Digital
Goverment Trends

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Introduction

The world is moving towards total digitization. Nowadays we do not understand our daily routines without the use of technologies that facilitate their completion. The digitization of public administrations is still an unfinished business at the global level, but there is global awareness and the necessary disruptive technologies are already operating. The transformation linked to automation and artificial intelligence in services designed for the citizen will have real impacts on new public policies and services.

Before the pandemic, we had already noted a change in the demands of the users related to the procedures and formalities requested by their administrations. But the COVID-19 has come as a trigger for the Administration, highlighting the imperative need to modify and digitize both its internal structures and the way it relates to citizens.

Greater digital efficiency, more participation and accountability, more human relations and understandable and agile processes are the challenges that public administrations have to face in the post-Covid era. This new time has demonstrated, across the planet, that public administrations are not prepared to face changing environments where millions of citizens have been constrained in their ability to to exercise both their rights and obligations in terms of key public policies and services.

But we are lucky: the solutions exist and so does the creativity to build them up. We only have to promote and implement them to change the mental paradigm both internally and externally.

Today's technology offers endless possibilities to increase the value of people within the administration, to reinforce citizen participation, to be more efficient with global resources. In short, to focus on people and not on processes.

At IMPULSE we are part of this change, a constant change, and we will be part of all those to come. These are some of the most relevant ones that are appearing and others that are yet to arrive. But, above all, it becomes necessary to understand who, what for and how to do this, and to design the administrations of the future so that they not only meet today's needs, but also function in an agile and flexible way to foresee tomorrow's problems and design future scenarios.

Technology is at the service of the things that really matter.

Challenge 1:
AUTOMATE IT

Automation is one of the great tools of digitalization. The sophistication of technology makes it possible that processes that previously required manual, paper-based work in different systems now can be carried out through fully automated workflows that, thanks to artificial intelligence, behave like a human but with enhanced capabilities.

Automation involves the inclusion of all technologies that generate process efficiency.

Among them are the technologies that facilitate the automation of the administrative procedure. For example, RPA (robotic process automation), which mimics the human response when interacting with a user interface from an IT or office automation system; or iBPM (Business Process Management) to carry out processes in an organization and improve performance. And those technologies that increase the capabilities of public employees, such as chatbots that automate communication with the citizen, or AI that assists in decision making.

One of the great challenges, if not the greatest one, in the coming years will be to modify processes and all interactions in order to achieve the greatest possible penetration of digital services among citizens.

This means automating everything that can be automated in order to allocate resources to what adds value. It is necessary to carefully analyze the needs and find the platforms to coordinate all these technologies and processes so that they work in a coordinated manner. The conceptualization of the transformation together with a good architecture and platform design to support business processes and guarantee a transversal capacity for reuse, will be a key element in the success of the implementation of advanced technological models in the Administration.

