# **POLICY BRIEF**

Digital Counter - Revolutionising Public Service Delivery Through Innovation

# interoperable europe

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# **INTRODUCTION**

With the aim of facilitating cross-border data exchange and accelerating the digital transformation of the public sector, the Interoperable Europe Act aligns with the objectives of the EU's Digital Decade, including ensuring 100% of key public services are available online by 2030. The regulation aims to make interoperability a cornerstone of the Digital Single Market, supporting more effective implementation of digital features in public policies and services across sectors such as justice, health, and transport. In this context, the Interoperable Europe Academy's peer-learning policy briefs are a new initiative designed to enhance the implementation of digital government policies by fostering the exchange of experiences, innovative approaches, and capacity building between public administrations. These briefs provide insights into various solutions, highlighting their role in addressing public administration challenges and identifying transferable practices. The initiative encourages learning from successful examples and supports the reuse of solutions across Member States.

This policy brief focuses on Digitale Balie, a digital service counter solution developed during the COVID-19 pandemic by the municipality of Rotterdam to deliver essential public services via video call. Drafted in consultation with the team behind the solution, this brief provides guidance on how to develop and implement a digital counter solution like Digitale Balie. It highlights key steps and challenges municipalities may encounter, the results that can be achieved, and key lessons learnt from Digitale Balie to consider. Each part is supported by insights into how Digitale Balie approached the implementation and management of such a project.

# **HOW IT ALL STARTED**

In 2020, the COVID-19 pandemic forced public administrations into lockdown, halting essential public services such as childbirth and marriage registrations in the municipality of Rotterdam. The initial challenge was the sudden closure of public counters at city halls and service centres in the municipality, which made it impossible for citizens to access essential services. Pre-COVID, designated teams went to hospitals to register childbirths for citizens who could not visit service centres. Due to the lockdown however, hospitals were overwhelmed with patients and closed for all activities other than first aid and healthcare. In order to continue serving its citizens, the Municipality needed a solution that could deliver essential public services remotely: Digitale Balie.

# **BUILDING A DIGITAL COUNTER SOLUTION**

The development and implementation of Digitale Balie can serve as a guide for administrations looking to adopt remote public service delivery solutions. This section outlines the high-level steps involved in creating and deploying a digital counter, designed to ensure secure, efficient, and user-friendly access to essential services.



### **Procure a Simple Platform**

Before adopting solutions like a digital counter, public administrations should begin by establishing a clear vision and then procuring a simple, reliable platform to support their goals or alternatively choose one already in use within their administration. This could be for example an off-the-shelf Software as a Service solution.

The Digitale Balie team prioritised high-security standards and chose to avoid market cross-border solutions due to privacy concerns. The team feared that citizens might be reluctant to use these platforms, leading to low adoption rates. Instead, they opted for Mendix, a rapid application development platform, combined with Weseedo, a video platform with high-security standards (used for example for medical and legal purposes).

#### **Conduct a Pilot**

As a second step, public administrations should begin with small-scale experimentation to understand the platform's capabilities and limitations as well as citizens' (users) needs and behaviour. The experience of the Digitale Balie team illustrates this process well.

Initially, the team experimented with video calls on a small scale with colleagues and family members. Through this, they soon realised that delivering public services such as child or marriage registration required a secure identification system, as it is legally mandated for citizens to verify their identity to access these services. Without proper identification, there was a risk of significant legal consequences, such as the potential for registering a child who was not born. Recognising this need, the team transitioned from using an existing video platform to developing a comprehensive digital counter, aptly named Digitale Balie (digital counter in Dutch).

### **Evaluate the Architecture**

For long-term success, public administrations interested in implementing a remote public service delivery solution should thoroughly consider their technology and architecture set-up. Envisioning how a solution will integrate with both local and national structures while considering potential future use cases is crucial for the effective use of public funds. Public administrations should think big, even if the first use cases are small. The Digitale Balie team started with a forward-thinking approach, implementing a scalable architecture that addressed immediate needs while laying the groundwork for mid-term growth and expansion.

To achieve this, they leveraged the municipality of Rotterdam's license for Mendix, the crossborder application development platform that facilitated the quick creation of IT components. Within six weeks, the team successfully integrated an identification connection with the Dutch digital ID system (DigiD). The team is now also considering the implementation of the eIDAS regulation in its cross-border component, working towards ensuring that all EU citizens could identify themselves with their respective national eID in the future and therefore have access to their services remotely.

