The challenge for digital transformation in public administration

As digital technology becomes ubiquitous, there is both excitement and concern about its societal impact.

By João Rodrigues Frade

Building a trustworthy digital society: the exciting and perilous road ahead

We live in an era of unprecedented change. In Europe alone, the ongoing digital transformation will most likely lead to the full digitisation of the paperwork necessary for the free movement of goods, services, capital and people within the European Single Market. Eventually, the official paper documents (and official cards) still used to process many of our daily transactions will become obsolete.

Government bodies are important intermediaries of those transactions, as the documents they issue, or certify, are the standard way to verify information about people (identity cards, work permits, driving licenses, etc.) and goods (origin of containers, safety of products, etc.).

Since Johannes Gutenberg invented the printing press in 1440, paper has been used by governments around the world to verify information about their citizens, goods, and services. For centuries, paper documents have been backed by the full weight of widely respected institutions, which in turn guarantee the legitimacy of the daily transactions taking place in the global economy.

While digitising official documents speeds up the flow of information and makes life easier for citizens, it also leaves room for fraudulent activity, as without the appropriate digital tools, digital documents remain relatively easy to tamper with. This remains one of the main reasons why the lack of trust in the digital world still poses a major challenge for governments. In short, the issue is much bigger than sharing sensitive documents and information over the internet. Today, the main challenge is figuring out a way to make everyday online interactions safe and trustworthy for all parties involved.

Moving towards a trustworthy digital society

Europe is leading the way towards a new regulatory framework for the Digital Age. This includes the General Data Protection Regulation (GDPR), and its rules for platform-to-business cooperation, but also eIDAS, the single European framework for eID and trust services, among several others. While regulations are being put in place so that Europe transitions to a trustworthy digital society, there is also a lot happening at the technical level to enable this transition.

Although it doesn't get as much attention as regulatory reform, the EU also promotes digital solutions based on open standards and technical specifications aligned with the aforementioned regulations to support the creation of an open, fair and inclusive digital society. Reuse of existing digital tools not only prevents the reinvention of the wheel, but more importantly it helps to save time and reduce costs, while increasing interoperability among the Member States participating in the Single Market.

A good example of an EU-wide initiative aiming to promote reuse and improving interoperability is the European Interoperability Framework (EIF) and its 47 key recommendations on interoperability. The EIF is a product of the wider ISA Programme, created to provide digital solutions that enable public administrations, businesses and citizens to benefit from interoperable cross-border and cross-sector public services. Another important EU-wide initiative is the digital programme of the Connecting Europe Facility (CEF) and its grants for accelerating the deployment of digital solutions in several key sectors of society, such as justice, health, data, etc. CEF also promotes the adoption of common solutions, known as Building Blocks, such as eID and eSignature, all of them based on open standards and technical specifications that facilitate the delivery of digital public services across borders. Furthermore, the adoption of common solutions by different sectors also supports cross-sector interoperability and the sharing of data among them.
The digital trust challenge

These solutions are all part of a concerted, EU-wide effort to foster a culture of trust in the emerging digital society. Ultimately, the goal is to make sharing data online as safe and easy as giving out our personal details over the counter. This process is well underway. Most Member States are already using these digital solutions as part of their own digital infrastructure, enabling their citizens, and also cross-border citizens, to share official documents in a convenient way while substantially minimising the risk of fraud. Let's look at how this is done.

The “just-in-time evidence issuance” pattern has been the most common way, in the last decades, to share sensitive data via electronic means. This pattern fundamentally relies on the ‘just-in-time’ fulfilment of a request for information made directly to its authentic source such as a population register, a vehicles register or a business register. A good analogy for this pattern is the digital post. But there is now another method to share valuable information online, known as “verifiable credentials”, which is typically powered by blockchain technology.

Blockchain is often mistaken for just another online data sharing tool, but it is more than that. Before blockchain came along, several data exchange protocols for the sharing of information online already existed. Blockchain is not a protocol for sending and receiving data, but a shared ledger in which the blocks of information composing it contain permanent and variable records about specific entities. For example, blockchain creates an immutable and decentralised record of financial transactions, the lifecycle of a document, and the steps products go through in a supply chain. In practical terms, this means that blockchain can facilitate checks on the integrity and origin of official documents without the need to contact their issuing entity each time. In this case, the sharing of data is often done using digital wallets. This is why CEF is working on the European Blockchain Services Infrastructure (EBSI), which was put together by the Commission in close cooperation with the European Blockchain Partnership (EBP). The plan is for the blockchain to join other Building Blocks, such as eDelivery, eSignature, and eID, in the EU's digital transformation.

Trust and technology

Digital services have the potential to make life easier for all of us. However, illegal surveillance, security hacks, misuse of personal data, and the spread of misinformation and fake news continue to make headlines. But trust and digital technologies don't have to be mutually exclusive. The same tools driving this digital transformation can be the same tools that assure citizens their data is in safe hands. When applied for the right purposes, those digital tools don't just act as guarantors of trust in the digital sphere, they also become catalysts of positive societal change.

Since their creation, governments have directly and indirectly safeguarded many of the daily transactions between citizens, businesses and public administrations. In some corners of society, there are concerns that this digital transformation will make some of these daily transactions and processes less secure. But that is not the case. A birth certificate sent or received via a digital post office can carry the same weight as one received via a traditional postal service; carrying an ID card, passport, or a driver's license in a digital wallet will be as valid as having them in a physical wallet.

States and their institutions are putting in place digital infrastructures which will ensure these processes and transactions happen in a trusted way, within and across borders. This is why the EU will keep implementing regulations and designing digital tools that answer the needs of a modern world. Such an approach will not only help Europe in its quest to become paperless, but it will also assure citizens their data and rights are safeguarded.

To continue learning about the way that official documents can be shared in a trusted and secure way, I invite you to click below:

| The digital post office | The digital wallet |
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Make the right policy calls by harnessing Big Data.
Bank account opening

Login with eID

eID
Allow cross-border access to digital services.

Context Broker
Use and share real time data from various sources in a smart way.
eInvoicing

Make is easier to do business with the public sector.

eInvoices received from 2 EU countries

Pay eInvoices
eArchiving

Simplify long-term access to information.
Mortgage accepted

eSign contract

eSignature
Make signatures paperless.
Create a secure and reliable message exchange infrastructure.
Qualifications translated

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eTranslation
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Blockchain
Enhance the way that citizens, governments and businesses interact by enhancing trust between entities and improving the efficiency of operations.