



The Complete Guide to Improving Government Institutions' Efficiency Through Smart Digitalization

Executive Summary

The now connected and customer-centric world has customers demanding and expecting to have their needs met quickly and efficiently.

The modern customer is increasingly getting used to enhanced shopping experiences like ordering groceries online and having them delivered to their doorstep immediately.

Government institutions, however, operate and offer a somewhat different kind of experience.

Citizens fill out forms, print and mail them, make payments using cash or cheques, and make appointments that must happen between official office hours of 9 to 5, in person.

This kind of experience differs from what most people have come to expect from the likes of Amazon, Yelp, or Kayak.

Some innovative governments, however, have realized this and adapted **integrations for government-industry software**.

They are now using technology to offer innovative and customer-focused experiences to their citizens.

After all, why not treat your citizens as a business treats its customers? Governments run on taxes, just like businesses run on revenue from clients.

Digitalizing operations allows government institutions to improve the lives of citizens, demonstrate value, offer better experiences, and increase civic engagement.

It allows for ease of use, customization, pay-as-you-go, and so many other benefits.

Objectives of digital strategy	% agree
1. Increase efficiency	87%
2. Create or access valuable information or insights to improve decision making	84%
3. Improve customer/citizen experience and engagement, and transparency	82%
4. Fundamentally transform our organization processes and/or organization model	64%
5. Create or access valuable information or insights for innovation	62%

Image Source: Deloitte¹

¹ <https://www2.deloitte.com/pg/en/pages/public-sector/articles/digital-government-transformation-survey-results.html>

For a long time, government institutions believed they were immune to digital disruptions. But most of them have gotten the awakening call and cannot ignore it anymore. Government institutions and departments must find ways to deliver value in a completely different way.

Their changes must impact all government sectors and meet citizen expectations. They must find ways to fit into the emerging digital landscape in pursuit of value. They also must willingly evolve service delivery accordingly.

Smart digitalization will lead to an improved economy and society. It will allow institutions to efficiently and equitably serve citizens. Fail to adapt, and the institutions run the risk of becoming less relevant to citizens since they cannot identify or capitalize on opportunities that create value to them.

Unsatisfied or neglected citizens can use the same digital disruptors government institutions are ignoring to connect and organize. The institutions must, therefore, remain relevant and listen to their citizens.

A government that fails to adapt digital changes will become less able to discharge its duties to the public, and this can lead to inefficiency in terms of service delivery.

This paper seeks to show how government institutions can adapt smart digitalization to transform service delivery and create value for its public.

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Introduction

The digital revolution has disrupted not only the private but also the public sector. The era of cloud computing, data visualization, and social media has changed everything, including citizen expectations of government services.

Businesses and citizens alike expect to receive instantaneous access to services and information from government institutions. Therefore, governments have no other choice but to join the digital bandwagon.

Public institutions *must* embrace digitalization to offer citizens frictionless experiences and encourage collaboration across departments. The future of governments lies in coordinated services and real-time data flow.

Integrating government-specific software improves service delivery, enables transparency, and reduces costs. When data flows across systems, the responsible agencies can act in real time. The citizen can also access services across institutions seamlessly.

Government institutions have a mandate to support citizens through enabling good health, security, prosperity, and citizen well-being.² They use taxpayer's money to deliver these services with a promise to do it sustainably and efficiently.

To fulfill this mission and adapt to a technologically advanced public, they must embrace emerging technologies and digitalization. Without a digital strategy, government institutions will not perform adequately or meet the demands of its citizens.

Smart digitalization will open compelling opportunities to institutions and help them leverage the huge amounts of data they currently own. These institutions have amassed huge data over the years, but their closed-off nature means that they are not fully leveraging it.

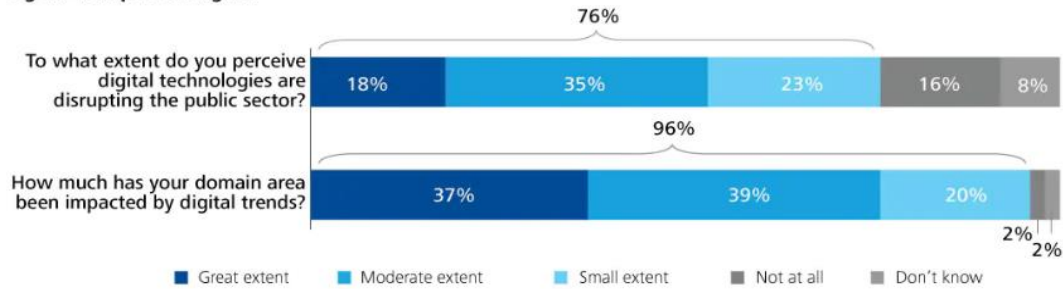
The institutions amass different standalone software and applications over time, leading to silos that duplicate infrastructure and create individual lines of business.

