IT tends to be tactical in nature: identify a problem. Buy a solution. Deploy. Repeat. While this may be the right answer in some cases, it can lead to a fragmented environment and missed opportunities.

Starting with outcomes—rather than reacting to needs as they arise—can guide technology choices toward greater long-term value. Whether it's public health, citizen engagement, crime reduction, faster movement of people and goods, or infrastructure improvement, successful transformation has tangible goals at its core.

It starts with defining the outcome: in concrete, measurable terms, what does your organization want to achieve? Once that is defined, you can bring technical and business experts together to identify the best path forward. By creating a vision focused on outcomes, you can avoid getting stuck in a situation where leaders believe they need to be experts on technology.

Modern infrastructure and development practices allow a hybrid or incremental approach. In many cases, organizations find themselves reducing their technology workload by retiring a data center or purchasing a software-as-a-service solution rather than building a custom application.

It can also be useful to take a broad view of potential risks and challenges. Considering how well a technology choice would perform not only under current conditions but in times of uncertainty or increased demand may influence the ultimate design of a system. For example, traditional, on-premises systems may be unable to handle dramatic increases in unemployment applications or remote working, but cloud-based systems can scale quickly to handle large increases in demand.

Broadening your vision with big-picture questions

It pays to take a step back from the day-to-day processes of budgeting, requirements, and project management to ask big-picture questions.

Questions for government decision makers

- What is our core mission? What are we really trying to achieve?

- What improvements do we want to see in the world?

- How can we measure them—and the impact of technology on achieving them?

- Who is doing this right in government and industry right now?

- How can we better articulate the outcomes we want to see and use them to drive technology decisions, instead of starting with technical requirements?

- What do we need to ensure the performance of the system in times of increased demand or uncertainty?

- How can we upskill our workforce to be able to take advantage of new digital capabilities?

Questions for IT decision makers

- What role does technology play in achieving our mission today?

- How could that role change for the better?

- How do our current partners and vendors approach these broader challenges?

- What are other agencies doing with technologies such as AI, analytics, and the Internet of Things?

- How can we position ourselves to be more agile without rebuilding our entire technology stack?

- How can modern technology enhance the resiliency of our systems?

- How can we upskill our workforce to deliver new digital capabilities?

Enhancing leadership collaboration

Organizations succeed at transformation when government and IT leaders recognize shared goals and benefits, such as increased agility and responsiveness, cost optimization, and greater bandwidth to focus on innovation. When decision makers are in sync, they can often identify and implement creative new approaches faster and avoid the risk of failure.

Active communication is the key to unlocking the value of this relationship. Government leaders can help by engaging IT early and continuously in the planning process, and by staying focused on outcomes. IT can work to understand what drives those outcomes and focusing on the best ways to achieve them rather than focusing on limitations of current systems.

Building bridges

These questions can help you diagnose potential issues in communication between administrators, employees, and IT in your agency.

Questions for government decision makers

- How often does our department communicate with the IT function outside of budgeting and procurement, or to get support when something breaks?

- What are some practical ways we can help IT leaders better understand the mission and activities of the department, such as shadowing departmental staff?

- On the other hand, what are we doing as business leaders to understand IT's world?

- What roles do interpersonal relationships play in this dynamic and how could they be improved?

Questions for IT decision makers

- What are the aspects of successful outcomes that we share across IT and the department?

- How can we better understand the outcomes sought by the organizations we are part of?

- What are we doing to educate business decision makers about the opportunities presented by modern IT?

- How can we encourage creative collaboration between technical and departmental staff?

- What are the win/wins of transformation for business and IT together, especially when it comes to addressing high-pressure scenarios?

Building buy-in

People need to see a clear path forward and proof of success if they are going to pursue new approaches to technology. Detailed success stories can go a long way toward helping them embrace the art of the possible.

Many forward-thinking government leaders are enthusiastic about sharing their successes. Connecting with them directly can be a great way to gain insight into best practices and potential pitfalls. Your technology partners can also be a source of this type of information.