However, the team is now encountering challenges resulting from the initial discard of an ambitious and comprehensive role structure from the outset. Retrofitting and reprogramming roles in Mendix proved complex and time-consuming. This highlights the importance of planning early on for a broader range of roles with varying levels of authorisation, such as administrative, technical, and access rights, as well as ensuring clear separations between front-office and back-office functions. Taking a 'think big' approach during the initial design phase can help avoid similar obstacles and ensure a smoother implementation process.



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# **Scale your Solution**

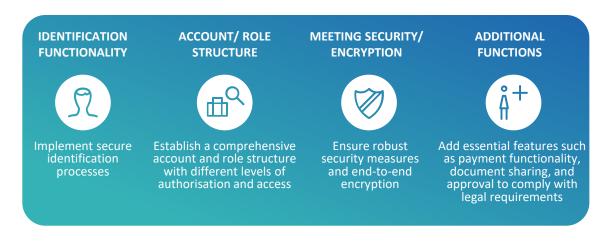
Based on their initial experiences, public administrations can then decide whether to develop a fullfledged digital counter. The Digitale Balie team's experience highlights the importance of focusing on essential functionalities, such as identity verification before developing additional features based on user feedback. With a functional and reliable platform in place, user requests for functionalities such as document sharing, payment processing, translator integration could be integrated, which also expanded the types of services that could be delivered via Digitale Balie.

The team prioritised creating a user-friendly solution, avoiding platforms that required account creation or app downloads. Instead, they ensured that citizens could access the digital counter simply by clicking on a link that opened a video connection.

To accommodate these functionalities while maintaining security and ease of use, the team developed an additional Mendix layer on top of the initial platform provided by Weseedo. This approach allowed them to continue building new features while ensuring the safety and security of the system, ultimately resulting in a robust and user-friendly remote public service solution. The development process also emphasised meeting security, with encryption and other measures implemented to safeguard sensitive information and ensure secure meetings.

By following these key development and implementation steps, the Digitale Balie team successfully addressed the need for remote public service delivery during the pandemic and beyond. The solution's secure, user-friendly design and rapid deployment ensured that essential services could continue uninterrupted, benefiting both the administration and the citizens it serves.

### **Key Development Milestones**



# **DIGITALE BALIE TODAY**

Digitale Balie enabled continuity in public service delivery during the pandemic, while improving internal processes and citizen experience overall. For example, before the pandemic, the process of marriage registration was organised in a decentralised manner, with different neighbourhoods handling their own registrations. This decentralisation made it difficult to manage capacity and resources efficiently. The digital counter allowed the team to centralise the entire marriage registration process, resulting in a more efficient and streamlined operation. Similarly, the child registration process was greatly improved thanks to Digitale Balie. Citizens with disabilities, single parents with children, and those without the means to travel could now access services remotely, enhancing their autonomy and reducing the burden on the municipality's resources.



Nevertheless, during the development of the solution, the Digitale Balie team encountered several challenges. One of the primary obstacles was the emotional barrier associated with using video platforms for public services. Citizens and public servants alike were hesitant to embrace this new mode of interaction, fearing privacy breaches and the unfamiliarity of the technology. Exacerbated by the widespread distrust of Big Tech solutions, this initially led the team to choose an alternative platform with higher security standards.

From a technological perspective, the team realised that not adopting a sufficiently ambitious approach during the initial planning phase, e.g., for the role structures, resulted in unforeseen complications later in the process, particularly as the service offering grew and demands increased.

Scaling up Digitale Balie post-pandemic also proved challenging due to reduced incentives. As society returned to normal, the urgency to adopt digital solutions both for citizens and within the administration diminished, and the momentum gained during the pandemic waned. The team struggled to maintain the same level of enthusiasm and support for the platform, making it more difficult to integrate Digitale Balie into mainstream public services.

Despite these challenges, the team remains confident about Digitale Balie's potential and is now seeing increased adoption across other departments and services, further validating the potential of video calling for public service.

# POTENTIAL FOR REUSABILITY

Many use cases identified during the pandemic are still very much relevant today. A digital service counter like Digitale Balie could be used to engage citizens who are more "digitally savvy", thereby freeing up on-site capacity for those who cannot switch to the digital option. The digital counter also offers significant opportunities when it comes to decreasing costs of maintaining offices as it enables remote working and thus also offers more flexibility to public sector employees. Another use case is the one of citizens who are registered in a municipality such as Rotterdam but who cannot be physically present to receive the public services that they need.

At the same time, this solution also brings constraints with it, which could limit its potential to be reused in other administrations. Future initiatives may need to account for costs associated with new platform licenses, which can impact budgets and planning. The municipality of Rotterdam did not have to consider this for Digitale Balie, as the team was able to leverage an existing license (Mendix), avoiding additional expenses. Another hurdle lies in the use of Mendix itself. Since it is not an open source platform, the municipality of Rotterdam would face challenges in sharing their code with other municipalities that use different platforms. This is not due to a lack of willingness or feasibility, but rather because the code is more complex.



