How technology can unlock the power of digital government

EY

Building a better working world

Guided by the belief that digital solutions should serve the public — in health care, constituent services, cybersecurity, employment and beyond — the EY organization has harnessed the power of its high-tech alliances to improve the citizen experience.

Until recently, the push for government digital transformation has been deferred to future planning: robotic automation, artificial intelligence (AI) and cloud-first design were seen as opaque, beyond the time horizons of the public sector, the sleek tech of Silicon Valley.

Then came the global pandemic, raising the cost of governments' dependence on outdated systems in human lives. Wish list items of government modernization were suddenly pushed to the foreground as critical and urgent. IT leaders in the public sector faced a set of critical decisions, like which technologies made the most sense and who was best suited to run and support them? As the COVID-19 pandemic swept across the US, the cacophony of unmanaged data created shortfalls in health care testing, treatment and vaccination. How would health authorities handle statewide contact tracing? What about the variants? How safe and effective are the vaccines? How would we expedite communication, distribution and the associated logistics?

But in the state of Georgia, residents were getting practical, personalized answers to these questions — in multiple languages — thanks to an AI-powered virtual agent developed by EY professionals. Nicknamed "Peachy," this interactive tool was designed using EY technology alliance relationship partner Microsoft's Azure cognitive tools. Then, to process an incoming torrent of complex medical data, EY professionals developed several robotic process automation (RPA) tools with another EY technology alliance relationship partner, UiPath — a set of solutions that continue to improve decision-making for Georgia's health authorities. Meanwhile, a powerful contact tracing dashboard — created specifically for the Georgia Department of Public Health using Microsoft's Power Platform — was geotagging parts of the state where the vaccines were needed most and automatically processing shot requests.

Information silos and data shocks don't just paralyze health officials in times of crisis, they extend to infrastructure and everyday services, leaving historically underserved groups especially vulnerable.

In fact, a global survey, part of the EY Connected Residents initiative, confirmed a changing view of government and its role in people's lives: **residents from a dozen countries expressed concern that their basic needs were not being met, from access to quality health care to feeling safe in their own communities.**

Bringing intelligent, highly personal solutions from companies like Pegasystems – already used in banking – these alliances are helping implement simple and intuitive functions that allow e-government services to offer a better user experience – from waiting in lines or on hold to slow manual processes and approvals. Understanding your constituents as real people, with backgrounds and needs as diverse as their lived experiences, was critical.

Whether in a global crisis or while renewing a state ID, this challenge to one-size-fits-all public service was also echoed in the EY Connected Residents study, which found greater acceptance for digital government services when they created a friendlier space for people to connect. It suggested that constituents expect from their government what they already get in everyday commercial transactions, like one-click shopping or paying their credit card bills online: speed, efficiency, transparency, reliability, security and a personal touch.

"While we offered calls in English and French, we had very diverse staff fluent in multiple languages," said Debby Wong, Manager, Ernst & Young LLP, describing an interactive telephony system developed by EY tech collaborator ServiceNow to help Canadian small business owners in distress. "When someone was struggling with translations, we would message on secure channels. We could then easily transfer the caller to an advisor who spoke the native language."

The impact of this technology led to the creation of the Business Resilience Service (BRS), a joint initiative between EY professionals and the Canadian Chamber of Commerce, and proved so successful it actually influenced the Canadian government's policies on assisting small businesses in times of need.

This and other EY e-government alliances dispel the myth that disruptive technology has to disrupt basic services. On the contrary, applications like Adobe and cloud based Microsoft 365 once seen as beyond the learning curve, are now commonplace, even expected and increasing safety and workplace productivity across the private sector. Customized training, multifactor authentication, a simpler migration of email boxes – a more intuitive and personal experience for citizens and those who serve them – can just as easily make government agencies better stewards of taxpayer money.

Did you know?

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"Filling out paperwork and carrying cumbersome electronics is no longer necessary and sometimes dangerous, especially for workers operating in difficult environments," says Jeffrey Penner, EY GPS Digital and Technology Enablement Leader. "We can relieve them of that burden with intuitive, user-friendly, mobile-first solutions that are powered by AI and smart cloud-based capabilities."

What is digital government and how can it improve citizens' experiences are also questions of safety. Malicious actors don't wait for digital government transformation and weaponize the same tools to exploit vulnerabilities. Using ransomware, they hit increasingly softer targets: public sector employment, entire municipalities, even hospitals, forcing them to make payments or risk halting critical, life-saving services.

"In fact, cybersecurity is now widely seen as the risk of the decade," said Chuck Seets, EY Americas Assurance Cybersecurity Leader. With no borders to contain it, the tsunami of digital transformation has brought with it risks to not just IT and banking, but increasingly energy, water treatment, transportation and other critical infrastructure.

To help its clients track and respond to cyber attacks, we have tapped the power of IBM platforms – a suite of applications already used by thousands of companies to detect breaches, assess damage and automatically patch vulnerabilities to prevent future attacks. The EY-IBM Alliance offers a powerful combination of technology and cyber communications strategy, along with education and training for any organization's first line of defense against cyber threats and backed by EY people with public sector–specific cyber knowledge and experience.

Governments can no longer afford to operate without the same advance levels of deterrence. This is why, leveraging Microsoft technologies, EY Security Simplification helps organizations shift to a platform strategy – an integrated approach to information and cloud safety that seamlessly combines Microsoft's latest security tools without compromising productivity. The alliance proved so successful at shoring up protections against cyber threats, that our US firm was named the leader in Microsoft Implementation Services by IDC MarketScape in 2021.

These digital government safeguards should also aid those who do the jobs that can't be done remotely: sanitation, hospital staff, electrical line and gas main technicians, and others civil service workers operating in the field.

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"You can validate utility lines just through video recording how they appear as you drive by in a car," said Raghu Raj, Principal, Technology Consulting, Enterprise Asset Management practice, Ernst & Young LLP, explaining the benefits of AI, character recognition software and computer vision. In hospitals and operating rooms, it can capture inventory levels in supply closets just with an image.

Digital government transformation is an opportunity for progress in the public sector, a broader pathway for workers and citizens to live better and more fulfilling lives. It's about taking technology-agnostic approaches, understanding organizations' specific needs and bringing it all together — a vision of e-government only the most forward-thinking IT leaders have the background and capabilities to realize.

This is only the beginning. To unlock the power of digital government, learn more about EY alliances.

By adopting these and other digital technologies, e-government can reduce costs and the time lag of providing basic services. They can improve hiring, minimize dull and repeatable work, and bridge digital divides between people from diverse socioeconomic backgrounds. With AI, advanced cloud solutions and cybersecurity, they can transform how citizens engage with governments through one-stop access to multiple services to make those interactions more respectful, compassionate and built around individual needs.

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