The isolated apps are expensive to manage and not flexible. This leads to reduced productivity, non-responsiveness, and lack of agility. Operating with silos and poorly integrated systems leads to inefficiencies and complications that lead to public frustration with government services.

Digitalization is reshaping how governments deliver services to citizens. Seventy-six percent of government leaders who participated in a Deloitte survey believed that digital technologies were having a major impact on their governments.

² <https://www.weforum.org/agenda/2017/02/government-responsibility-to-citizens-anne-marie-slaughter/>

Figure 1. Impact of digital



Graphic: Deloitte University Press | DUPress.com

Image Source: Deloitte³

How to Improve Government Institutions' Efficiency through Smart Digitalization

With citizen expectations at an all-time high, governments must consider what and how they deliver. Ensuring that citizens have great experiences should be the ultimate goal.

This will allow the institutions to achieve their stated missions, meet their budget goals, and engage employees. However, this will only succeed if the digital strategy starts with identifying and understanding the citizen's journey.

Improving the citizens' experience will involve enhancing their journeys across channels and products or services offered. It means putting the citizens' needs first and allowing them to engage with the institutions actively.

For citizens to fully benefit from this digital transformation, they must learn about the institution's services and understand the value they get from their services. Conversely, the institutions have to meet the requirements and needs of the citizen.

For example, government institutions offering student aids cannot help their target audience if students are not aware of the services offered, if they cannot find the correct information online, or if they experience difficulties when enrolling in certain programs.

³ <https://www2.deloitte.com/us/en/insights/topics/digital-transformation/digital-transformation-in-government.html>

Research from the retail or private sector shows that good experiences lead to customer loyalty.⁴

Ninety-three percent of customers will repeat purchases with companies that offer them great customer service, 69 percent will spend more on a company offering great customer service and those happy with the experience share their positive experiences with friends and refer about 11.

The same applies to government institutions.

Making it easier to complete transactions will encourage the citizen to comply, deliver services at a cost-effective price, and improve trust in the government.

Customer Experience and Loyalty

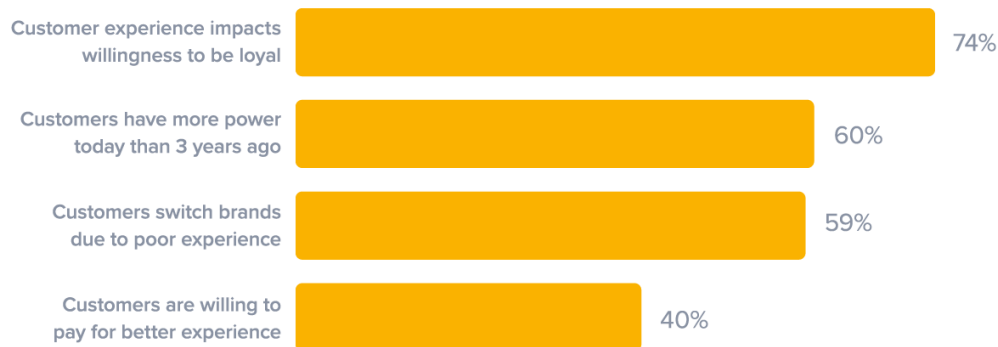


Image Source: Super Office⁵

To improve citizen experiences, government institutions must understand the customer journey and how each of the institutions works. According to Mckinsey, this excellence in customer experience is achievable with four elements working together.⁶

⁴ <https://blog.hubspot.com/service/customer-loyalty-statistics>

⁵ <https://www.superoffice.com/blog/customer-experience-strategy/>

⁶ <https://www.mckinsey.com/featured-insights/customer-experience>



Image Source: Mckinsey⁷

When the four work together, then the institutions can make improvements with insights leading to correct resource allocation.

Smart digitalization is the way to go for governments that want to accelerate their citizen's experience through digital journeys. They can identify what experiences matter most to citizens and focus on areas that customers value.

Digitizing public services will increase citizen engagement, help businesses flourish, and drive economic growth.

A government can deliver productivity improvements of at least \$1 trillion if it adopts digitalization.⁸ Digitalization can help government institutions improve efficiency, effectiveness, and customer satisfaction.

