# SELF-SERVICE ACCELERATOR

A solution to enhance citizens' autonomy and ability to use digital public services

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# ÍNDICE

# INTRODUCTION

The **experimental fast-cycle project** "Self-Service Accelerator" (3As), which started in February 2020, sought to respond to a major challenge faced by public services in Portugal: a portion of **citizens who, although possessing the necessary digital skills, still have low levels of use of digital public services (DPS)**. Among other consequences, the **underuse of the DPS potential or the option for face-to-face service for public services that have digital versions persists**.

To respond to this challenge, this project aimed to **develop a solution that would allow these citizens to use the DPS autonomously**, while at the same time stimulating and empowering them so that in the future they can use them by their own means, whenever they need them.

# INTRODUCTION

In an exercise of open innovation, the choice of locations in Aveiro allowed to embed the development of this solution in the real context of citizens' daily practices. Aiming to incrementally develop the essential features for this solution, this project took place over three phases:

- **Research**: based on the available data, it has made it possible to rigorously define the specific challenge to be solved and to characterise the profiles of its recipients.
- **Co-creation**: through a collaborative session with citizens, it was possible to listen to their opinions and define the essential requirements for the functioning of the solution.
- **Experimentation**: in partnership with experts, the requirements were materialised in tangible proposals and tests were carried out with citizens

This approach allowed us to **learn about the experience of using DPS by this segment of citizens** and, thanks to the articulation with partners from the innovation ecosystem, to **materialise a solution** to meet their expectations and needs.

Throughout its development, the project was enriched with the participation of other teams from the Administrative Modernization Agency (AMA): the Department of Stores and Citizen Spaces; the Direction of Platforms and Digital Skills; and the Board of Directors Support Office.

# METHODOLOGY
Phases of the approach

## Research (problem characterisation)
**Data:** February 2020
It started from available data on the use of DPS in Portugal, both from information collected by LabX in its projects and from statistical information made available by the National Institute of Statistics (INE).

## Co-creation (collaborative session)
**Data:** March 2020          **Local:** Fábrica da Ciência (Aveiro)
By bringing the collaboration with citizens to the foreplan, it allowed their needs and expectations to be identified, as well as ensuring - through an ideation exercise - a survey of the requirements that the solution must have in order to ensure its purpose.

## Experimentação (*ciclo de experimentação*)
**Data:** September and  October 2020          **Local:** Design Factory Aveiro
Thanks to the materialisation of low-fidelity prototypes and the testing of the prototypes, solutions were developed in collaboration with experts and were subjected to experimentation with citizens.
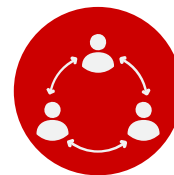
# Research

## Challenge

Promote sustained and lasting digital switchover for citizens who already possess basic digital skills, in order to ensure a use of DPS in line with this potential

## Recipients

Citizens who have the required digital skills and who use digital services (social networks, online shopping, homebanking, etc.) in their daily lives, but who, however, do not use DPS, tending to opt for face-to- face service.

## Objectives

It aims to explore the essential characteristics for a solution to this challenge, combining in one proposal the definitions of the physical component, technical equipment (hardware) and user experience in DPS

## Answer

Materialisation of a self-service accelerator solution into a low fidelity prototype, consolidating a set of learnings and guidelines to inform future developments.

# Research

# Research

## Data-driven challenge

A first glimpse of the challenge emerged as early as 2018 in the field research carried out on the face-to-face service at the [Citizen Shops](#)[1]. At that time, **it was found that there were citizens who did not use the digital channel to carry out public services**, even though they had the indispensable digital skills. More systematically, according to data from [National Institute of Statistics](#)[2], **46.2% of Portuguese citizens have not used DPS in the previous 12 months**. When they do use it is largely only to obtain information.

