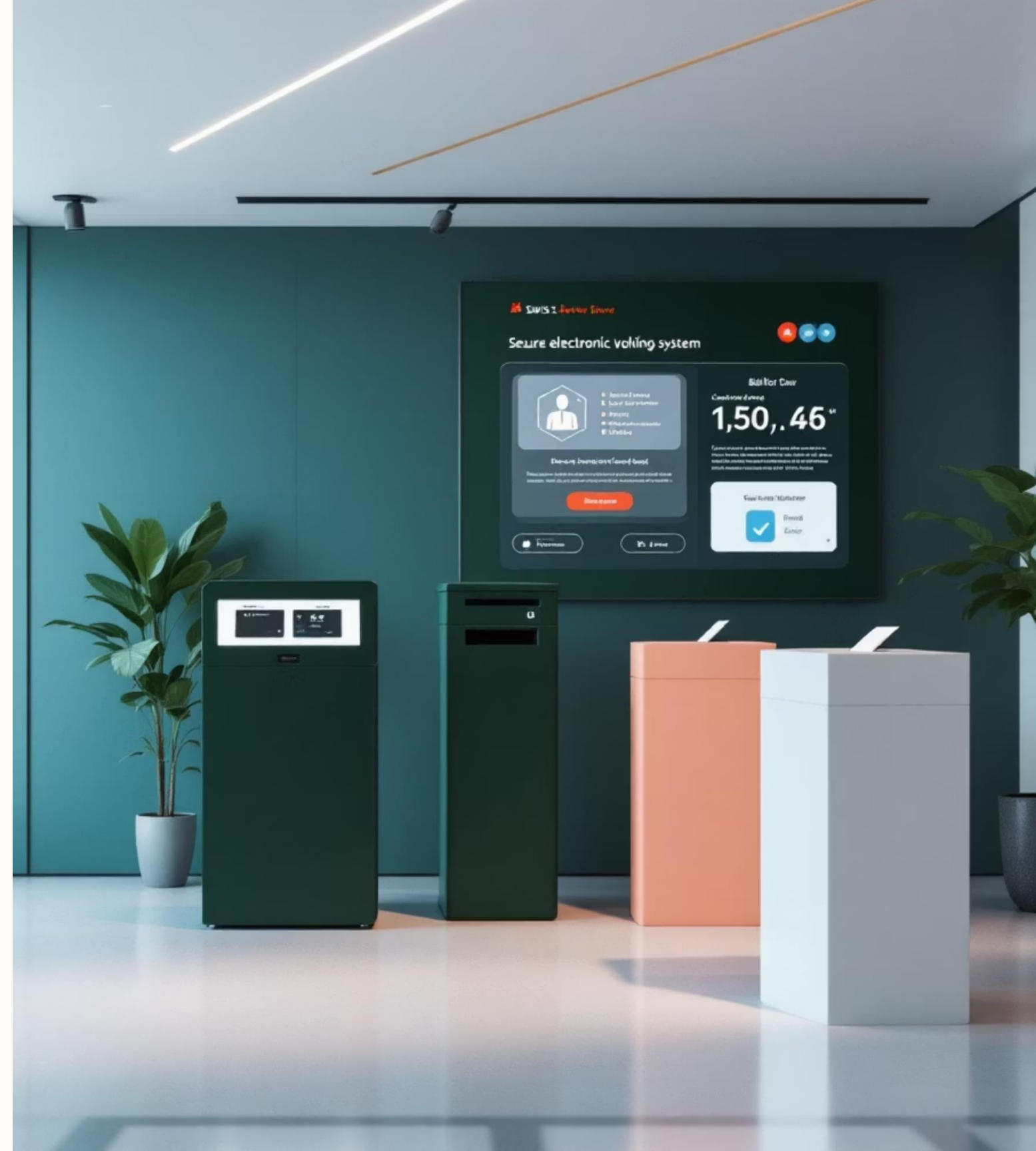


# Swiss e-Democracy: Redefining Election Operations

The project at Insitum in collaboration with Swiss Post, Cantons, and ScytI from April-August 2017

Service Designer: Led workshop & conducted interviews with election administrators, Swiss Post, & product teams. Delivered a comprehensive service blueprint, customer journey map, wireframes, and training materials.