⁷ Idem

⁸ <https://www.mckinsey.com/industries/public-sector/our-insights/the-opportunity-in-government-productivity>

The government institutions can achieve efficiency by leveraging the following areas:

1. **Internet of Things (IoT)**
2. **Automation**
3. **Integrations For Government Industry Software**
4. **Mobile Apps**
5. **Data analytics**

1. IoT

The internet is exploding, and there is an upsurge of devices that can connect to it. The NCTA – Internet and Television Association estimates that by 2020 there will be more than 50 billion connected devices.⁹

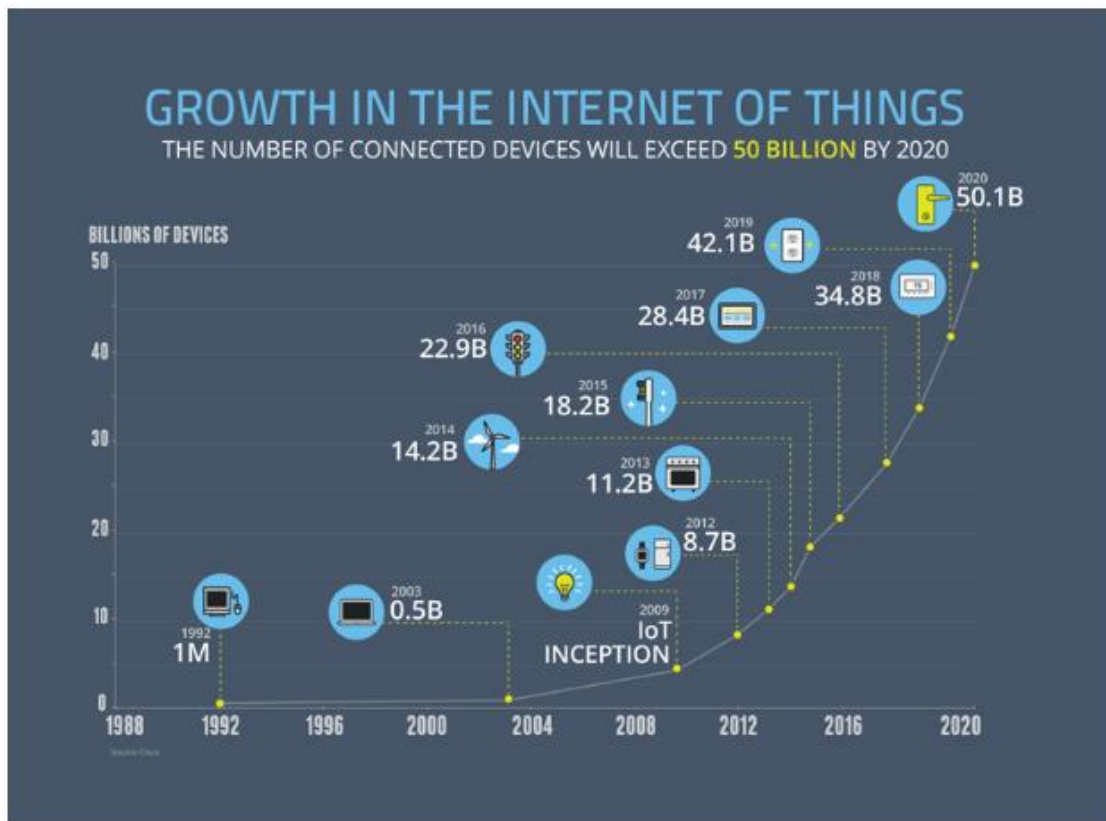


Image Source: NCTA¹⁰

⁹<https://www.ncta.com/whats-new/behind-the-numbers-growth-in-the-internet-of-things>

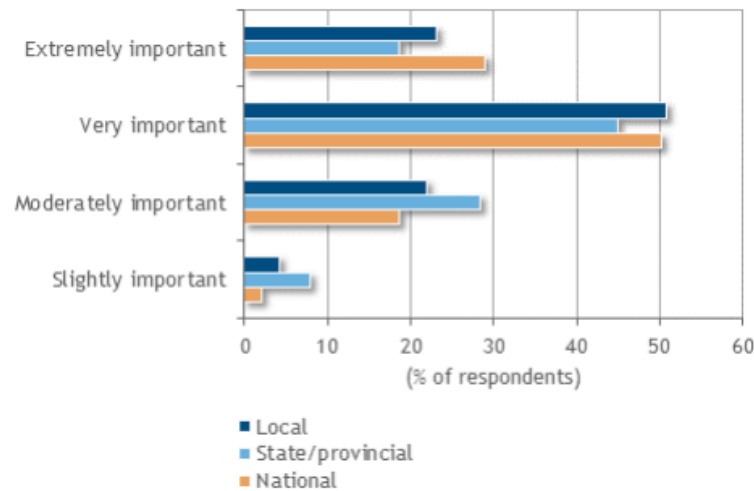
¹⁰ Idem

IoT is a groundbreaking innovation that brings people, data, processes and things together. It makes networked connections relevant by turning information gathered into actions.¹¹

