

Realise your digital aspirations

Make the big shift toward digital government

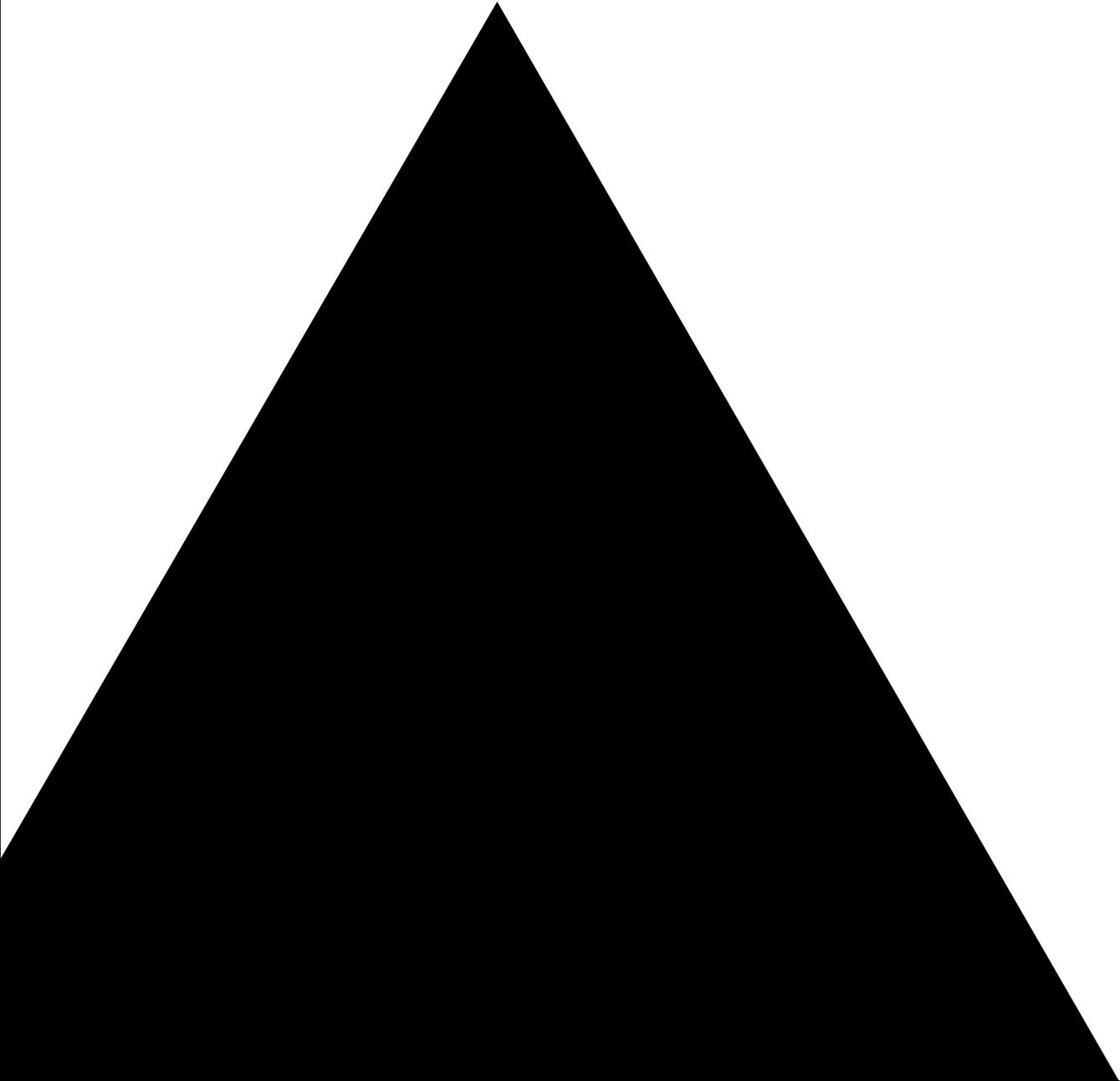


Table of contents

Take 10 steps to digital success	3
Step 1. Create a consistent and innovative interlocked business and IT digitisation strategy	5
Step 2. Redesign services and processes around outcomes, not internal organisations	6
Step 3. Start using a digital reference architecture from day one	7
Step 4. Design systems for structured and unstructured data	9
Step 5. Organise around publishing open data by default	10
Step 6. Let dynamic data analytics drive decisions	11
Step 7. Automate operational support processes	12
Step 8. Evolve toward personalised and proactive services	14
Step 9. Apply a holistic approach to security	15
Step 10. Standardise IT solutions under an as-a-service model	16
Take the next steps	17
About the author	18

Digitising a government's services portfolio is no longer a unique or standalone project. The myriad new technologies that citizens and entrepreneurs have at their disposal are driving governments to adapt—and implement a roadmap to become a fully digital government.

In a recent blog, the UK Government suggests that “Digital government is a global effort ...”¹ where it is necessary to share experiences and reuse services. Many governments have come to the conclusion that there is no point anymore in producing solutions in isolation. Instead, the power lies in the reuse examples either from other departments or even other governments and focus more on standardised IT.

Digital government is fundamentally different than e-government. In the e-government era (circa 1995 – 2005), government's primary focus was on making information available via websites and having citizens download forms they could fill in and submit. These websites tended to be departmental, so users could only request information about that single department or where overarching portals were used for “connected” departments. Many governments still use this technique today but are not yet embracing the full potential of a digital world.

For governments to become truly digital, they need to rethink the current business operating model. It is not enough to have one component in the process be digital; the whole process must be digital—from request to fulfilment.