Team: 3 Product Managers, 3 Swiss Post Operations specialists, 2 Designers, and 2 UX researchers





# Approach

✖ Objective

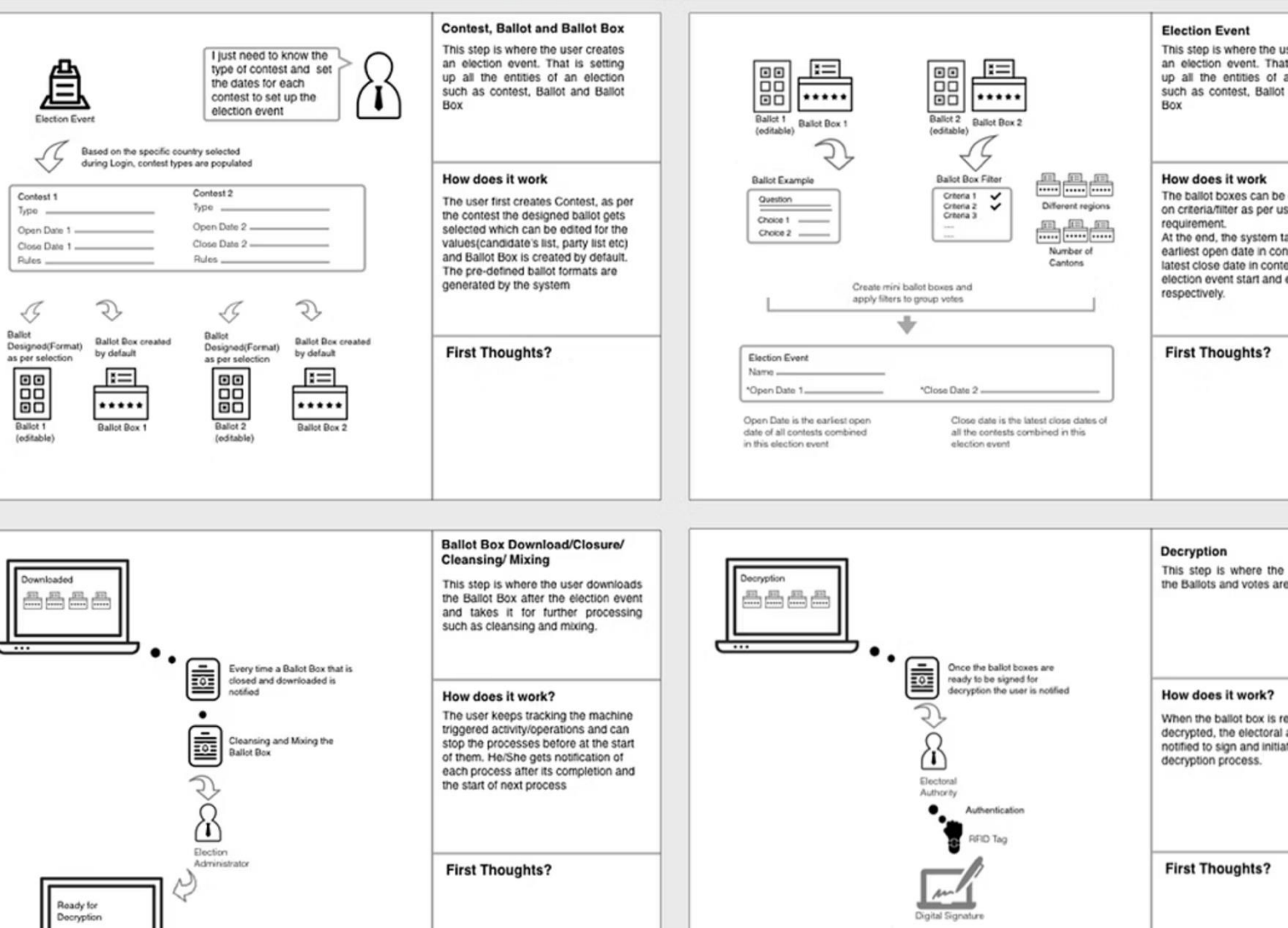
Redesign the e-voting platform for secure, fair, and efficient election operations.