IoT contributes to better, more accurate, and timelier decision making. It helps organizations capture, analyze, transport, and make decisions. A survey by IDC found that most government institutions consider IoT either extremely important or very important.¹²

Importance of IoT to the Organizations

Q. How important do you think the "Internet of Things" could be to your organization?



n = 429

Base = government respondents weighted by GDP

Source: IDC's Global IoT Decision Maker Survey, 2016

Image Source: IDC¹³

According to the survey, some of the reasons for its adoption include security, people tracking, improved efficiency, improved asset management effectiveness, and better business processes. IoT is one of the drivers changing how governments interact with their citizens and run their processes. It helps them improve infrastructure and the protection of citizens.

¹¹ https://www.cisco.com/c/dam/en_us/about/ac79/docs/innov/loE_Economy_FAQ.pdf

¹² <https://azure.microsoft.com/en-us/resources/idc-government-organizations-iot/>

¹³ Idem

Some of the ways government can apply IoT include:

a) Smart cities

Smart cities use emerging technologies and innovation to offer new services, make cities liveable, and tap economic opportunities. Built on a communication and information technology foundation, they allow for economic development, efficient city management, innovation, sustainability, and citizen engagement.¹⁴

To transform a city, institutions need data. Government institutions have access to data from existing government systems, third party applications, mobile applications, online platforms, and the citizens themselves.

To build a smart city, they will need to harness this data and use it to make informed data-driven decisions that give citizens exceptional experiences.

Smart cities involve automation, linking disparate systems and networks, and using this information to transform systems. All this helps make cities more efficient and ensures resources are where they are needed.

Some of the components that make smart cities work, according to *The Economic and Social Value of Building Intelligent Urban Spaces*, include:¹⁵

- A holistic city view of human activity in the area, including in schools, government, hospitals, resources, infrastructure, businesses, and people.
- The use of information and communication technology to enhance workability, livability, and sustainability. This can be done by connecting the various parts of government as well as businesses and residents with each other. The government institutions can then have access to the workings of the city at any given time, as well as own the tools to refine processes and anticipate various occurrences.
- Collection of data, dissemination, and analysis: the connected systems provide data and access to city conditions. The institutions will need smart devices like traffic sensors, smart gas meters, etc. to collect data. They will also need related public-sector software to run and sift through the information. Once collected, institutions can communicate the data through proprietary networks to the relevant departments, businesses, and consumers. The data is then analyzed to understand and predict what will happen in the future.

The internet of things can help government institutions connect infrastructure and vehicles in a city. It can help make a city smart, safe, and operate efficiently.

¹⁴ <https://www.idc.com/ap/smartcities/>

¹⁵ <http://www.knowledgeatwharton.com/books/library/smart-cities/>

Key Parameters that will Define a Smart City in 2020



Image Source: Frost & Sullivan¹⁶

b) Creating jobs

IoT makes it possible for institutions to identify blind spots. It helps analyze the industry and market place to identify growth opportunities.

Smart digitalization allows government institutions to build a dynamic and responsive work environment. The responsive environment is made possible by deploying intelligent automation tools that complement human workers.

Reducing repetitive and manual work leads to increased productivity and satisfaction. This new environment attracts, retains, and develops the required skills and capabilities.

¹⁶ <https://store.frost.com/strategic-opportunity-analysis-of-the-global-smart-city-market-19888.html>

c) National defense

With IoT, the government can better protect their borders using inexpensive and high performing devices. IoT automates the protection process leading to improved accuracy and speed.

d) City planning

The governing bodies can use IoT to analyze population growth, mapping, zoning, water supply, and land use during the planning and management of cities. They gather detailed data and analyze it to facilitate the planning and management of the city.

By working with government software companies, the cities can use IoT to manage infrastructure in healthcare and transportation. They can also use it in areas like water control, waste management, and emergency management.

e) Quick response to emergencies

IoT examines data and enables first responders to access real-time information on incidents and on how to respond. Environmental sensors, for example, can report early sightings of crime or an emergency, and alert police dispatch.

IoT helps reduce response time, reduces reliance on witnesses when documenting a crime, and locates unreported crimes.¹⁷

2. Automation

There is a lot of pressure for governments to improve efficiency, provide better services to citizens, and provide better working environments for employees. Employing automation in the private sector has seen businesses achieve these purposes and more.¹⁸

Governments need to leverage automation and artificial intelligence to gain benefits across their different functions. These benefits are achievable through building on existing IT systems.