The impact that these changes may have on the citizens' perception of the services provided by administrations can be turned around if the conceptualization of the different interactions that users have with the administration is designed to solve not only today's challenges but also tomorrow's problems.
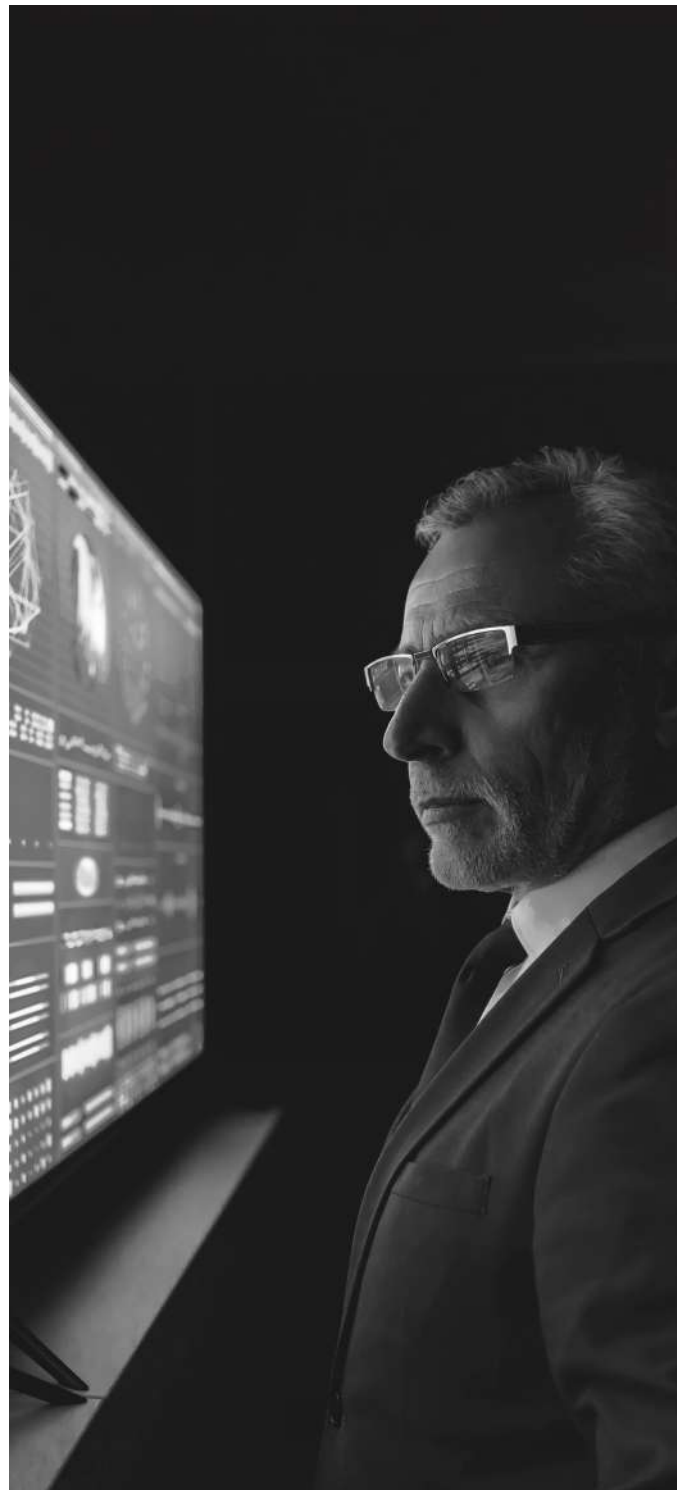
In addition, the analysis of administrative processes, both to be automated and already automated, to in an intelligent way using techniques such as process mining can be the guide for possible predictive models that will set trends in citizens' behavior and make it possible to anticipate needs.

The benefit is not only for citizens, since automation can be key to change the working model of the Administration. Freeing public employees from low-value tasks, and assisting them in the comprehensive management of administrative procedures are great advantages.

Challenge 2:
DESIGNED GOV

In the last decade, technology has managed to eliminate, reduce or simplify many administrative procedures through electronic administration. Nevertheless, today's automatisms need to deliver efficiency and take into account both the process and the personal environment of the person accessing them.

Facilitating procedures in situations of high emotional stress, such as the birth of a child or the death of a beloved relative, would humanize the role of the Administration. Some European administrations have already implemented guidance processes, for example, in the case of a divorce, it takes charge of the administrative management at all the stages of the process, and suggests solutions for collateral issues that may affect the family unit. It is true that the procedure is long (due to the great number of hyperlinks), but at least the option is already available. Optimizing the stages, favoring its usability, achieving a positive response from the citizen and obtaining suggestions for improving the process depends in part on the organization and visual structure of the process itself. This would boost the concept of Designed Gov, i.e., design applied to public services, centered on the person and not on the process.

It is designed having the user, not the customer, in mind. The main difference is that the former does not have an alternative option, whereas the latter does. Design frameworks or platforms of designers already exist in various European administrations whose main function is to use creativity to improve services and make them more accessible to the entire population.

Designed Gov proposes that technology, design, creativity and cross-departmental collaboration be the pillars on which to redefine public services to offer the user relevant solutions. This is aimed not only at achieving the "ideal" end result of a service, but also increasing users/citizens' engagement and participation in this process.

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> **The aim should be to eliminate anything, even words, that create a gulf between 'us and them' when we refer to public service.**

> **Design to humanize the relationship between users and Administration. But as a society we do not function solely as individual units.**

It's worth mentioning the collective conscience, which must be understood, analyzed and designed to ensure governance that takes into account the needs of citizens in both areas.

Designed Gov is much more than a visual change and should not be understood only as a matter of usability and time saving. It is not just to upload a more accessible form on the website. The value of these platforms and this approach to relationships and services lies in the possibility for "any" individual to have access to exercise their rights and duties as a citizen. We refer to both the older and analogical citizen and the younger and digital one.

The key point is to be aware that people must be served. This requires understanding the context, motivations and obstacles they encounter in order to create processes that help them resolve them. This can only be achieved with collaboration between all parties.

This would foster a breeding ground that also allows for co-creation to seek different approaches for different individuals at different times, to be inclusive, and promote a genuine relationship between the individual and the public administration.