📋 Research

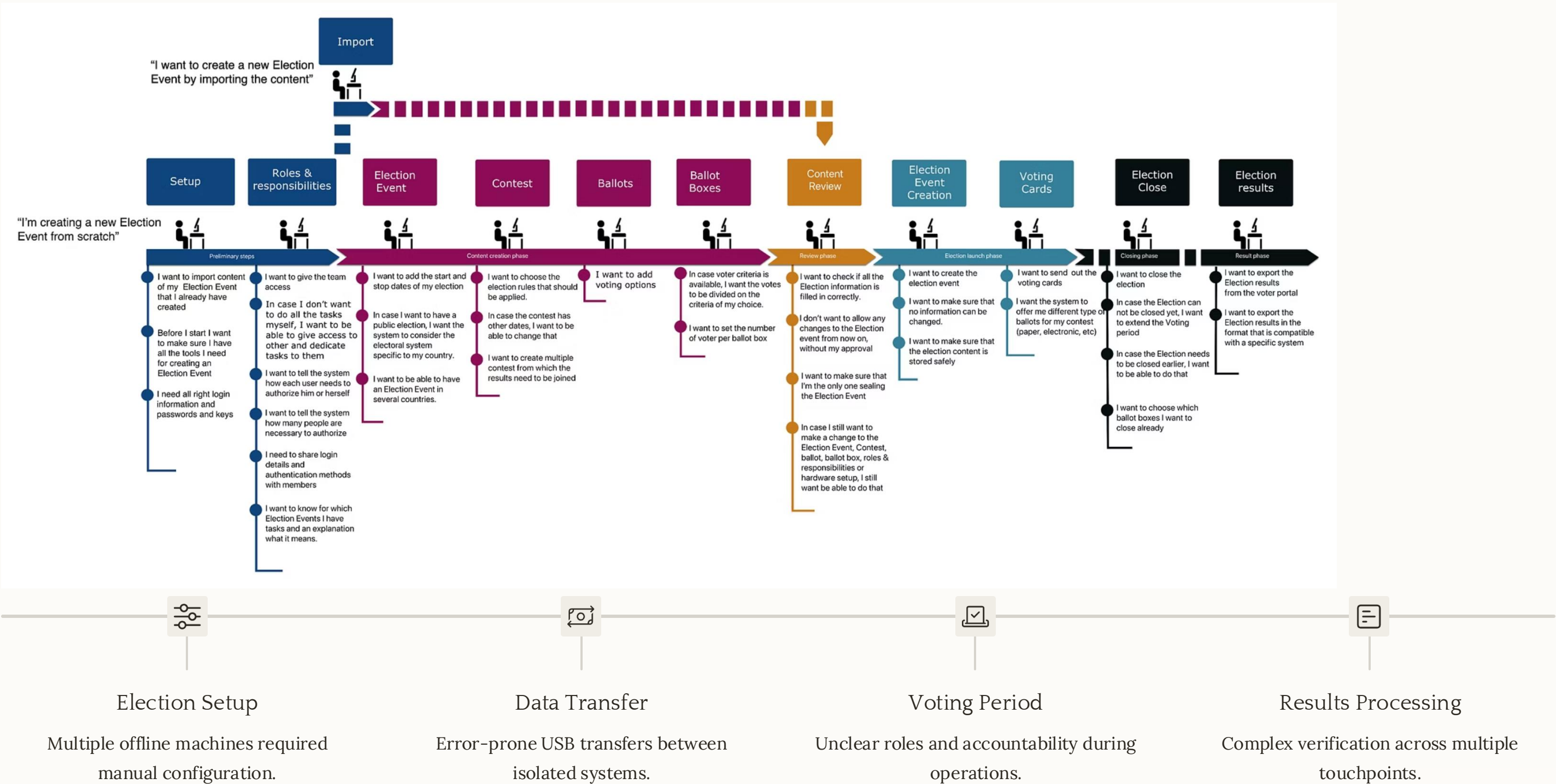
Conducted interviews with 22 participants and workshops with Swiss Post and ScytI teams.