**Citizen Shops: percentage of citizens using the DPS (2018)**

**44%**
Penafiel

**59%**
Laranjeiras

**Population using digital services (2019)**

**PT**
**53,8%** of citizens used the Internet to interact with Public Administration bodies

**UE (28)**
**60%** of citizens have interacted digitally with their Public Administrations

Of these,**45,6%**% access to obtain information on the websites of the bodies

# Research
Recipients profiles

By performing a multivariate analysis of data gathered on users of face-to-face service, we were able to characterise three profiles that fit within the purposes targeted by the initiative.

## Young people starting their careers

They are making their first direct contacts with the Public Administration, and they have already finished or are finishing their training cycle (professional course or higher education course) or are entering the labour market.
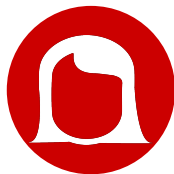
## Digital services users

Working-age adults who perform digital private services (e-commerce, home banking, etc.), use digital platforms (videoconferencing, chats, etc.), but still have limited or no use of the State's digital channels, either because of ignorance or negative previous experiences.
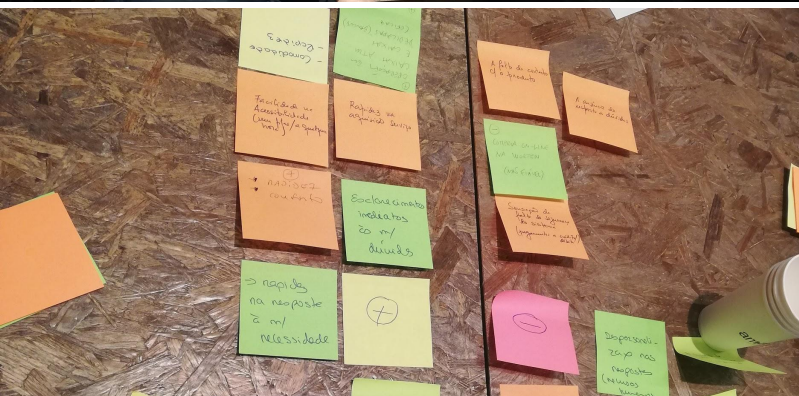
## Active and autonomous retirees

They use and make use of the web space to carry out private services or use social networks on a regular basis. Despite being users of the digital channel, they continue to use the face-to- face service to carry out public services, for reasons of trust.

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# Co-creation

# Co-creation
Citizen participation and consultation



**Objetivo**
Identify citizens' needs and make a
survey of the requirements that the solution must have.

**Participantes**
21 citizens (7 of each profile) + 8 public workers responsible
for the central management of the face-to- face service in
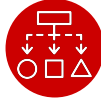the Citizen Shops.

**Parceiros e funções**
- Department of Political and Territorial Social
  Sciences, University of Aveiro - recruitment
  and support to LabX in the facilitation of the
  session.
- Design Factory Aveiro (DFA)- participated as an
  observer, in order to prepare the design of the
  Experimentation Cycle.

# Co-creation
Citizen participation and consultation



## Methodology - Collaborative session

A **collaborative session** was held with the purpose of generating ideas and identifying characteristics and requirements that a solution should have, in terms of space, equipment and digital experience, to meet the purposes of a self-service accelerator. Groups were created according to the identified **profiles**, so as to respect the diversity of perspectives. Through collaborative exercises and group dynamics, the participants' individual experiences with digital services were used. The session had two moments:

- Execution of an exercise to encourage the **generation of ideas**, based on the challenge of creating a solution in which citizens can carry out DPS autonomously, guaranteeing a satisfactory experience.
- Starting from these ideas, the groups were challenged to **materialise** these concepts in **models**, which they could highlight and explain according to their usefulness for this solution

# Co-creation

Main results: requirements

From the session the main requirements from the citizens' point of view were identified for::

Enable the citizen to **receive support** when needed in performing the service (e.g. through a remote call to an assistant).

**Adequate** signage and electronic equipment.

Be **welcoming** and **comfortable** for those who use it.