Challenge 3:
GREEN DIGITAL

The resources and infrastructures required for digital transformation (such as cloud and/or green data centers or technologies with, a priori, high computational consumption such as blockchain) must meet efficiency and sustainability criteria and must have a minimum environmental impact. This challenge for Public Administrations comes from a more generalist and technical challenge, Green IT, which in the last decade has been setting a clear trend in the private sector of technological infrastructures.

According to the IEA (International Energy Agency), data processing centers consume 1% of the global energy. In the view of this, the Public Administration must also take on the challenge of implementing systems that improve energy efficiency and consumption in data centers through policies and programs that set a trend in energy efficiency standards for network devices, or incentivize efficient network operations.

If the private sector seeks solutions with low environmental impact, it is because the return is high. Not only in the field of intangible assets such as customer perception or branding, but also in the economy, with significant savings coming from further energy optimization.

This poses a big benefit for corporations, and an even greater benefit for administrations. Let us not forget the current urgent situation in terms of climate change policies.

This challenge initially involves modernizing systems and infrastructures by working more in the cloud and with more efficient methodologies such as the digital, delocalized workplace.

On the other hand, the human capital that manages public services will also need constant updating and training to be able to integrate digital skills associated with new technologies and environmental impact and to continuously optimize energy consumption through specialized companies or profiles exclusively dedicated to efficiency.

In addition, for the sake of consistency, supplier management and public procurement processes should also certify their commitment to using clean energy and resources from renewable sources.

The challenge for today's administrations is to modernize their systems, train their people and certify their suppliers to ensure that the the adoption of new technologies and the increase in digitalization processes do not represent a step backwards in the implementation of ecological energy transition for this decade.

Challenge 4:
OUTCOME GOV-TECH

The ecosystem of small companies and start-ups working with emerging technologies must be part of the equation when redesigning public administration services. The reason is simple: with an agile and practical methodology, this type of company can offer great benefits both in innovation and in the rapid implementation of solutions.

There are already start-ups creating solutions jointly with governments in areas as diverse as cloud-based software solutions for water resource management, utility management, green IT, data resilience and smart city management, among the most modern ones. After the explosion of Fintech, Edutech, and many other techs, Govtech start-ups are the spearhead of today's most innovative digital ecosystem.

And how can we increase the participation of these companies in the design of today's governments? Many of them work with the help of Administrations, others have a public-private business model that allows them to overcome the rigidity of the Administration's contracting conditions.

This is the main obstacle for accessing the Public Administration: stiffness. The complexity of tenders, economic requirements and the difficulty of accessing certain public tenders hinder the incorporation of this highly specialized business fabric in the administration as government suppliers. Whereas this is changing, the most immediate challenge to increase participation is to eliminate the Administration's inertia in the search for suppliers, opening up tenders to non-conventional companies.

In Europe, collaboration with small businesses is already a reality. This not only facilitates dealings with local governments, but it also boosts citizens' participation and communication.