📉 Challenges

Disconnected processes, manual data exchanges, and lengthy training requirements.

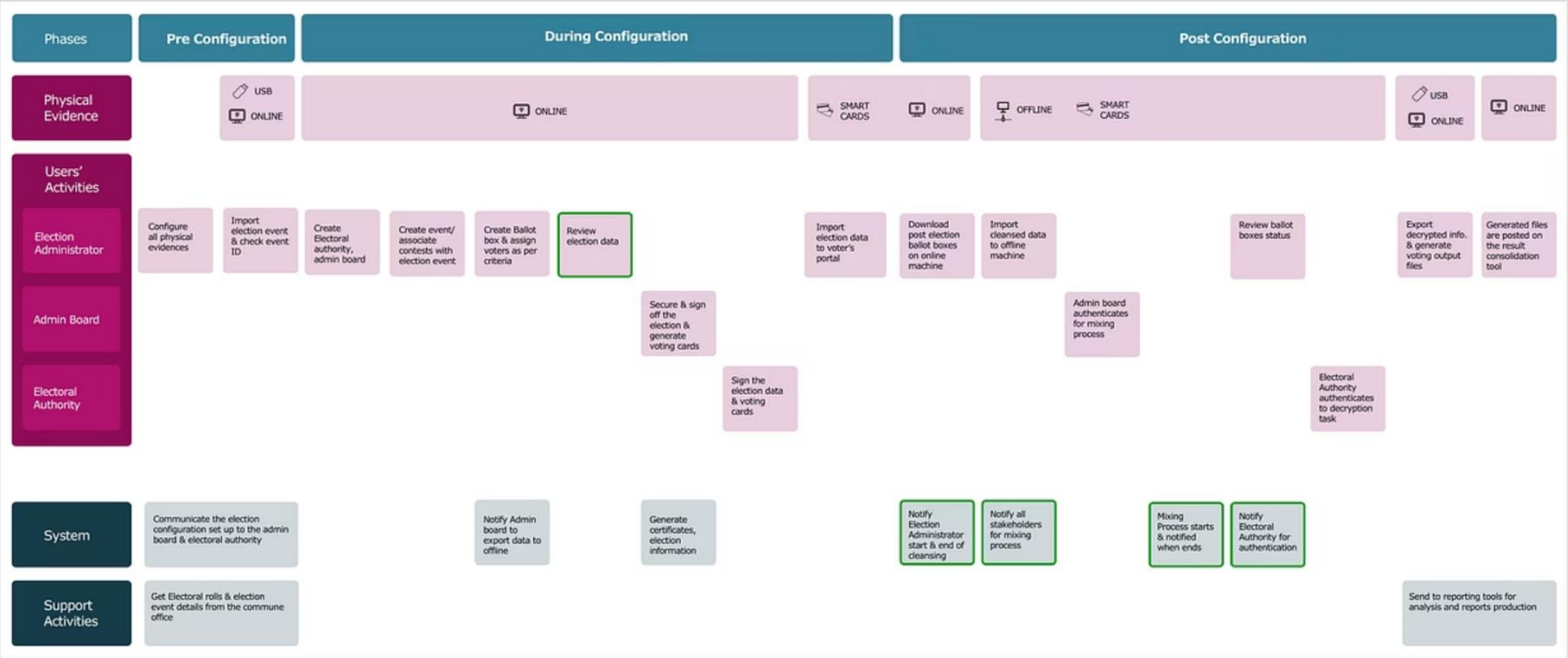


# Customer Journey Map





# Service Blueprint



## SWISS POST'S E-VOTING SOLUTION

### KEY POINTS FOR CANTONS AND MUNICIPALITIES



Swiss Post offers the cantons and municipalities a simple and flexible e-voting solution for Swiss citizens resident both in Switzerland and abroad. As the trustworthy carrier of more than 20 million consignments containing voting material and postal votes every year, Swiss Post is also the natural choice for ensuring the safe and confidential transport of votes cast electronically.