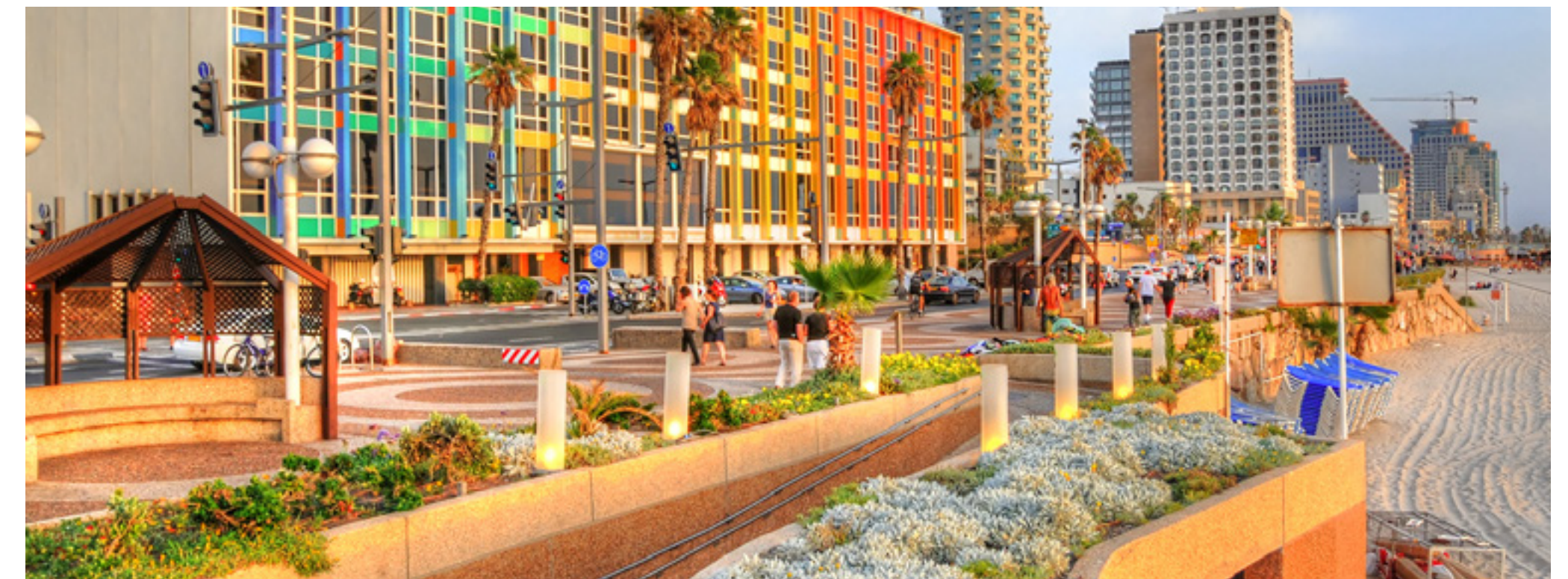## Three government transformation success stories

Tel Aviv engages citizens with innovative digital services, public participation

City of Tel Aviv, Israel

Involving citizens in decision making is becoming more and more a part of how we operate, and it's really changing the way we do business on a daily basis."

Chief Information Officer, City of Tel Aviv-Jaffa

Washington Health Benefits Exchange builds a highly secure and compliant environment to protect citizens' data

State of Washington, USA

" When we started this project, we were concerned about security and compliance and thought the cloud was a no-go. However, Azure Government gave us the flexibility we needed to create the most secure and compliant environment possible."

Associate Director of Infrastructure Services, Washington Health Benefits Exchange
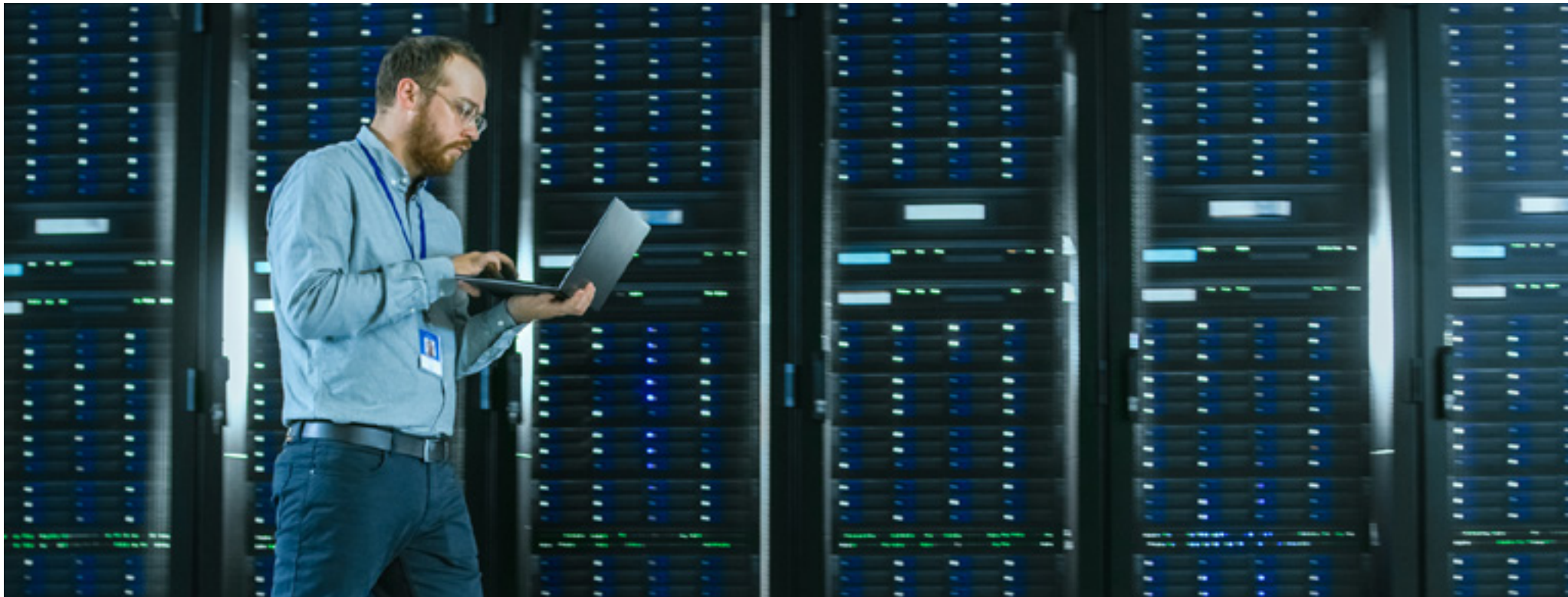
Provincial government goes digital to spark proactive civic engagement

