

COVID-19 and Virtual Solutions

Throughout 2020, governments have faced unique challenges including shifting to a remote operating environment, navigating uncertainty around revenue and operating needs, and facing demands to deliver services in new ways.

- **Shift to Remote Operations**

Almost immediately at the onset of the coronavirus pandemic, governments needed to move their workforce offsite. Shifting to a remote operating environment meant that staff needed access to the full capabilities of their software solutions from home. It's worthwhile to note that governments with web-accessible cloud solutions had an easier time with this rapid shift.

- **Financial and Workforce Uncertainty**

Prior to COVID-19, governments largely managed by patterns: "It's what we've always done. Next year, we expect to see a five-percent increase, etc." There was a linear, predictable planning approach. Now, governments face new challenges around their ability to forecast where they will be in three, six, or nine months with changing revenue. There is significant uncertainty around losing major revenue sources or potential inability to access a certain portion of their workforce. Constituents' needs for services may also change dramatically from one period to the next. It's a challenge to forecast forward and ensure the right mix of financial and human resources to meet community needs.

- **New Public Service Delivery**

Finally, people want and need to interact with government remotely. There was a scramble when COVID-19's early days exposed holes in governments' online presence and ability to expand online offerings for things that were normally accomplished in person. For example, someone

contesting a traffic ticket would ordinarily appear before a judge. Today, that person can pay a ticket online with a guilty plea, but there's not a good answer for someone pleading not guilty.

Governments reached a pivotal moment and created changes that are here to stay. The demand for online services, in particular, became urgent during the pandemic. The expectation is that those services are going to remain and keep rolling.

Virtual solutions that enable remote work, help navigate uncertainty, and facilitate new ways to serve are certainly responses to the COVID-19 crisis environment.

Even more important, they are necessary for governments to be sure that when the next crisis hits — whether recession, hurricane, or something else — their technology is in place and flexible enough to support them.

Virtual Solutions

To improve daily operations now and weather the next full-blown crisis or even smaller bump in the road, governments should implement comprehensive virtual solutions to better serve all stakeholders. Stakeholders in the broadest sense of the term include government employees, businesses, residents, other governments and agencies, and decision-makers and officials.

Following are specific ways to meet the evolving needs of these groups.

1. Better Serve Government Employees

Employees' ability to work remotely relies on transforming familiar, in-person workflows to new digital solutions.

Virtual Work Solutions. Web-based, cloud solutions enable remote work and are easily scalable to add new functionality and evolve as community needs change. Digital content management makes all relevant documents available to remote workers throughout workflows, putting key information at employee fingertips rather than in inaccessible file cabinets.

Electronic Time Sheets. Digital workflows effectively replace inefficient paper processes around time, attendance, and scheduling, eliminating in-person handoffs and signoffs.

Employee Self-Service. Improving employee access to crucial information and services reduces other staff time spent responding to routine requests. Fully customizable employee portals help staff help themselves, from updating personal information to making benefit selections, in a way that also eliminates paper forms and redundant data entry.

2. Better Serve the Business Community

Technology that connects the core functions of government internally and to the public can facilitate advanced business management and bolster community development.

Automate Internal Processes. Solutions that reach the public, automate business functions, and enable self-service expedite actions necessary for growth and economic development, such as licensing, tax remittance, and fee collections. These solutions also help to enforce ordinances even when offices are physically closed.

Paperless, Web-Based Plan Reviews. Integrating regulatory and business development requirements of relevant departments in a single platform creates internal efficiencies so staff can process plan reviews, permits, and inspections, faster and from remote locations. Specifically, a browser-based, paperless plan review and submittal process provides collaborative interaction between government and constituents without requiring in-person interaction.

Community Development Public Portals. Modern community development software provides online or mobile permitting, inspection, payment, and enforcement functionalities, 24/7. Allowing online monetary or records retrieval transactions helps community members conduct nearly all business with government online, on their own time, and keeps development moving forward.

3. Better Serve Residents

Governments that inform, engage, and enable action for their residents allow constituents to become a part of the government process. Successful, user-centered policy and program delivery not only provide easy ways for residents to interact with agencies and consume information that is relevant to them, they solve the challenge of people of going to multiple departments to conduct government business.

Remote Accessibility. Having a quick and reliable e-commerce solution to support traditional in-office transactions ensures that residents can "do business" with government from anywhere. Facilitating easy remote transactions also ensures timely revenue collection. Enabling online utility payments via web link or phone payments via IVR systems, for example, drastically reduces delinquencies.

Community Engagement. Facilitating mass communication can also help residents conduct business with government more easily. With real-time or pre-scheduled push notifications, governments can quickly disseminate emergency or other information to residents, targeted by location, whenever necessary. These types of notifications also play an important role in relaying emergency information to the hearing impaired, where traditional phone calls or emergency sirens prove ineffective.

Offering public-facing engagement tools in an app allows residents to participate in government in a customizable mobile experience. Using a 311 app or website, governments can expand two-way communication with residents, allowing them to make payments, report non-emergency issues, request services, and respond to surveys.

Mobile-friendly websites that are easy to navigate and provide both information and useful interaction are also essential in providing community news. Interactive maps help residents access geospatial views for neighborhood-level information, as well for trend analysis or alert notification. Remote government employees can additionally convey news automatically to residents via phone, text, or email in a secure, audited environment.