**What is e-voting?**  
E-voting is an additional voting channel which is offered alongside postal voting and the ballot box. E-voting allows voters to use electronic media to participate in votes and elections. Votes are cast via computer, smartphone or tablet.

**Where will the Swiss Post system be used?**  
It has been used in the Canton of Fribourg since 2016 by Swiss citizens resident abroad and in the Canton of Neuchâtel since 2017 by citizens resident both in Switzerland and abroad. In both cantons, the system has been used for federal votes and for cantonal elections. The Canton of Basel-Stadt is also looking to introduce the Swiss Post e-voting solution as soon as possible.

**Advantages for cantons and municipalities**  
- The cantons have **complete control** over the election and voting process, which means that they can guarantee their sovereign jurisdiction at all times.  
- The cantons can organize their own elections and voting processes **very simply**.  
- The Swiss Post solution can easily be configured to meet cantonal requirements, and can also be integrated into cantonal portals (flexible integration into e-Government).

**Advantages for voters**  
- The voting platform can be used on **all end devices and platforms** (responsive design).  
- Swiss Post's e-voting solution is **fully accessible**.

**2017 -AA- Access for All**

**Swiss Post**

**Demo system, www.e-voting.ch**

## Post E-Voting

### Key aspects of the service

→ Swiss Post is working in partnership with the cantons to provide an electronic voting solution.

→ Swiss Post offers e-voting as a service, and is committed to long-term cooperation, ensuring the quality of the service as well as its evolution, integrating the latest developments in terms of security and data protection.

→ Swiss Post is designing a solution based on a fully verifiable cryptographic protocol, permitting its use by 100 percent of the electorate (second generation) once its robust is complete (end of 2017).

→ The solution and its data are stored exclusively at Swiss Post in Switzerland.

→ A generic data model supports the wide range of democratic election and voting procedures in the cantons and municipalities.

→ Since it supports Swiss standards, the solution can be easily integrated into cantonal IT and voting systems.

Since 2012, Swiss Post has been conducting an intensive examination of the issue of e-voting. It aims to provide a comprehensive, secure and sustainable range of services and to help to bring the democratic process in Switzerland into the digital age. Swiss Post is a reliable partner at the interface between the physical and digital worlds throughout Switzerland, with its core competency in the secure, reliable and punctual transport of sensitive information, making it the natural choice also for an e-voting system. Swiss Post currently transports 2.2 billion letters annually, of which around 20 million annually are exclusively for elections and votes. Its role as a trustworthy intermediary is indisputable.

**Clearly defined allocation of roles and responsibilities**  
Holding elections and votes is an important responsibility of the cantons. The cantonal electoral authorities are responsible for the electoral registers and rolls, opening and checking the ballot boxes and tallying the votes. The role of Swiss Post remains unchanged: it focuses on the secure transport of votes and guarantees the anonymity of the ballot boxes, in that it does not save personal data and does not have the private key for ballot boxes – similar to the procedure for postal voting.

**Security and monitoring**  
Swiss Post has many years of experience in dealing with sensitive information, for example in e-banking, where it is Switzerland's leading provider with over 1.6 million customers, in e-health, for example with the electronic patient record, the secure electronic letter IncaMail, and with SuisseID, the Swiss standard for digital identity and signature. To meet the demands of the Confederation, Swiss Post has chosen to work with a renowned technology partner, Scyt, with considerable expertise in the areas of cryptography, science, research and development. This means Swiss Post can offer a solution that meets the highest demands on software and infrastructure, today and in future. E-voting is the core business of Scyt. The company is a global leader and has around 20 years of experience. Electoral authorities across the world rely on Scyt solutions for their e-voting.