¹⁷ <https://eena.org/wp-content/uploads/2018/11/The-Internet-of-things-and-emergency-services.pdf>

¹⁸ <https://www.cetrixcloudservices.com/blog/7-benefits-realized-through-digital-process-automation>

Adopting automation will lead to lowering operational costs, less wastage of resources, efficient processes, fewer errors, transparency, consistency, traceability, scalability, and higher employee satisfaction.

Employees in the public sector call centers spend lots of time doing repetitive work like picking calls, processing manual information, and navigating several systems. The result is a poor citizen experience and a frustrated employee.

Through automation, the agent is free from these repetitive tasks and can focus on giving the customer a great experience. Automation is transforming the customer care landscape, and government institutions need to take note.¹⁹

The institutions can have a website and then automate it to make it easy for citizens to communicate and complete applications. Others include digitizing citizen-facing services, including passport applications, filing tax returns, and driver's license applications.

Some governments now have eGovernment programs where citizens can obtain digital identities, digital signatures, and personal records.²⁰ Such a program makes it easy for citizens to access services online.

Some of the automatable operations include those in the finance department (general accounting operations, financial control, and cash disbursements) and those in HR (payroll administration, recruitment administration, benefits administration, and record-keeping).

Automating back-end processes allows for faster processing time as employees do not have to spend time manually entering data. The data is kept up to date, and errors reduced. The public can also engage with government employees via chatbots and intelligent assistants.

¹⁹ <https://www.consultancy.uk/news/12749/automation-is-transforming-customer-care-and-call-centre-landscape>

²⁰ <http://e-estonia.com/>

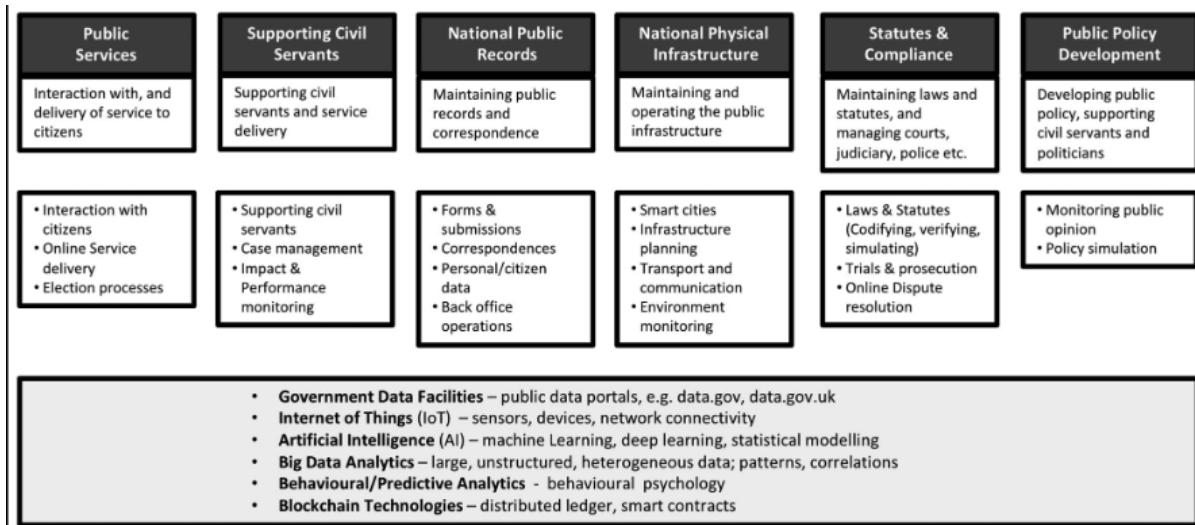


Image Source: Oxford²¹

Adopting these automation services empowers employees and boosts citizens' satisfaction with the services provided. The institutions also gain real-time analytics into the workers' performance and what citizens need.

Robotic process automation helps institutions increase speed, flexibility, and efficiency. It helps with the management of backlogs, peak periods and reduces manual errors.

1. Integrations for government industry software

Government departments use different applications when running operations. Most of these departments also operate in siloed environments. Lack of integration between these systems leads to duplicate, and scattered data.

Integrating these applications helps the government leverage applications they have and make data-driven decisions that are also accurate.

Integrating data may seem like a complicated process, but eliminating silos makes it easy to share data across departments. These collaborations lead to greater efficiencies, reduces data errors, manage duplicate data, and reduces the time spent entering data.

²¹ <https://academic.oup.com/jnl/article/62/3/448/5070384/>

Integration allows government institutions to do more with less. Team members from different cities or departments can collaborate seamlessly. They can process complex transactions and post omnichannel communications.