This document is not a vision memo that explains what a digital government is or should be. There are plenty of opinions out there on the subject. This document presents a set of steps supporting the decisions on how to move to becoming a digital government. Based on proven experience with various government clients around the world, this document lays out a 10-step approach to maximise digital success with IT as a core enabler.

Take 10 steps to digital success

Based on DXC Technology (DXC) experience working with different government clients, we have gathered information for a roadmap on how to become a digital government. You will notice that the presented approach is not focused on a traditional IT “change your infrastructure” or “buy this new technology today” roadmap. It is focused on driving change on the business side and then translating this into an interlocked IT roadmap and efficient IT reference architecture.

Apart from the necessary business and organisational changes, a large number of steps are focused on becoming a data-driven government. This is one of the most crucial elements in the roadmap. Governments are sitting on a wealth of information that can be used in internal and external ways.

Internally, you can gain more value by creating interlinked information architectures. In these architectures, analytical tools can help optimise your discovery of citizens' real needs and provide targeted replies across organisational boundaries.

Open data plays its part on the external side. Many reports indicate that publishing open data drives innovation and economic growth as industries create new applications using the datasets the government makes available.

¹ See <https://gds.blog.gov.uk/2015/07/29/same-but-different-a-common-international-approach-to-digital-government/>

As information is the most important asset of any government, more focus and attention is needed to protect these assets in the digital world. DXC advocates a new approach to security, including raising business awareness. In the Internet world, we have to better understand how information flows and how to protect each individual data element that moves around the various IT infrastructures.

Each unauthorised way of accessing data should be viewed as a threat, and protective measures should be put in place. This is not a one-time endeavour—it’s an ongoing cycle of continuous learning from attackers and putting new measures in place.

And finally, after all business steps are taken, a multiyear, interlocked business and IT roadmap can be drawn up and executed. This should not be seen as a separate track, but interlinked with the changing business needs.

Governments cannot wait for years for IT to come up with a solution for yesterday’s problems. Every roadmap needs to take a forward and innovative approach to enable continuous improvement along the way. It should be a multiyear roadmap with tangible projects that can be started right away and that can deliver increasing value along the way.

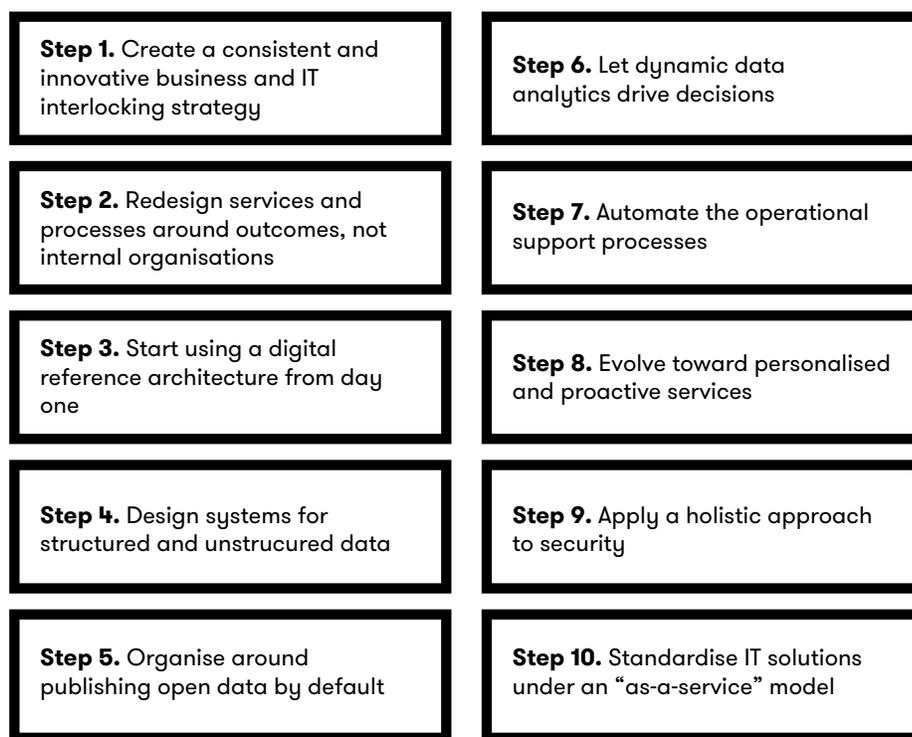


Figure 1. The 10 steps toward a digital government

In the next sections, we will explore each step individually and explain how it will help drive the overall transformation.

Step 1. Create a consistent and innovative interlocked business and IT digitisation strategy

Many governments want to enable cost savings and provide a more consistent experience for citizens by standardising processes and IT systems from the bottom up; however, when creating a roadmap for digitising services, departments within government often create competing views based on their individual service landscape.

Driven by a top-down objective to go digital, these roadmaps are translated into individual departmental needs and, therefore, deliver different solutions and timeframes to the public. This results in a sprawl of IT systems and information duplication.

That's why we need a more forward-looking approach to designing new business services and how IT responds. Increasing external trends and innovation tend to influence government business and IT faster all the time. And not including these new trends or technical means is not an option, as citizens will quickly adopt them.

DXC takes this into consideration when planning the next release of our systems of engagement with citizens—even up to the level of policy domain strategy (see Figure 2).