**Solution**  
Swiss Post is developing a solution that meets the diverse nature of political rights in Switzerland. In its most advanced phase of development by the end of 2017, the solution will meet all the requirements of a second-generation system and specifically has the following characteristics: a fully verifiable cryptographic protocol for verifiable vote casting, both individual and universal verifiability, including additional control components, and for use by 100 percent of the electorate. The solution will be developed in stages by the end of 2017, and introduced gradually together with each of the partner cantons.

**Integration with the cantons and municipalities**  
The integration of the solution into the existing systems in place in the cantons and municipalities will be closely accompanied by Swiss Post. The solution can be integrated directly and will also support the eCH standard interface used in Switzerland for eGovernment solutions. With a generic data model, the solution can take account of the diversity of languages and the wide range of election and voting processes in Switzerland. The solution also offers a graphical back-office tool for the administrative bodies. Swiss Post will provide the cantons with advice and support with respect to governance, conformity, processes and technical infrastructure and software.

**Operation by Swiss Post**  
The Scyt software will be integrated into the Swiss Post IT environment by Swiss Post employees using defined quality processes. The entire e-voting solution will be operated by Swiss Post on its own infrastructure in Switzerland. The data will be stored at two highly secure and redundant available Swiss Post data centers, ensuring that the solution meets the highest standards of security and data protection. Monitoring of the systems will be carried out by Swiss Post and independent partners in the field of cyber security. Operation

**SWISS POST**

**Yellow in motion.**



## Streamlined Touchpoints

Reduced from 7 to 4 touchpoints for simpler operations.



## Clear Role Definition

Established accountability through demarcated responsibilities.