Gauteng, South Africa

" We wanted to move away from paper and manual processes and bring all citizen services to our digital platform."

Acting Deputy Director General, Gauteng Provincial Government

Showing a positive path forward

Another way to address fear of change is to frame it as an incremental journey where success will be proven at each step. Cloud technology supports this approach by allowing services to be turned on and off without the need to invest in capital infrastructure. Experimentation, proofs of concept, and pilot projects often require little investment and can provide significant insight—and prove that change can be made while preserving trustworthy technology.

There's often a fear that technology-driven efficiency will cause people to lose their jobs. However, this is not what we've typically seen for our customers. In most instances, highly skilled individuals spend far too much of their time doing menial tasks. Technology frees them to focus on higher-value work.

As remote work and remote governing proliferate, modern technology is critical to carrying out a government's mission. Technology such as digital collaboration, augmented reality, and virtual agents can be used to upskill the existing workforce to take advantage of the latest capabilities— while providing a secure, always up-to-date productive experience. It can also ensure that people can focus on the most important aspects of their jobs when unexpected circumstances arise, when staffing up is not an option.

Overcoming budget challenges

According to the US General Accounting Office, over 80 percent of all federal IT spending in the country goes toward operations and maintenance of "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."[1]

To address this, organizations can look for ways that transformation enables more efficient use of funds. Some modernization initiatives show clear cost savings over existing solutions thanks to the ability to retire costly infrastructure. In other cases, return on investment can be demonstrated through increased productivity, lower costs, or enhanced outcomes.

Complex and rigid budget and procurement processes, although sometimes frustrating, exist to ensure public funds are spent responsibly. However, many

predate the cloud-driven shift from capital to operational expenses. Government accounting rules often require certain revenue streams to go toward capital expenses, limiting the ability to invest in cloud technology.

Many regulatory bodies, such as the Government Accounting Standards Board in the United States, the European Union, the Office of Economic Cooperation and Development (OECD), the International Financial Reporting Standards (IFRS), and others are working to update requirements accordingly. Some organizations address this issue by treating transformation as a one-time capital investment.

Some invest in transformation planning so they are ready to implement when resources become available. If new leadership, initiatives, referenda, or circumstances bring about new funding sources, the organization can be ready to take the next steps toward a transformed future.

[1]"Government needs to get serious about IT modernization," FCW, 2019.

Modernizing your approach to IT

Newer approaches and technologies reduce the need to perform massive migrations or wholesale replacements of existing technology. For example, many governments still rely on mainframe computers for core systems. Just a few years ago, replacement may have been the only option.

Today, hybrid and edge solutions provide options for incremental modernization. Using virtualization, containerization, or APIs, they can wrap old systems with new capabilities to enhance the citizen experience and enable innovation. They can increase cybersecurity, enable highly secure data sharing and collaboration, and enhance resiliency—all without replacement. Over time, they can reduce reliance on the older technology bit by bit, eventually retiring older technology when it becomes feasible.

Try something new

Using the cloud makes it easier and more economical for developers to experiment. Rather than having to deploy new capacity or borrow it from production workloads, they can easily spin up a test environment in the cloud and turn it off when they're finished.

Managed cloud services today go beyond simple computing infrastructure and storage. Whether you're interested in exploring AI for automating processes or enabling secure remote work, it's likely you don't have to build a solution from scratch internally.

Finally, choosing the right technology partners can significantly reduce compliance and security burdens. The shared responsibility model of cloud services means you don't have to configure and manage every aspect of security and compliance. Some vendors, such as Microsoft, even have cloud environments configured specifically for government customers in certain regions.

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Transformation with a purpose

Technology can help government agencies improve services, support economic recovery, reduce costs, ensure resiliency, and increase secure collaboration. Choosing the right solution or platform naturally follows when the desired outcome is clear and understood—and when departmental and IT leaders have a healthy working relationship.

Microsoft helps governments fulfill their missions through digital transformation, providing partnership, insights, and solutions to enable remote government access, empower cross agency collaboration, and deliver trusted and secure services.