With citizen expectations on the rise, budget cuts, and less staff, government institutions can no longer operate in a siloed environment. Too many technologies and too many individual systems will negatively affect operations.

Non-integration means siloed data and systems that do not share information, leading to reduced productivity and overcomplicated procedures. If a citizen must log in to different platforms to access different government processes, they get frustrated.

Having one portal to store all the data makes it easy for them to complete applications or transactions.

Smart institutions are using integrations for government-industry software to enable data sharing. Governments can then offer seamless experiences to citizens even when they are short on staff.

What Does an Integration Platform Do for Your Government Institution?

a) Reduces siloes

Integrated government software streamlines and automates processes and workflows. It allows for the sharing of data across departments, teams, and regions.

Failure to share data across departments leads to miscommunication that could ruin citizen experiences at different touchpoints.

b) Increases efficiency

Having too many government software solutions from different vendors leads to your staff having to perform more manual processes since they do not share data between departments. The teams spend time and effort trying to circumvent the software inefficiencies and integration limitations.

With integration, for example, the permit application form automatically sends the payment information to the accounting software. The integration of government software allows for data sharing. Your teams can then have more time to offer efficient services to citizens.

c) Offers high-level services and simplifies user access

The government institutions have different departments and numerous employees using different systems to accomplish various tasks. An integrated platform allows employees to have access to the same data across multiple government software applications. This collaboration allows for exceptional customer experiences.

Systems that do not share data also mean that data duplicates across platforms, time is wasted, and there is a high possibility of errors. However, with integration, data is shared across platforms.

It also makes it easy for the staff to work. For example, when you hire new staff, their information automatically updates on the platform so that they don't need to have different passwords and usernames for every platform.

d) Safeguards citizen data

A single platform allows you to safeguard data from hackers. Duplicated data across platforms increases your risks of data exposure and a cyberattack.

e) Reduces cost

Maintaining separate government software systems dents your budget more. One platform that serves a variety of administrative workflows allows you to maintain and manage costs.

2. Mobile Apps and Social Media

The number of smartphone users today is above three billion across the world.²² Mobile phones also account for almost half the time spent by people on the internet.²³ The mobile app industry is also growing exponentially, with the total expenditure by consumers on mobile apps increasing year-on-year.

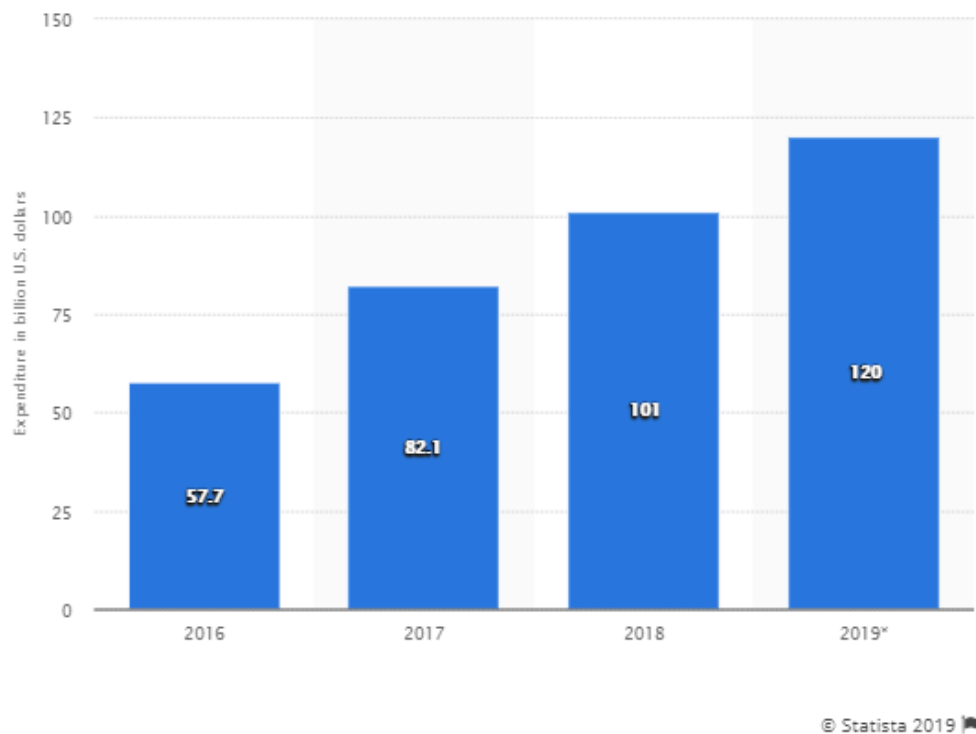


Image Source: Statista²⁴

²² <https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>

²³ <https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates>

²⁴ <https://www.statista.com/statistics/870642/global-mobile-app-spend-consumer/>

Mobile apps, SMS, and social media enable citizens to access services in a targeted and convenient way. They also encourage citizens to participate in policy-setting, decision-making, problem-solving, and budget prioritization.

