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eGOVERNMENT SAFER, SMARTER, AND BETTER CONNECTED

We can't solve tomorrow's problems with today's economic models.

Every country has created some sort of digital agenda and most have a roadmap in place. Digital agendas evolve into digital transformation programs that will give structure and direction to smart services and power both governments and industries into the Industry 4.0 era.

Four stages to smart governance

The evolution into eGovernment that drives digital transformation and creates smart cities occurs in four basic stages.

Regardless of economic development, people's basic needs and wants are fairly universal: equal access to education, job creation,

healthcare, transportation, and sufficient food and water in a safe environment. Then, a robust digital infrastructure is the key to unlocking the potential of people and societies.

The main differences between nations are the legacy systems and information silos that are already in place. Choices from the past are now blocking forward progress, meaning that nations must take different approaches to digital transformation. However, our case studies show that when a city or area is safe, its citizens feel more secure and open to building expectations for value-added digital services and smart solutions.

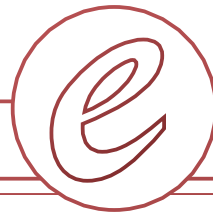
Staying safe

Thus, the first program in smart city initiatives is safety. After all, how economically viable is a digital

agenda if a city or region isn't safe and secure? People don't want to live or work in an unsafe environment, and they definitely don't want to put their families at risk. Areas with high crime are characterized by a lack of unity, poor citizenship, and low quality of life. In the numbeo.com index, the highest-scoring countries for living standards also tend to be some of the safest. Crime also doesn't pay – it's estimated that violent crime, for example, costs the UK economy £124 billion per year. As such, does it make sense to follow a digital agenda and invest in smart city initiatives and smart services without resolving the safety issue first?

Safe cities in action

Connected devices and IoT benefit public safety and policing. Authorities can combine their own video surveillance networks



First Safe Then Smart

- Creates a safe and livable environment and a high quality of life by establishing safe cities
- Increases expectations for other digital infrastructure and public services
- Serves as the foundation on which to base smart cities



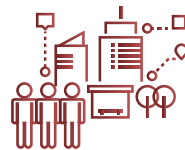
Government Cloud

- Increases efficiency and speed
- Breaks down silos between departments
- Creates a “digital by default” approach to governance
- Improves interaction between governments and citizens



Public Services

- Increases public satisfaction
- Raises quality of life
- Reduces costs and improves efficiency



Industry Acceleration

- Enables government cloud solutions, including video cloud, to be applied to other industries
- Promotes public-private partnerships that boost socioeconomic conditions
- Creates economically viable regions and sustainable models for growth



Four stages to smart governance



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with other public and private security systems alongside vehicle-mounted and portable solutions. With zero blind spots, these systems can monitor incidents like theft, civic unrest, and unauthorized access much more easily.

With smart devices running on private broadband networks, officers can pick up a live feed of, for example, shoplifting from CCTV before arriving at the scene, or they can receive feeds of criminals escaping a crime scene from cameras fixed to patrol cars or drones in the vicinity. Responses can be coordinated between central command and local patrols, while incident reports can be filed on the spot via mobile apps – all on a single device.

Police can store and organize surveillance data in a video cloud solution, and access, share and query vast video datasets with greater ease and accuracy. Sophisticated analytics tools improve the ability to identify, classify, and match stored video. These safe city solutions are secure against cyber attacks and cost effective as new infrastructure, especially when rolled out as part of broader smart city initiatives.



Transformation with government cloud

Governments have started transitioning from manual and paper processes to digital processes for all public services like tax, visas, housing, and citizen registration.

Paperless offices, high-performance workplaces, and self-service portals provide each government department with a unique system to digitally support its work. But, all these systems are verticalized. They're information silos, they're proprietary, they block progress, and they cannot seamlessly integrate with other systems.

Overlaying cloud architecture can remove the barriers between government functions and departmental silos without necessarily upgrading or having to replace existing infrastructure. Individual departments can access integrated, cross-functional application systems and staff can transfer access permissions to other departments.