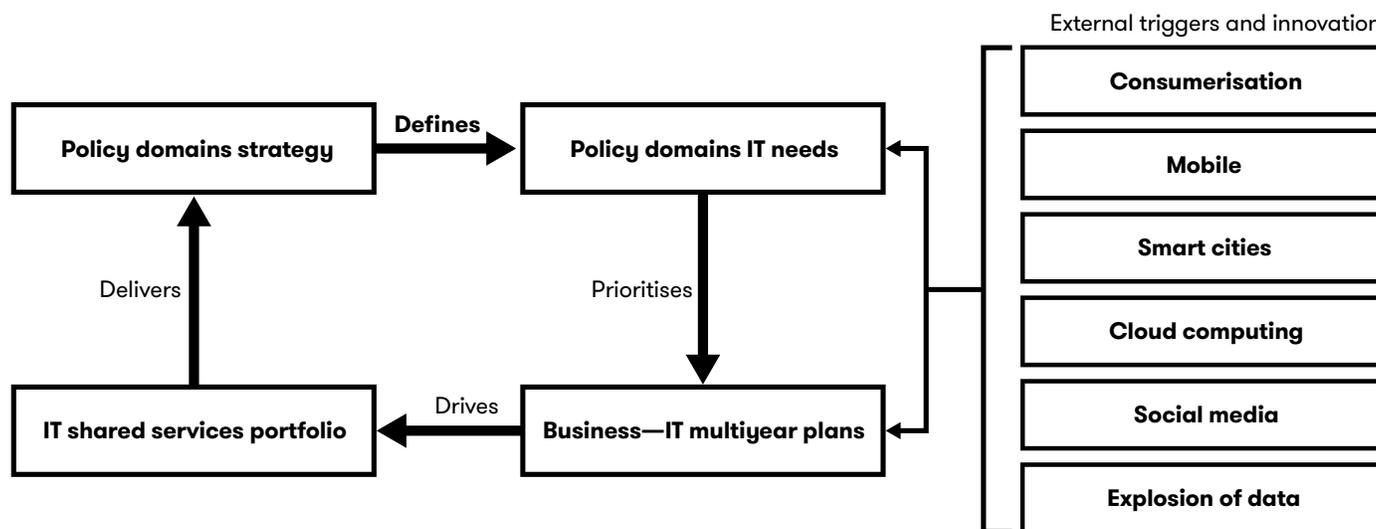


Figure 2. A suggested approach to creating an IT and business interlock

First, governments need to create a digital roadmap that works with a three- to five-year horizon. And it should consider external innovation triggers and watch which new platforms citizens use. Today's government CIOs must include these external triggers and offer a suitable IT system or service response.

Speed and agility on a smaller scale are more important than big transformation programmes. Although the cycle in Figure 2 tends to run yearly, the current speed of IT innovation will drive the cycle downward to months and even weeks for smaller experiments. This cycle needs to consider how departments deliver services or adapt to new ways of working, not just the IT impact. The technology and business cycles not only need to interlock but also need to operate at a much faster pace, in smaller steps than before. A small experiment with new services and the use of innovative technology will resonate more with citizens and internal organisations than working on mega implementations as in the past.

To make sure governments remain focused and deliver, DXC proposes working with an interlocked multiyear business and IT plan with a three- to five-year horizon. This includes secured budgets each year to guarantee the complete rollout of the project(s). As the organisation matures (as its technology footprint increases and automates civil servants’ basic tasks), there will be more confidence and trust in taking the next steps.

Step 2. Redesign services and processes around outcomes, not internal organisations

Too many government services have been designed over the years based on an organisational setup and culture, often working in isolation. This created a sprawl of websites where citizens need to go to request a service. Some governments provide an overall portal website where a citizen can find the products that different entities offer, but this is usually nothing more than a referral to organisational sub-sites.

If we take this one step further, there is usually no single place where a citizen can see an overview of the progress of all of their service requests, the status, and the expected time to deliver or make a decision. We can no longer sustain this and need to refocus on efficiency and a consumer-friendly approach.

Looking from the outside, it appears that in most cases the process for these services is similar but just implemented differently. Governments should strive for a common services reference model that can be reused. For example, a template should be available for a grant or permit process that is implemented across organisations but allows for different calculations or parameters to make a decision.

A standard overall approach and business model—with a variation of rules and calculations per grant—is possible with modern technology so organisations work together seamlessly.

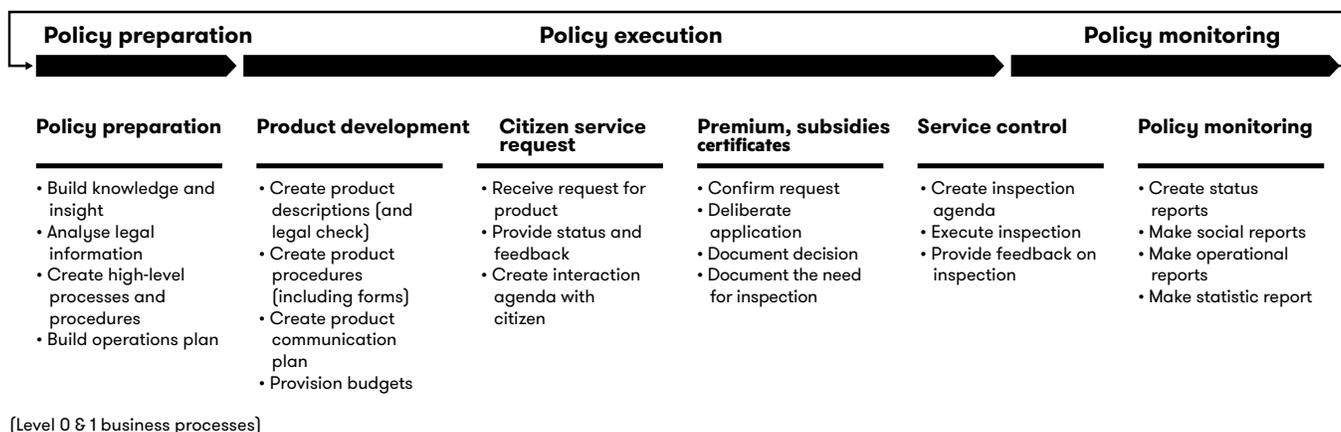


Figure 3. Sample set of generic government business processes

The recommendation here is to start creating high-level and generic business product processes that define a standard way for defining and executing on similar services (see Figure 3). This will also simplify how the product is positioned and integrated into one catalogue, making it easier for a citizen to find and use them.