**Allow to accommodate two users**, since it may happen that there is an accompanying person.

Convey **trust** and **privacy.**.

Allow citizens to **use "on spot" their own equipment** (tablet, mobile phones) after seeing how DPS are used.

# Co-creation
## Main results: guiding principles

After citizens contributed to defining the requirements that the solution should have in order to be usable, the perimeter to develop the solution could be more clearly circumscribed.

In addition to taking into account the learnings from the co-creation session, it was important that the solution to be developed respected feasibility criteria (e.g. in terms of available resources and technology). Therefore, this solution had to guarantee these preconditions:

- Feasible and achievable with a controlled use of resources;

- Potentiate synergies with existing DPS and with the existing infrastructure;

- Meet the needs of citizens with mobility handicaps;

- Enable installation in contexts that are closer to the citizens (shopping centres, universities, etc.).

Given these assumptions, 6 guiding principles were derived for the materialisation of the solution:

1. **Integration**: solution with connection to existing digital public services;

2. **Accessibility**: Responding to citizens with physical and sensory handicaps;

3. **Pedagogical**: fostering citizens' autonomy and skills;

4. **Portability:** it can be temporarily (mobility) or permanently mounted in several places;

5. **Support system**: having a set of aids available in case of doubts or difficulties in carrying out the services;

6. **Frugality**: strict use of resources and the need for minimum infrastructures at the assembly site, making the solution sustainable and economically viable.

# Experimentation

# Experimentation

Prototyping with experts and testing with citizens
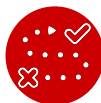


## Objective

Validate the concept quickly and with controlled resources. Based on the results of the co-creation session, low-fidelity prototypes were designed, materialised and tested in order to assess the potential of the solutions with their end users.

## Participants

26 citizens distributed by the three profiles identified + 2 workers from the Citizen Shop of Aveiro

## Partners

- DFA: technical partner for the design and conduction of the Experimentation Cycle; support for the recruitment of citizens.

- Department of Social, Political and Territorial Sciences of the University of Aveiro: recruitment of citizens.

# Experimentation

Prototyping with experts and testing with citizens



## Methodology

Due to the pandemic, this project had to be adapted. Given this limitation, an **Experimentation Cycle** (CE) was designed and carried out together with the technical partner DFA. In order to get as close as possible to the contexts of citizens' daily lives, **the environment of a shopping centre was recreated**.

Since **an approximate simulation of reality** was intended, two real digital public services were coupled to the prototypes: the activation of the Digital Mobile Key (CMD), in the Autenticação.gov portal and the change of address in the Citizen Card (CC). The CE had two phases:

1. The **ideation and materialisation of the prototypes** took place over 3 days at the DFA premises, consisting of an ideation session that made use of writing and drawing, the debate and selection of ideas, and the prototyping of the selected cases. In this phase, the prototypes were subjected to rapid testing to identify problems and adjust the prototyped solutions in an iterative manner.