Removing silos can make a once-only



model possible for individuals and businesses to access government services. Instead of having to register multiple times across government departments for different services, doing so once covers all services. Re-using information can also guarantee a much more personal experience. The same principle applies to contacting multiple departments for a single issue like registering a business, applying for citizenship or registering a birth.

eGovernment bridges information silos and makes them work as a single unit without replacing them or executing a forklift upgrade. Digital transformation is built on open standards and carried by Business-driven ICT infrastructure (BDII). With a focus on customer-centric innovation, BDII is leading the way into the next industrial revolution by deeply integrating ICT infrastructure and software applications, developing innovative infrastructures, and enabling joint innovation with partners.

As the engine of digital transformation, government cloud has a series of benefits:

- Shares data across departments

and enables service collaboration and diversification.

- Reduces costly and complex networking and computing resource duplication that occurs when each government agency maintains its own IT resources.
- Protects government information from a growing number of internal and external security threats.
- Serves as a scalable solution that adapts to expanded or downsized government functions.

Big data analytics and IoT

Enabled by cloud, data mining and the analysis of huge datasets can reveal insights that can help governments with extremely complex decision-making, especially when AI solutions add precision and insight to analytics. Data mining tools can process structured numeric data in traditional databases or extract relevance from semi-structured and unstructured data, such as text, graphics, images, and web data.

IoT and smart sensors have huge

potential for making connections everywhere in eGovernment and serving as the source of an incredible amount of data. While the most publicized applications of IoT tend to be in the areas of transportation and health, less obvious applications include wildlife protection, monitoring rivers to predict floods, and protecting against earthquakes.

In touch with the people

A strong digital infrastructure can also realize huge cost savings for governments and strengthen relationships with citizens. The European Commission estimates that online communication could cut costs by between 15 and 20 percent, while e-Procurement could save a staggering €100 billion per year.

Realizing cost savings through ICT is particularly important in the light of the austerity facing so many governments. According to the Institute of Fiscal Studies, Britain's time of austerity will extend through to the 2020s, while current plans in the US will see cuts of US\$10.5 trillion over 10 years. In July 2017, the BBC reported that the new government in



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France will "cut €4.5bn (£4bn; \$5.1bn), primarily from defense, interior, foreign affairs, and transport."

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Industry accelerators

Once safe cities, digital infrastructure, and eGovernment solutions are in place, digital transformation can be more easily replicated in other scenarios such as transportation, agriculture, healthcare, and education. Digital transformation also encourages government-enterprise partnerships.

Looking ahead to 2025

We're likely to see a whole range of changes over the next decade. The advent of driverless cars, for example, may consign driving licenses to history and lead to the reallocation of land previously used for things like parking lots. Basic services like garbage disposal will become smart and on-demand, rather than waiting for city services to handle them at certain times of the week. Smart lighting will save money for electricity companies and enhance public safety with sensors that know

when you're near, and light your way as required. Smart meters in homes will cut bills for consumers by enabling tailored adjustments to energy use.

Augmented reality is likely to have a widespread impact on public services. For example, a water leak today leads to roads being blocked off and dug up to locate the fault. In the near future, water pipe valves will provide real-time information to an intelligent operations center. Paper blueprints spread out on an engineer's dashboard will be replaced by a smart device that displays the complete water network via an overlay of AR, thus visualizing the specific section of the water network and its faults.

Equally, police officers will have real-time information available in their helmet's visor or in-vehicle display, allowing for a far quicker response, which is further accelerated by less congested roads. Civil engineers or services departments can use AR for maintenance and repairs rather than going through paper manuals.

The future is destined to be safer and smarter, with eGovernment enabling seamless interaction between citizens and the government and the efficient delivery of public services. A better connected city, region or nation makes public services economically more viable and sustainable. The result is a better quality of life for all. [winwin](#)