To make this truly successful, it must be underpinned with a new mindset and strong governance at all government levels. Change at this level does not come easy, but it's necessary to keep up with market dynamics, or governments will continue to face a lot of manual work with ever-increasing operational costs.

Step 3. Start using a digital reference architecture from day one

After establishing a generic business process approach for all services across entities and governments, it is time to map services onto a standard IT reference architecture. This ensures that every service has a similar business process flow and that all systems of engagement are designed and rolled out in the same way to optimise and standardise the IT solutions portfolio. (See Figure 4.)

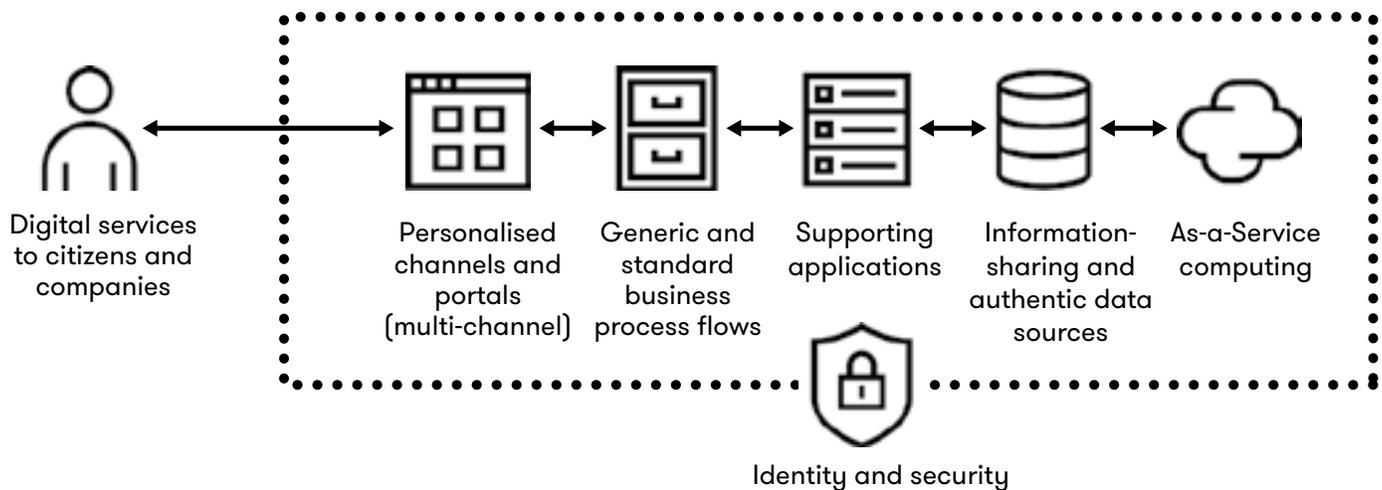


Figure 4. Sample characteristics of a digital reference architecture

A number of principles will guide the IT department in creating standardised solutions:

- The primary focus is to **enable digital services to citizens and companies** by delivering an end-to-end personalised experience that is mobile by default. This includes ensuring that the citizen only has to make one request for the service regardless of entry point (such as city hall, local, or federal), and they get one integrated answer back. Going one step further, we also need to agree that digital government starts and ends at the edge, meaning at the interface the citizen is using today—not the website the government is pushing out.
- The next level is to **build a personalised citizen portal** that keeps an overview of all current and historical service requests. This will provide a 360° view of services that the citizen has requested or are pending. Pushing proactive services via a personalised portal is a way of increasing citizen trust. This can also include a digital data vault where all certifications or documents are stored. Not only those related to the service requests, but also the ones related to life events, such as birth certificates, diplomas, training curricula, and employer data.

- As noted in step 2, we strive toward a **generic business process model** where a civil servant starts designing workflows and decision parameters from a standard and generic business process library. This library is to be centrally maintained and enriched. For each workflow, a standardised set of business solutions is available as a service. The civil servant can immediately focus on their business duties instead of IT solution integration.
- The previous point links to the **supporting applications** that the business needs. Operations should be standardised on the same business applications, which are sourced as a service. Too many times, governments build custom applications for the same process. This is no longer sustainable—not when the business process it supports is basically the same as other similar applications.
- To provide better services, it is **imperative to improve information-sharing and authentic data sources** across all levels of government. This is a focus of step 4 and beyond, but it is important to realise that governments need to evolve toward a data-driven government by sharing information across entities and government levels. This goes way beyond internal data-sharing with respect to privacy and also includes embracing open data as the default for external data-sharing.
- After all the above are well defined, we can concentrate on IT and security. Most of the solutions can be sourced from an as-a-service computing model. The focus for government here is to let go of commodity IT services. Instead, contract these from a Tier 1 supplier that not only delivers to an SLA but also guarantees compliance with your security policy.



We live in an information society, and data is the new oil ... you can say that governments are in the middle of the data revolution.

How to get going? Use the 80/20 rule, and do not automate all the exceptions from day one. First, look for similar or repetitive processes such as grants, subsidies, licenses, exam setup, follow-up of school reports, and inspections. These are some examples of where a generic process flow can be used and mapped on the reference architecture to come up with a standardised IT solution to deploy these services. Of course, the parameters will be different, but at least you will have started from one generic solution set.