Technology that facilitates remote meeting management allows residents to participate in virtual town hall or council meetings, with online agendas, minutes, and real-time meeting interaction. This not only helps internal organizational guidelines but increases transparency.

4. Better Serve Students and Parents

For parents, caregivers, and school personnel, easy access to school and student information is essential.

Student Information Systems. With mobile-capable portals, real-time student information is accessible to students, parents, guardians, and district staff. Customizable dashboards with live content tiles ensure relevant information is delivered to each user. This allows all stakeholders to track homework and grades, file incident reports, record medical information or nurse visits, update meal accounts, or track purchases. Popular systems allow parents to complete student information forms online in a way that eliminates redundant data entry for multiple children in a household with family-wide fields. Such a system electronically alerts staff and parents when a form is missing and also allows the school to make announcements, either school-wide or to specific classes or groups.

Student Transportation and Parent Communication. Mobile apps enable parents or caregivers to access a child's bus stop location, route, and daily estimated pick up time without having to contact the district. Such apps allow districts to notify specific families affected by late bus issues. The apps and the accompanying routing software were instrumental in locating children and executing targeted school lunch delivery and other services during the coronavirus pandemic.

5. Better Serve Law and Justice Partners

Increasing access to the justice system for all residents means integrating justice partners and bringing court services to the convenience of constituents' homes.

Online Dispute Resolution. Online dispute resolution (ODR) helps individuals reach family or small claims case resolution from their own homes, outside of court hours. Through ODR, the same litigants who would have had to take time off work or perhaps drive hours for an in-person hearing can access an online platform from home and at their own pace. This not only removes barriers to access to justice, but dramatically speeds case resolution time and reduces court backlogs.

Virtual Courts. Flexible options to skip in-person interaction empower residents to take care of matters, such as citations, in a timely manner from the convenience of their homes through video chat technology.

6. Better Serve Stakeholders and Decision Makers

A secure, cloud-based infrastructure with self-service access facilitates transparency by providing up-to-date data that can illustrate trends, improve financial oversight, reduce costs, and engage the public and officials region-wide. Collecting data, making sense of it, and publishing it so that stakeholders can draw correct inferences and take action are important components of solving real problems on the ground.

Open Data Dashboards. Using open data portals and data analytics, decision makers can access accurate, actionable government information. Up-to-date data supports meaningful program evaluation and fact-based policy decisions. Dashboards connect disparate data and surface it to executive-level staff and officials for increased insight and more informed resource allocation.

Maps. Map-centric portals allow leaders, the public, legislators, and the press to view and analyze community development, public health, and other regional trends.

7. Improved Security

Security threats to government systems increase every year. It is nearly impossible to keep up with the number of vectors of attack into local government systems. In addition to constantly evolving security threats, governments must stay compliant with federal or state security regulations.

Cybersecurity. Integrating people, processes, and technology (with frequent checks of all three), is the foundation of a lasting cybersecurity culture. Developing a cybersecurity culture includes policies and procedures that account for continuity of operations, disaster recovery, and incident response. In order for such a culture to endure, strategies must include the people who make it up. Clarity around cybersecurity responsibility and annual training are imperative.

Another discreet component of robust cybersecurity is the ability to detect when government systems are under attack. It's too late to look for vulnerabilities after an attack has occurred. Managed threat detection is essential for the security of internal systems, along with preventative risk assessment and mitigation.

The Right Vendor for Virtual

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ROI and the Cloud

Implementing virtual solutions has the added benefit of significant returns on investment. Developing a solid government technology stack to support the above solutions is not typically a large capital event. Moving to the cloud, for example, levels out expenditures in predictable amounts, and is an incremental spend over a government's previous run rate for paying for software maintenance. Accelerating a move to the cloud allows governments to take advantage at low budget impact of its many capabilities that bolster all core areas. During the COVID-19 crisis, it was a big problem to have a critical server locked in an office where staff couldn't go. As the crisis continues and as we look into the future, there are other benefits. Not only does the cloud mitigate security risk, it can also improve the agility of government to respond quickly to rapidly evolving situations.

Savings are also realized in head count. While virtual solutions do not eliminate positions outright, they facilitate headcounts that flatten or diminish over time. New efficiencies allow governments to leave vacancies unfilled, or to redirect existing staff to higher priorities or valuable projects that have sat on the back burner for years. Technology, in other words, enables governments to keep up with an increasing workload with fewer staff.

The Future Shaped by Technology

When considering existing and new challenges facing governments, it is important to recognize that technology alone is not the solution to most problems. Policy changes are the solutions. That said, successful policies are nearly impossible to implement without enabling technology behind them.

To keep communities connected and served during crises and in times of change, governments must attend to a long-term digital infrastructure. The virtual solutions noted above not only better serve all key stakeholders, they provide governments with resource-saving efficiencies. In the context of uncertain fiscal impact and evolving community needs, strategies that make operations smarter and more sustainable are critical to move governments solidly into the future. The focus on virtual solutions is especially important as governments realize the value of mobility, online engagement, and remote citizen interaction. The continuation of remote work, investment in secure networks, and improved engagement and communication will drive ongoing innovation to strengthen governments and communities they serve well into the future.

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