Government organizations are adopting enterprise applications that help with messaging and document sharing. These enterprise applications keep the employees flexible and engaged on different platforms.

Mobile technologies, on the other hand, empower the workforce to work effectively. Government employees can also work remotely from any location and have easy access to information.

Other applications include the citizen-oriented apps designed to give citizens a simple mobile interface to access government processes. The government institutions' services are made available to citizens at any time, anywhere, and on any device.

Social media and mobile platforms have also replaced traditional channels as a means to interact with government institutions. The citizens use them to report concerns, provide feedback, and interact with government institutions.

Data collected from these interactions with mobile apps, social media, and mobile platforms is essential for a government that wants to provide excellent services. The institutions can leverage data collected to improve service delivery.

3. Big Data and Analytics

Government institutions have access to huge amounts of data. However, big data refers to high volume, high velocity, and a variety of information, requiring a different kind of processing to allow for decision making and process optimization.

Government institutions use sophisticated algorithms to make sense of the huge amounts of structured and unstructured data when making decisions. These algorithms predict behavior, evaluate policy changes, and analyze program integrity.

When government institutions combine big data and analytics, they discover correlations and patterns. These help them understand trends and how they impact the public and government processes. The benefits of big data analytics to government institutions include improved citizen services and increased internal efficiencies.

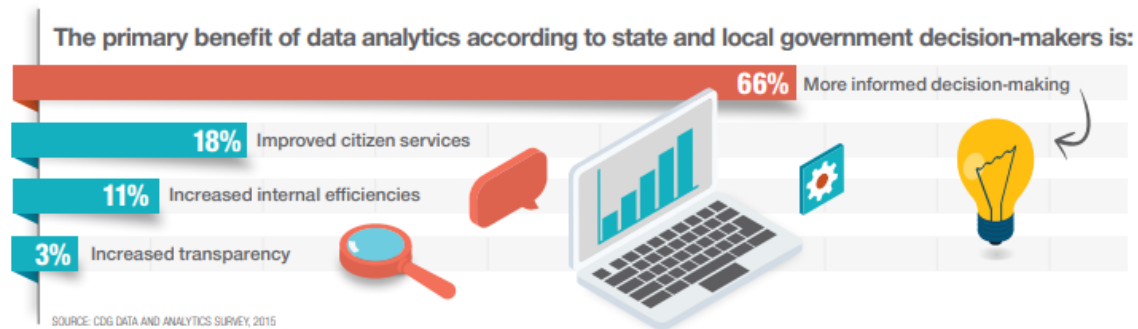


Image Source: GovTech²⁵

Those institutions using big data and analytics have seen improvements in workforce development, the ability to find potential job seekers, and the ability to make better decisions in terms of payroll, human resources, and finance.

Institutions can also use big data analytics for cybersecurity and predicting possible threats.

By applying quantitative skills and understanding their citizens, government institutions can solve citizen problems and tackle public policy challenges. However, this will require creating the right data fabric that brings together data from different platforms.

To succeed with big data:²⁶

- Ensure that you include 80 percent of information (this is the unstructured data) from spreadsheets, documents, digital media, and presentations across the institution.
- Know what information is available where, what it is, its value, risks associated with it, and rules governing use.
- Identify embedded analytics that can easily integrate with other software applications that can mine both structured and unstructured data. Integration allows you a full 360-degree view of all the data and information you have.

Harnessing data for better insights can help your departments to improve citizen services. Leverage the power of advanced data science and machine learning algorithms to get predictions, insights, and recommendations that improve service delivery to citizens.

Predictive analytics and text mining help government institutions manage public resources through anticipating problems and acting. For example: identifying people who may not pay tax, fighting human trafficking, preparing for natural disasters,

²⁵ <https://www.govtech.com/library/papers/Big-Data-and-Analytics-in-Government-1554.html>

²⁶ <https://www.govtech.com/library/papers/Big-Data-and-Analytics-in-Government-1554.html>

reducing homelessness, preventing child abuse, counter-terrorism, and predicting cyber-attacks.