A next step is to convert the reference architecture model to a standard business and IT architecture. One industry standard is using an enterprise architecture approach in which the business process is mapped to standard application components that are ready to be set up quickly. There is no longer any need for 35 CRM systems, 40 different BI solutions, and 234 subsidy applications to be run side by side. Standardise on the business flow and not on the technology.

It is imperative to use an incremental approach in building this roadmap and realise that it's not necessary to wait until the perfect generic process for all services is drawn. You can agree to jointly implement a first version and improve it over time. The benefits to the citizens outweigh the perfect process set.

Step 4. Design systems for structured and unstructured data

We live in an information society, and data is the new oil. These days, data is found and produced everywhere and no longer only stored in structured databases. More and more information is available in so-called non-structured formats, such as video, social media data, audio, or as machine-generated data. More and more devices are being connected and start exchanging data at real-time intervals.

This offers tremendous opportunities for analysing all of this data with new, advanced techniques—which are quite different than the operational reports we used to run based on data warehouses. There is nothing wrong with this, but governments need to realise that they must add these new techniques to their current business intelligence portfolio—often requiring new skills to process the volumes, variety, and velocity of data coming at the civil servants.

We need to consider more than the data coming into governments from external sources like social media. On the output side, governments now are also opening their own data in the form of machine-readable datasets, such as open government data. As governments establish themselves as a reliable source of open data—focusing on quality and consistency in their datasets—the benefits of creating value-added services for citizens will increase.

So governments have a double role in this: adapt to new advanced analytical techniques for their own internal benefits and produce quality datasets the industry can use to create applications. You can say that governments are in the middle of the data revolution.

Producing open data on the output side will lead to increased industry adoption. As a result, new applications can be produced faster and made available to citizens for a fee. If people start using these datasets in an app, it will improve the citizen experience. Open data from other governments or countries can also be used to facilitate analytics. There are ample reports proving this cycle, and various organisations—such as the EU, UN, or even the World Bank—are embracing open data to stimulate creativity and innovation at the edge

That's why governments need to take a new approach toward information architecture, including creating, delivering, and archiving all kinds of data. The architecture should take these things into account:

- A **variety** of information sources and formats, from human to machine, from records to video and audio, all providing a piece of the puzzle to analyse together to provide meaning
- A sheer **volume** of data that no longer can be handled by human record-by-record processing
- Where the **velocity** of when data is created and released in almost real-time and is handled differently than in traditional systems

The purpose of a modern information architecture is not to deliver one-off reports but to continuously use the available information in a much wider perspective. We should set up lab environments where data is properly explored and tested to validate business scenarios where an optimised service delivery model will play. If the lab's business case turns out positive, we create an application that uses the parameters and data streams to return relevant information for departmental use.

This can also be a continuous feed into a classical business intelligence area. But we increasingly see this evolving into a hybrid data-management arena where data is collected from a broader form of sources. So our recommendation is to create a new information architecture and strategy for governments—one that meets these needs:

- Incorporates more types of data by default—from traditional to machine-based ones
- Enables experimentation with data discovery in an automated way
- Enables the creation of data-driven applications
- Presents knowledge to civil servants in a lab approach
- Enables you to test business scenarios on a multitude of formats and volumes
- Allows data to be joined and used together with a respect to privacy
- Secures all data in the context of the process that handles it
- Enables newly skilled resources (such as data scientists) to continuously investigate data and feed back to operational processes

Ultimately, this brings the power of advanced analytics to enhance service delivery to citizens and companies. When will you start?

Step 5. Organise around publishing open data by default

Most governments have a strategy and policy in place to produce open data. In this step, we will focus on how to make open data a success. It all starts with providing quality, consistent data that must be mined correctly from the source systems.

Open data needs to be as trustworthy as possible to users. It is no longer acceptable to have several address formats in different datasets; there are enough standard vocabularies out in the public domain to use. Numerous techniques such as master data management are also available. No new methods or technology need to be invented here—only applied.

As open data evolves toward linked open data, whereby relationships between various data objects are now encapsulated in the design and become semantic web as defined by the W3C (see <http://www.w3.org/standards/semanticweb/data>). The previously mentioned rules become even more important.

DXC believes that master data management techniques also apply to open data. And that a governing body inside the publishing government must be established to define and impose the rules for data quality and master data.

As part of your renewed information architecture, take open data much more seriously than before. Become a valuable business partner to companies wishing to establish a business out of this. This can only be done when you focus on delivering quality datasets that are consistent in format, values, and relationships.

Companies will only use open data if the government as a whole (such as each publishing entity) is seen as a trusted partner that delivers quality datasets. That can only be done by enforcing standards that each entity must adhere to, which calls for an open data governance structure that builds on master data management techniques.

Step 6. Let dynamic data analytics drive decisions

The focus of this step is setting up a dynamic data loop based on the results of a data lab. In step 4 we focused on the acceptance of the new data paradigm—from operational preprogrammed reports to dynamic and real-time advanced analytics. By nature, the lab concept is a discovery-driven exercise to better understand the data or business case. We will now take it a step further and focus on institutionalising this paradigm into a government’s day-to-day operational business.