## Process Automation

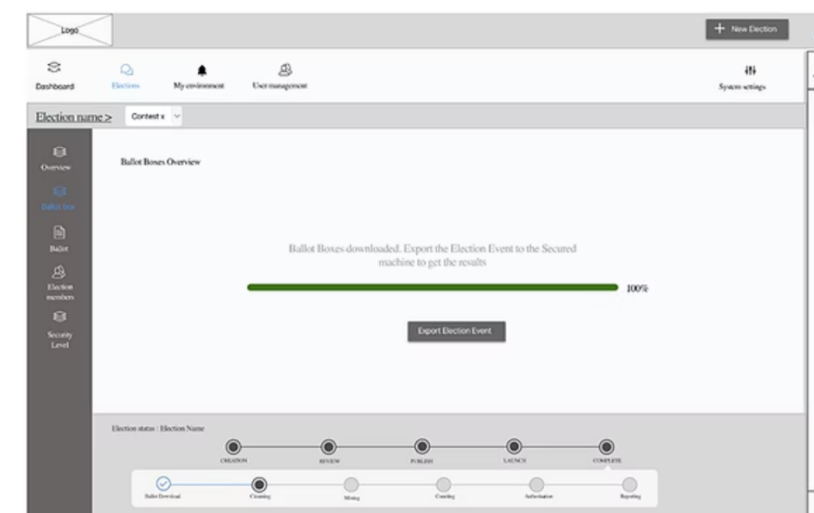
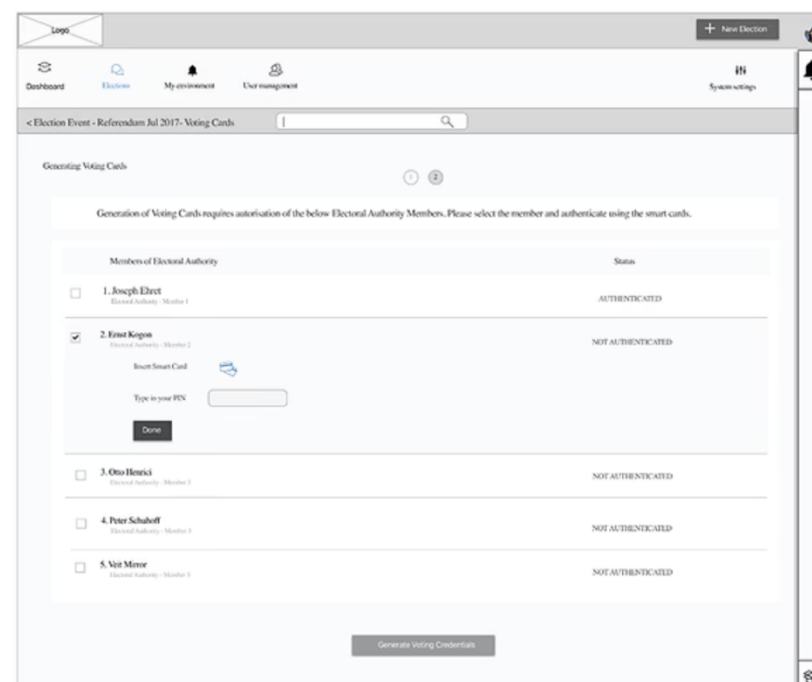
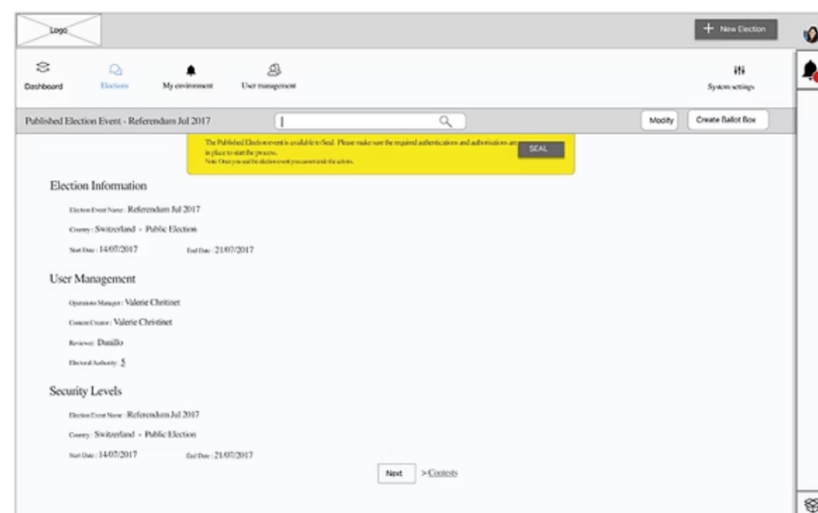
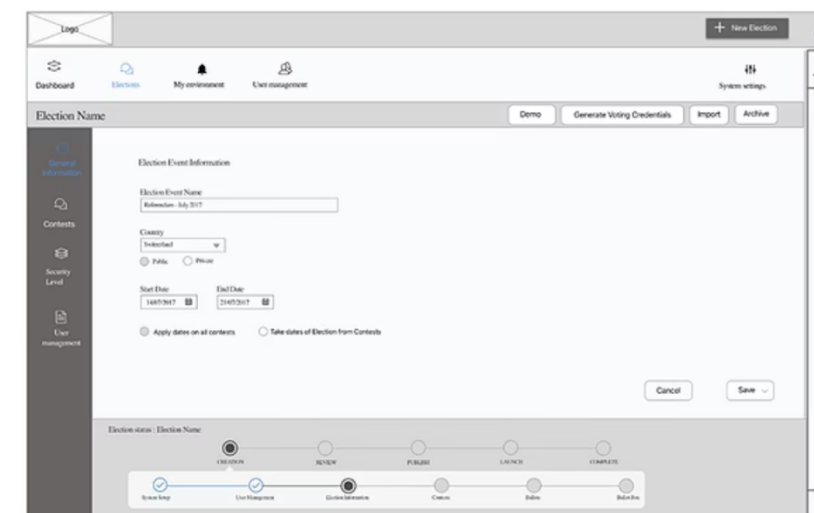
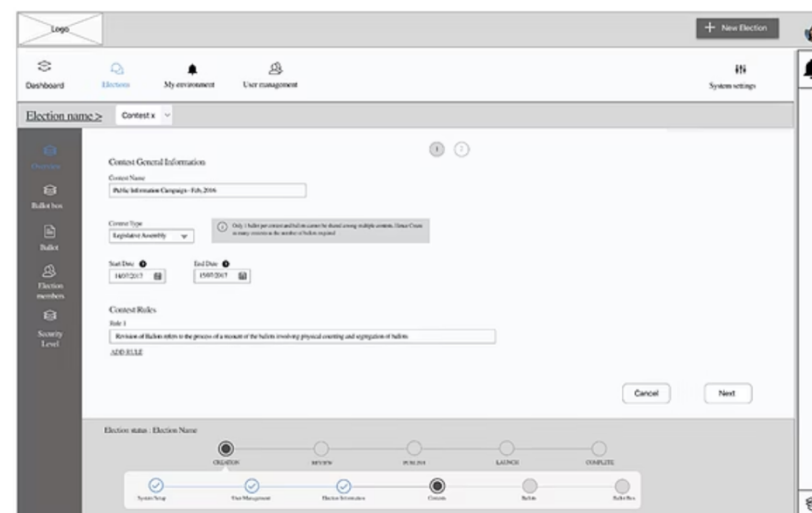
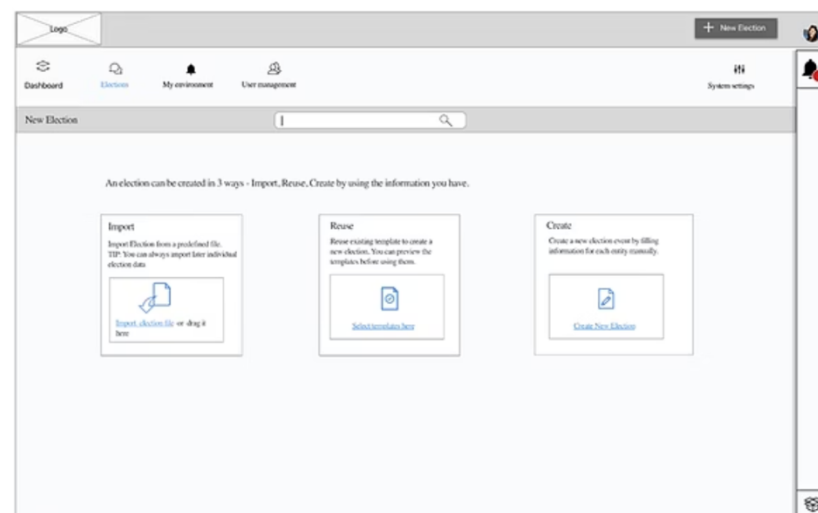
Automated process completion notifications, ballot box criteria and setup templates.



## Documentation

Created comprehensive process guides and training materials.

# Tactical UX Improvements



## Template-Based Setup

Election configuration with reusable templates or custom options.

## Pre-Filled Rules

Contest rules automatically populated based on election type & automated criteria selections for ballot boxes.

## Automated system notifications

Eliminated manual monitoring by alerting admins after each ballot processing stage, streamlining process transitions.

# Results

7→4

Touchpoints

Reduced system touchpoints for streamlined operations.

50%

Online Voting

Enabled in 3 cantons, up from previous 25% limit.

↓40%

Setup Time

Faster configuration with templates and clear roles.

# Lessons Learned

Early Stakeholder Alignment

Workshops ensured all parties shared common goals.

Security Integration

Balanced usability with stringent security requirements.



Sacrificial Concepts

Early prototypes clarified actual user needs.

Scalable Model

Created foundation for secure e-voting expansion.