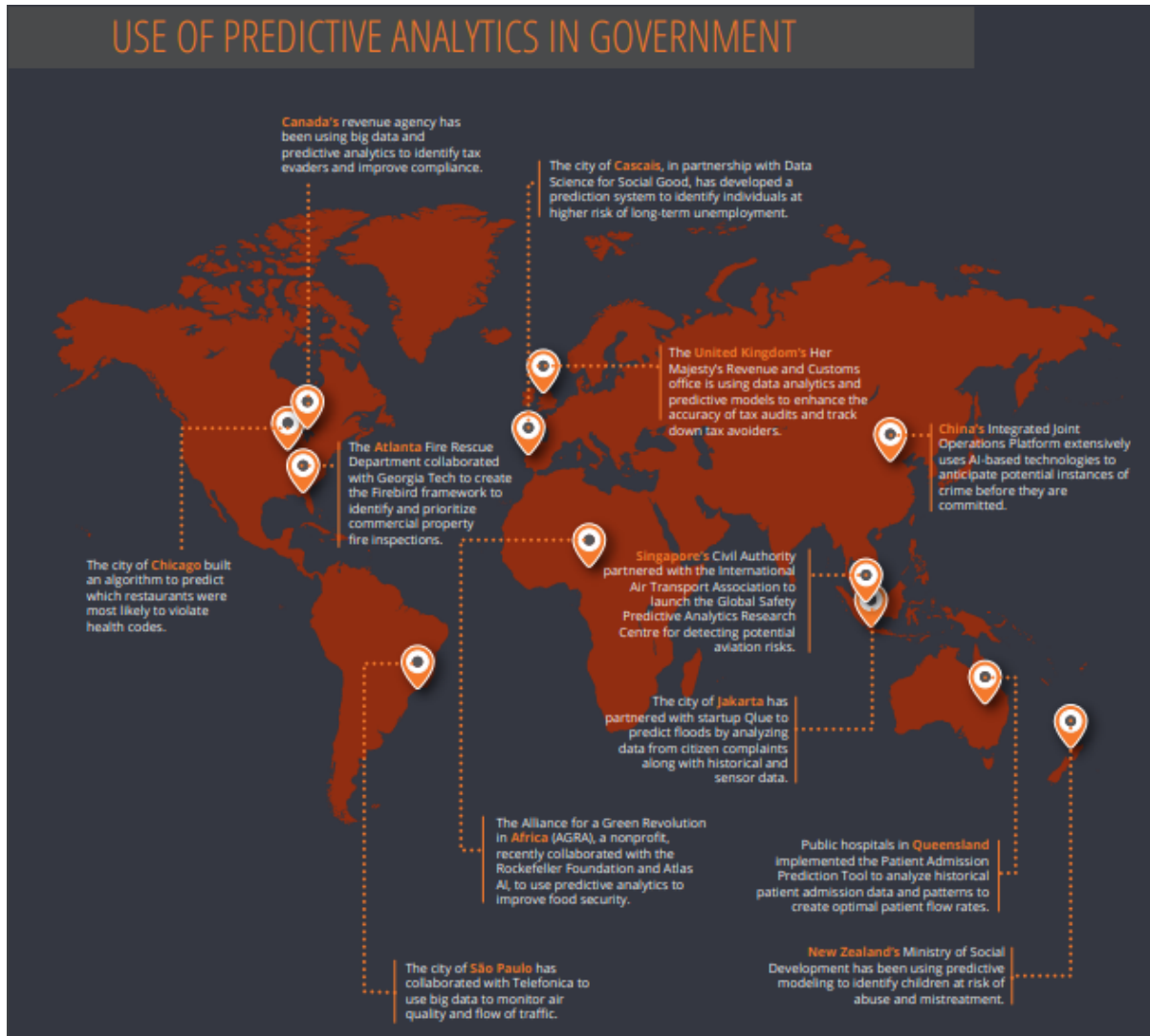


Image Source: Deloitte²⁷

²⁷ <https://www2.deloitte.com/us/en/insights/industry/public-sector/government-trends.html>

Conclusion

Smart digitalization allows citizens to access personalized and responsive services. But it also requires governments to adopt a citizen-first culture and mindset in delivering services and designing policies.

This will, in turn, lead to improved service quality, enhance efficient and transparent interactions, boost public trust, and realize positive feedback and results from the public.

Last but not least, smart digitalization adoption will allow government institutions to increase efficiency, formulate smart policies and operational models that meet citizen needs, successfully run development projects, and ultimately achieve economic growth.

About Cazoomi

Cazoomi allows government institutions to integrate critical everyday business data through our SyncApps integration platform. Integrate CRM, Marketing Automation, Financials, and Support software to the software you use today. We offer more than 150+ integrations and help you set up, explore your options, and guide you through usage.

SyncApps by Cazoomi enables government organizations to deploy software as a service for their financials, handle Support, CRM, and Marketing integration with ease and at a price point built for any organization.

For more information, visit <https://www.cazoomi.com/>