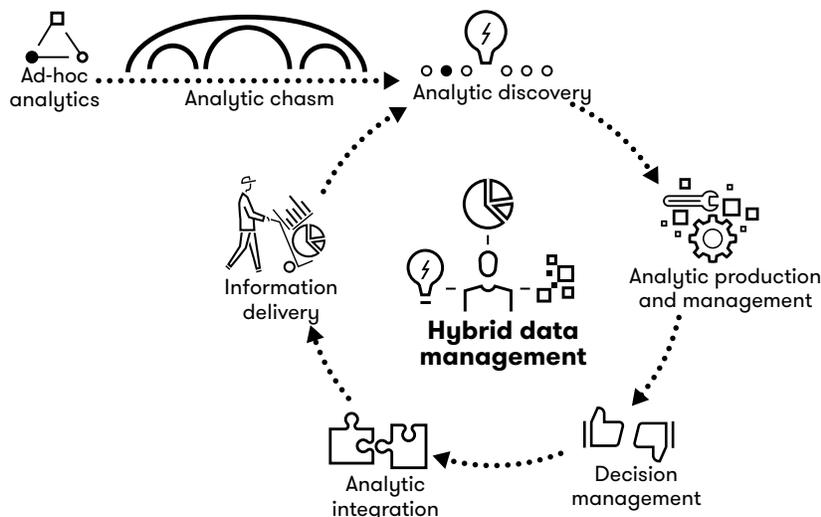


Figure 5. Evolution to ongoing data discovery as part of the operational processes

This means making advanced analytics a core element of the decision process when citizens request a service. Today, processing the forms the citizen completes and data a civil servant collects to validate the request is highly labour-intensive, reactive, and sequential. Instead, a focus should be placed on proactive service delivery in which the civil servant has all the data readily at hand to propose a service to the citizen. (See Figure 5.) This is quite a mind shift for most governments. So we suggest introducing this gradually, not in a “big bang” approach.

Governments must learn how big data techniques can help become them more proactive as a whole. This will mean changing the business process to let data analytics be an automated part of the overall process. During this change, data analytics solutions will run in the background and continuously report findings to the civil servant.

For example, the solutions might spot potential fraud if the same service was requested twice (or more) in a slightly different way. On the positive side, the solution might also spot changes in the family (such as the son going to college) and suggest services that may be valuable to that family. For example by granting a study loan or determining whether that the family is eligible for a higher subsidy in other services.

Currently, this is all done on an individual request-by-request basis at the departmental level. If the recommendations from the previous steps are well implemented, by now we should have an information architecture in place that allows data-sharing amongst entities. Now we take it further and let data that originates in one department or level of government interact with the service portfolio of that government and let the solution come up with suggestions.

Remember in steps 1 and 2 we were recommending that the civil servant become more of an expert than an office clerk? This is a perfect situation whereby all the automated analytics provide recommendations; the civil servant reacts to them by allowing an extra grant or initiating a new, proactive service delivery.

The next step is then to create IT solutions that continuously analyse the flow of information into recommendations. The theories and algorithms can be tested in a lab environment and then converted into a set of business rules that the solution constantly validates. That's why we recommend doing this gradually by experimenting in the lab, creating a statistical model that can be operationalised, and creating new IT solutions that use the statistical models. Again, this is a huge step forward in automating decisions, so plan for a gradual introduction that gives civil servants and your whole organisation time to get used to it.

Eventually we end up with a data-driven government that continuously acts upon information derived from a wide range of sources. This means that reporting systems no longer have a "report the facts" purpose anymore like statistics. Instead they become an integral part of the decision-making process and come up with suggestions that citizens will appreciate.

Ultimately, this also will require a new mindset and skill set amongst civil servants. Next to IT solutions, governments will need to invest in data scientists—meaning people with the necessary skills and authorisation levels to analyse big data streams and make them relevant to the business process decision cycle on an ongoing basis.

So we recommend that governments start learning these new big data techniques and incorporating them into a first set of services. We recommend starting lab environments as soon as possible and begin experimenting with business data to build statistical predictive models that can be applied in IT solutions. Then you can institutionalise this in an operational process.

Again, we suggest doing this on a small scale first—but with the goal of letting the results drive operational processes, so you're also investing in the new skills of experienced civil servants who can act proactively on changes in your situation. Only then will these techniques provide value for the citizens and the government will become a proactive organisation instead of waiting for the next incoming request.

Step 7. Automate operational support processes

In the previous steps, we focused on IT solutions to automate decisions based on advanced analytical data algorithms. IT solutions are only a part of the overall data flow. Governments also need to organise themselves differently to provide each other horizontal services. Obvious examples include HR or invoice handling, which are well established. But we would like to take this further and focus on central and horizontal data processing centres of excellence.

A lot of administrative and similar process work still is done by a department or government level, such as regional versus federal. When we think about the data being used for these processes, one realises quickly how much data proliferation exists and how inconsistently data is stored and used.

We previously introduced the concept of master data management, but it is even more powerful to establish one horizontal organisation that is authorised to store the unique version of the data and provision it to the departments on a need-to-know basis.

The centre of data excellence should establish two competencies: an information broker and a process orchestration broker. The information broker is the most essential part, and we suggest that you establish this first. Once proven, you can grow the centre to become a process orchestration broker, but always in the context of data exchange.

First, the centre should establish itself as the **authorised information broker** for all government entities and, therefore, hold the authentic data sources that can be reused in various processes. Person-related data, as well as company and social security data, can be prime candidates. This might also involve some legal anchoring of the IT systems that hold these datasets.

One simple principle to help make the business case to the political level is that you will only ask the same information of a citizen once and then reuse it—no matter your organisation or level of government. You will store it safely and guarantee the requesting organisation will only get the data fields and content they need for their respective process. Organisations will not store copies anymore, but rather use the appropriate data services to access the single version of the truth in real time.

The centre will be responsible for maintaining the integrity of the services that other organisations can use. This team will publish a well-documented service catalogue so standards for obtaining data are enforced.

After installing the information broker, you can facilitate process orchestrations. We call this second layer of services the **process orchestration broker**. In this layer, the centre will now also be responsible for automating a process workflow that typically spans different organisations or levels of government. The system can then trigger a department with the right data and information for it to investigate the case and make a decision.