So far, the most relevant collaboration takes place at the local level, but the trend is towards public-private collaboration models that address issues such as voting systems or data management in the administration to generate predictive models that improve the lives of citizens.
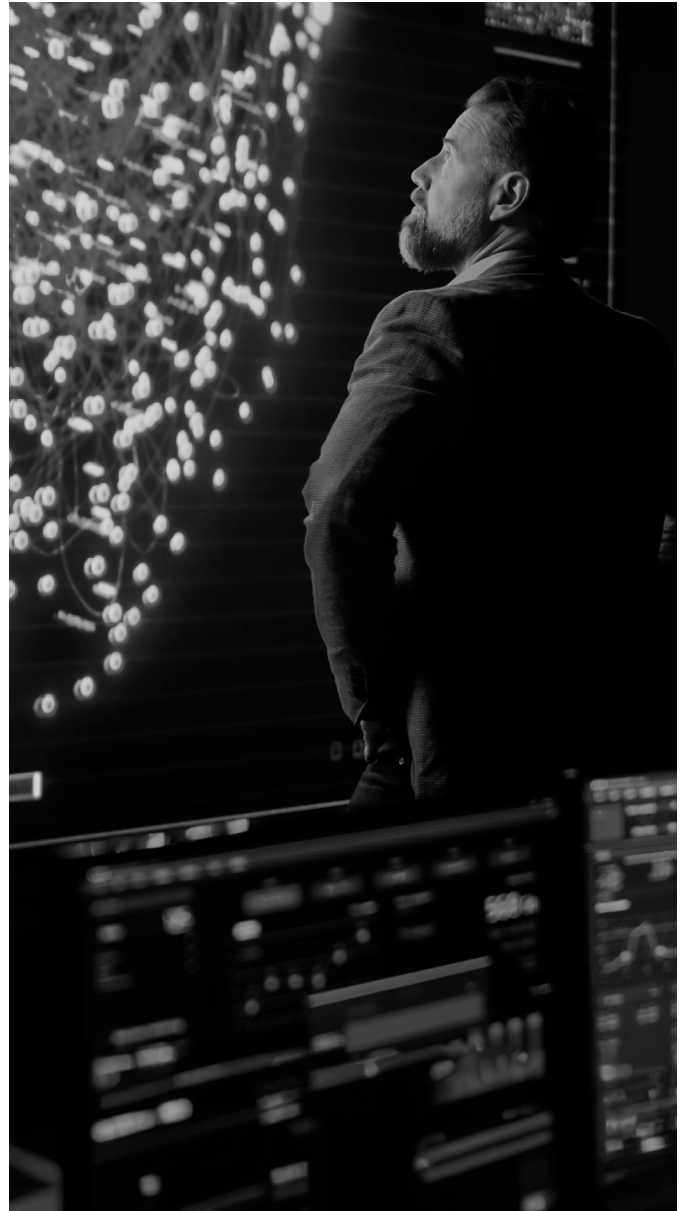
It is important to attract companies that can conceptualize the service management that the Public Administration cannot perform due to its lack of agility and its need to address solutions in a creative and, in some cases, in a disruptive way. Secondly, these services must be purchased and structures must be opened to solutions that do not have an expected outcome. There must be some risk and a trial-and-error philosophy to encourage change in management.

Challenge 5:
THOUGHTFUL IA

Artificial Intelligence is the technology that has generated the highest expectations for the new data revolution and digital transformation. From the perspective of people, AI is present in our private lives through virtual voice assistants such as Siri or Alexa; customer service chatbots, capable of establishing patterns and mimicking human response; or machine learning, which develops the ability of computers to learn from different interactions and modify their responses. This technology is already part of our collective imagination, and its practical application substantially improves many of our daily lives.

The benefits of using AI in the public sector are numerous: improvements in the healthcare system, safer and less polluting transportation, faster, more flexible and friendlier administrative processes, among many others.

All of them are aimed at creating an efficient ecosystem around the citizen to improve his/her life experience for the sake of a more efficient and inclusive society.

> **It is also beneficial from the Administration's point of view. Artificial intelligence will make it possible to identify needs according to interactions, design more personalized and impactful public policies, and anticipate future challenges. This will lead to the design of new services to optimize the numerous interactions with the Administration that define the public life of any person, taking into account the finite economic resources of any State.**

The quantum leap for global governments will be to integrate data on these interactions and to deliver personalized experiences in compliance with data protection regulations and the ethical framework of the AI Act. Secondly, it should generate sufficient confidence in the transparency of all processes in order to build the gap between digital and analog society and to reduce imbalances.

Public systems must be humanized since their mission is not only related to the management of data but also to empathizing with the impact data has on people. This humanization must be approached from a conceptual perspective based on specific values and ethics. It must use technology to leave no one behind, not only avoiding biases, but also eliminating these biases through technology.

The combination of both, technology and values, is one of the main challenges of the implementation of **"responsible"** and **"thoughtful"** artificial intelligence in the Administration.

The thoughtful AI must be guided by those values that promote citizens' equality, wellbeing and safety. According to a recent EU Whitepaper, Europe has a great opportunity to become a leader in the creation of an AI implementation model. However, this must take into account not only the welfare of an individual but that of society as a whole.

Those governments that are able to humanize the relationship with the citizens through a friendly and thoughtful AI that takes into account the personal circumstances of each citizen, and at the same time, are efficient and consider the social or environmental impact (for example by assessing the reduction of energy consumption in data management), will be the ones that will mark the difference in the governance of the near future.

Conclusion

These are some of the trends for which we see clear signals, but the future scenarios we expect to come soon are related to public metaverse, quantum computing, 3.0. web...

The world is a great laboratory of ideas. And Public Administrations are the ideal breeding ground to lead this digital transformation that will change the relationship between people and their leaders.

Only two things are needed: a good understanding of technologies and the design of their implementation in order to do so with guarantees and to ensure that they include the necessary public value with the maximum possible positive impact on the administration and society.

Citizens, people, have already demonstrated that they are eager to embrace these changes.

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