# **KEY LESSONS LEARNED**

The development and implementation of Digitale Balie provided several key lessons that other administrations can learn from:

## THINK BIG, START SMALL

One of the main lessons learned is the importance of thinking big, yet starting small and gradually scaling up. The team began by experimenting with a small-scale pilot, involving colleagues and their families. This approach allowed them to gather valuable feedback and make necessary adjustments before rolling out the solution on a larger scale.

### STAKEHOLDER INVOLVEMENT AND MANAGEMENT SUPPORT

Involving key stakeholders from the beginning was a critical factor in the project's success. The Digitale Balie team's management provided full support, allowing them to allocate resources and involve all necessary stakeholders. This support ensured that the project had the flexibility and resources needed to develop and implement the solution quickly.

### FOCUS ON USER-FRIENDLY SOLUTIONS

Focusing on user-friendly solutions is essential for ensuring high adoption rates. The team chose a platform that allowed citizens to access the digital counter by clicking on a simple link, without needing to create accounts or download apps. This user-friendly approach made the platform accessible to all citizens, increasing its adoption and effectiveness.

#### ENSURE LEGAL AND TECHNICAL COMPLIANCE

Ensuring legal and technical compliance was another key lesson learned. The team adapted processes to comply with existing laws and integrated the solution with the Dutch digital ID system (DigiD) for secure identification. This compliance was crucial for delivering services such as childbirth and marriage registrations, which require legal identification.

### DIGITAL TRANSFORMATION AS A GOVERNMENTAL MISSION

Recognising that digitising public services is not just a convenience but a fundamental aspect of many governments' missions is another relevant takeaway. As governments aim to modernise and improve service delivery, adopting digital solutions becomes a vital step to meet the rising demand for efficient and accessible public services. This shift is key for staying aligned with broader governmental goals.

## SETTING CLEAR ROLES FOR SECURE OPERATIONS

Setting clear roles on the platform from the beginning is essential for secure and efficient operations. The Digitale Balie team found that a comprehensive account and role structure with different levels of authorisation is crucial. They needed to retroactively separate technical and functional administrator roles to prevent excessive access and ensure security, which was not easy.

#### **DIGITAL EXPANSION**

Once a digital platform is up and running, its functionalities can be expanded to cover virtually any public service. This scalability allows the platform to grow and adapt over time, supporting additional services and increasing its overall value. This flexibility ensures long-term sustainability and the ability to meet evolving needs as the system matures.

#### ADDRESSING EMOTIONAL AND TRUST BARRIERS

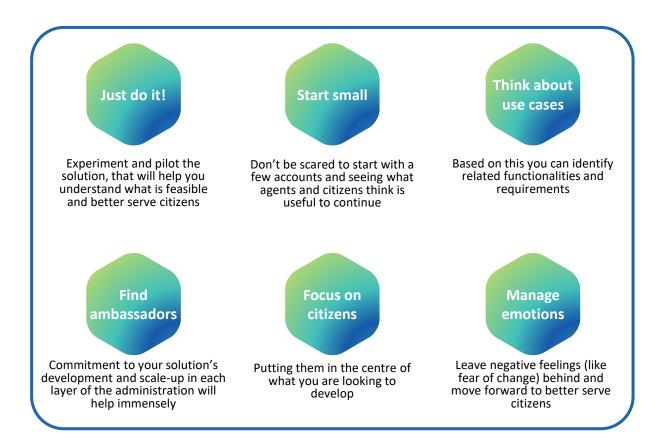
The team discovered that both citizens and public servants were hesitant to adopt video platforms for public services, largely due to concerns about privacy and unfamiliarity with the technology. This resistance was further compounded by widespread distrust of Big Tech solutions. As a result, the team prioritised seeking alternative platforms with enhanced security standards to build confidence and encourage adoption.



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# NEXT STEPS FOR INTERESTED READERS: HOW TO GET STARTED?

When asked about their best advice for other public administrations considering implementing a similar solution, the Digitale Balie team was clear:





If you'd like to know more about Digitale Balie, please contact:

iop-academy@ec.europa.eu

# Additional information resources:

EIDAS REGULATION: https://digital-strategy.ec.europa.eu/en/policies/eidas-regulation

DIGITALE BALIE: https//github.com/Municipality-of-Rotterdam/Digitale-Balie

Do you have a solution in mind that you would like to propose for a peer-leaning policy brief?

PLEASE CONTACT US WITH A SHORT DESCRIPTION OF YOUR SOLUTION TO SET UP AN EXPLORATORY MEETING

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