The dossier is then stored safely and passed on to the next in line to validate or process the enriched information. At the end of the chain, the process makes sure there is only one entry for the citizens to request the services and one reply, no matter how many departments have to process it internally.

A process orchestration broker becomes extra interesting for integrating services from different departments into one logical whole. It will take away the burden on the citizen to go from one office to another, piling up the paperwork along the way. Certain steps can be automated so standard process flows get processed automatically and only suspicious or flagged cases require intervention from the civil servant.

For this step, we recommend that governments install a central hub for information and process brokering, such as data storage and handling. Focus first on establishing the governance and the legal anchoring of an information broker. Then let departments integrate their process flows by requesting a single version of the data from the information broker system. Focus on a real business case that provides added benefits for citizens. You'll find that the whole system will pay for itself and that the next services will benefit from correct data provisioning.

Make sure that the privacy commission watchdogs this and that all requests are securely processed and logged. We proved this at the Flemish Government, so you can do it too.

Step 8. Evolve toward personalised and proactive services

Governments are discovering that citizens should be treated as a client, with services that are personal and proactive in nature. There is one prevailing rule for governments going forward: Start designing business process flows and service request from an end-user perspective. That means rethinking the way the service is requested, monitored, evaluated, and granted. All of these stages should be driven from the client's view rather than the organisation's internal processes. This can be done by applying the outside-in view, as illustrated in Figure 6.

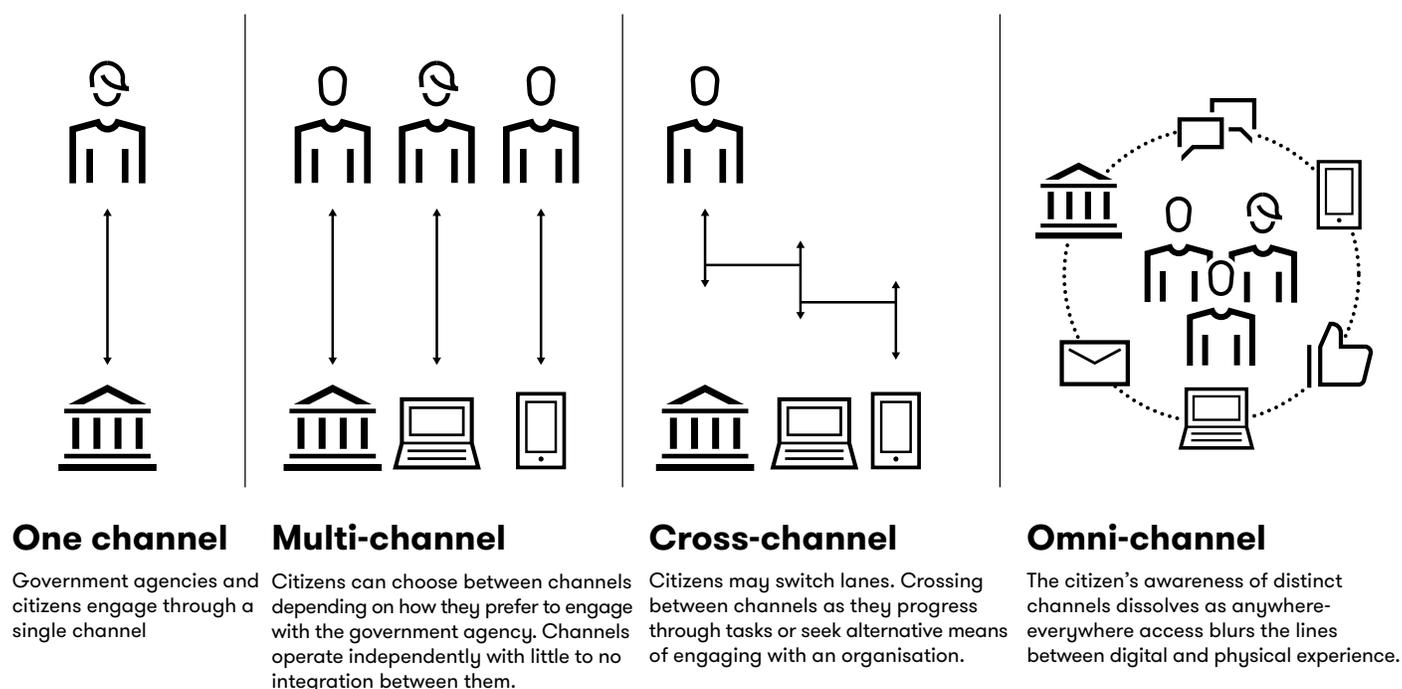


Figure 6. Sample channel models

Citizens, like a company's clients, disengage when the content provided is irrelevant or difficult to find. Clients consume products and services across different channels and expect a seamless, integrated process in the background. They will not accept going from one agency to another to collect approvals.

Citizens are also much more informed than ever about the services they need or think they are entitled to. There is also an expectation that governments know their clients and their expectations, and provide added value by proactively delivering services or identifying those in need more quickly than ever.

The next step for a government is to move to proactive service delivery. If governments have all this information available about you as a citizen, they can be proactive by suggesting which grants or services you may be entitled to. In certain countries, this would be seen as too intrusive or a violation of privacy, but if you can devise this as an opt-in approach, then you can gradually build it out.

The recommendation here is to take a proactive view of services. This will increase the quality of the interaction and service delivered whilst still keeping a close eye on the budget it has been assigned. The value for all stakeholders is clear, even though governments will initially tend to be scared of budget overspending. But you have to consider that you are reaching the right people faster than ever before, so the service is realised much more efficiently.

Step 9. Apply a holistic approach to security

In today's interconnected world, securing data assets has become much more important. Citizen data and other sensitive information is now stored on servers that are connected to the Internet. Security is no longer a matter of protecting the data centre alone. By default, every piece of information on its way from one point to another should be seen as insecure and in need of a different approach to be protected.

Governments worldwide are embracing public cloud models but often don't consider that this also requires a different approach to application and information security. Most public cloud vendors can now claim certification to security standards, but that doesn't mean that information that moves from and to that public cloud is secure.

Any security approach should be focused around these three pillars:

- First of all, governments need to protect the current environment by identifying risks much faster and in a more automated way than previously. This is most crucial for legacy systems and applications that were not designed to run in an interconnected world. This means prioritising your assets and determining how to protect each of them. Protecting your assets might involve traditional methods like firewalls and reverse proxies, but it increasingly will involve closing security gaps within applications. Next, securing the data is essential today, involving when the data is in motion or at rest. Finally, users need to be protected from attacks by malware or other means. We advise you integrate your protect approach across policy, governance, and technology.
- In this interconnected world, we can assume that governments will be under ever-increasing threat of attack and that an adequate detect-and-respond approach will be needed. This involves 24/7/365 security monitoring for all systems, applications, and data. A threat intelligence and advanced threat analytics approach is also needed. This involves using analytics across vast data sources, including logs, applications, user behaviour, and intelligence to identify threats, moving to a proactive incident response and avoiding issues. Finally, testing and training of key personnel and crisis planning are needed to mitigate any breaches.
- Although not popular to mention, another critical step for security is the ability to recover from an attack. Business continuity procedures should be in place. This involves back-up and disaster-recovery programmes that cover traditional and cloud environments. We strongly recommend a holistic approach to security in this step—from protecting, detecting, and responding to recovering from an ongoing stream of attacks.

Step 10. Standardise IT solutions under an as-a-service model

The focus of the steps so far has been on establishing a new style of business for governments—one where the business processes are rethought, you use an outside-in approach, and give information- or data-handling a more prominent place in the operational day-to-day workings.

All of this ultimately needs to be supported by an agile IT environment that can facilitate the business transformation. In this final step, we will focus on the IT infrastructure that must go hand in hand with the government's business transformation toward a digital government.

The government CIO's role must evolve quickly from keeping the systems running to accelerating business value. Although most CIOs agree with this new mission, it is difficult for them to deliver on these priorities, because traditional infrastructure is optimised for stability, scalability, and performance—but not for speed and agility. In the digital world, infrastructure must be the engine that creates value, not a bottleneck to success.

What has worked in the past isn't going to work in the future. IT must now be able to support two operating environments: a legacy world and a new series of digital-enabled systems of engagement delivered as a service by a trustworthy partner.

Not all applications must be developed and maintained in-house anymore; most can be catered from a cloud-based provider. We also need to realise that we simply cannot throw away all legacy systems, so we will need to operate in a dual situation called "hybrid infrastructure."



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We realise that not all systems are ready to fully embrace the digital world. Governments often rely on applications that are now considered legacy but still crucial to service delivery. We cannot change the world in one day, but we recommend creating a modernisation strategy to unlock the value of these applications and data, and make it available to more modern systems of engagement.

Our recommendation is to adopt a hybrid infrastructure roadmap and move applications that are considered commodity to an as-a-service model. The CIO must create and drive an agenda for innovation and also move legacy toward new application platforms faster than ever. This requires an IT modernisation roadmap that is aligned with the business goals as we recommended in step 1. So at the end, the IT roadmap will be able to enable governments to become fully digital. This will involve many changes in the way the CIOs source outside services and an increased focus on IT governance than is needed today.

Take the next steps

These 10 steps demonstrate that the power of change doesn't come with only the installation of a new IT solution. It has to create a desire to change how the "business of government" has been done for the last 30 years. So starting with a business perspective and questioning organisational boundaries and culture are the right—but most difficult—things to do.



Governments need to stop working inside out—from an organisation point of view—and look from outside in—from a client perspective.

Citizens have adopted the digital age and need to be viewed as clients who should be provided personalised and effective services, wherever and whenever appropriate. Governments need to stop working inside out—from an organisation point of view—and look from outside in—from a client perspective.

A great deal of attention and steps are devoted to data and information processing. This goes from avoiding duplicate datasets to using advanced analytics. The importance of information brokering and process orchestration brokering is crucial, and there are fine examples out there of governments that have proved this is possible. Publishing open data will only be truly successful if it follows a quality and consistency process, much similar to existing master data management processes.

With that comes the changing role of the civil servant—from an administrative office clerk to a subject-matter expert. One who receives findings based on automated data analytics algorithms that run continuously in the background.

Remember that old applications and infrastructure can be transformed to at least coexist in the Internet arena of as-a-service providers and still provide value to the business. This hybrid landscape will be the government CIO's focus for many years to come. This also comes with the realisation that we need to take a fresh approach to security, and recognise that any data object on the move between applications or providers is unsecure by default.

So instead of buying individual IT solutions, begin with the business end in mind: Create a multiyear roadmap that has business and IT support, and execute accordingly. For sure, new innovations and technologies are around every corner.

About the author

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Yves Vanderbeken is a DXC Technology (DXC) account chief technologist and lead enterprise architect for the Flemish government and local governments (Flanders). His focus is on delivering innovative approaches to digital services transformation, deriving public and business value from open data. Mr. Vanderbeken also helps governments gain benefits from adopting new digital strategies based on the “everything as a service” principle.

Mr. Vanderbeken leads a team of 10+ enterprise architects who are involved in various IT roadmap and other critical projects. He currently delivers strategic business IT alignment projects for various domains at the Flemish Government. Mr. Vanderbeken also manages and participates in the development of strategic business and IT roadmaps and enterprise architectures, focusing across the full IT spectrum.

About DXC Technology

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