2. The **experimentation** took place over 3 days, actively involving citizens recruited with the characteristics of the various profiles of the addressees of this solution. These citizens tested and evaluated the prototypes thanks to measuring and evaluation tools developed by the researchers.
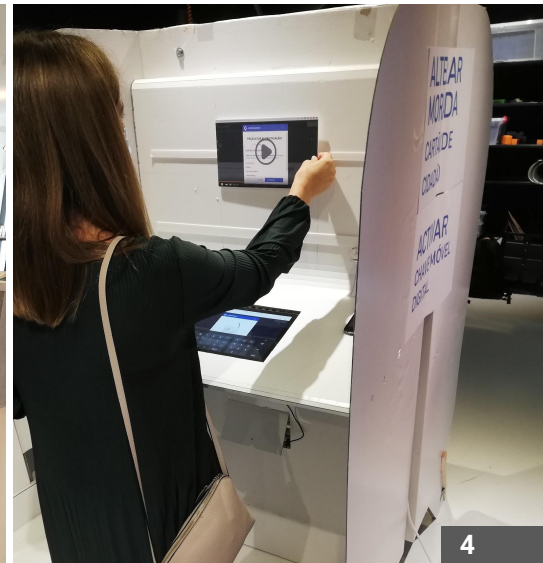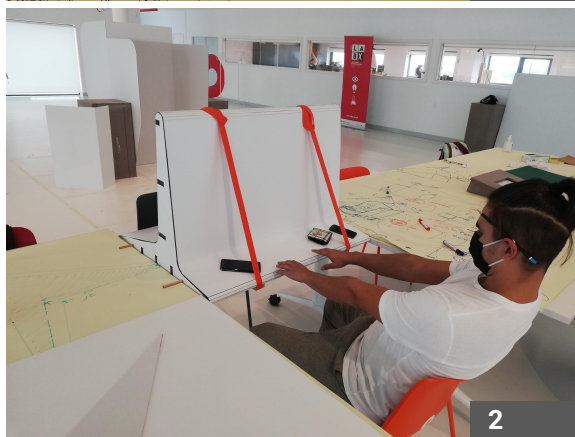
# Experimentation

Prototyping with experts and testing with citizens

# Experimentation
## Main Results

After the end of the experimentation phase, the prototypes were tested with citizens during three days, the main results obtained are listed:

- The decision to complement the solution with a low counter to **promote accessibility and inclusion** proved to be very positive;

- The touch screen **has proved to be to everyone's liking** (no smaller than 12.3 inches) and has made the solution more robust, as it dispenses with other interfaces (such as a mouse or keyboard);

- The counter supporting the touch screen must have a **slight inclination** (10º for high counters and 15º for low counters);

- **Privacy** is one of the most relevant aspects for citizens and is fully guaranteed by the solutions tested;

# Experimentation
Main Results



- The **information** and **signage** in the external surroundings of the solution should make reference to the services provided and include the institutional logos **to give confidence and credibility to the solution**;

- **Digital experience**, while not a priority for this phase of the project, was highlighted as an issue that needs to be explored in the evolutionary phase of the project given the **critical impact it has on the future success of 3As**;

- During the tests it was found that **a part of the citizens needed to receive small aids to complete the tasks in the DPS** due to the barriers that arose during their performance. Among them, the following stand out:

  ➔ **excess information on the service homepage**;

  ➔ **doubts as to whether the service has been completed successfully**;

  ➔ **use of acronyms without context in public websites**.

# Main Lessons

# Main Lessons

Notes to remember to enhance the use of DPS

- **RECRUITEMENT:** this proved to be the greatest difficulty in this project, made more difficult by the pandemic context. We tried to minimise the negative impact by making quick decisions and involving other relevant players, which allowed us to diversify and expand the network of citizen mobilisation;

- **SIMULATION:** the prototypes were tested in a specific space used to recreate and simulate the environment of a shopping centre. The simulation context made it possible to integrate citizens in an environment that resembles a reality that is common to them, allowing more realistic answers and opinions to be obtained during the testing phase;

- **CREDIBILITY AND TRUST:** to be able to install this solution in different contexts (e.g. a university, a summer festival or a shopping centre) it has to generate and guarantee trust and credibility to be seen as a reliable and safe solution;

- **MATERIALITY:** the structure of the solution tested proved to be ergonomically suitable and to the liking of the citizens to support the digital experience of the DPS made available on this equipment;

- **AVAILABILITY vs USE:** part of the citizens did not know that the DPS used during the tests were already available on the digital channel. Some citizens did not recognise advantages in having the CMD for their daily lives;

- **DIGITALISING IS NOT ENOUGH:** Many citizens had to receive help during testing to successfully complete the service. The journey of the service raises questions about the steps that citizens should follow to finish the service. These findings demonstrate that the transition of public services to the digital sphere must not only take into account the simplification of their processes but must be centred on citizens.

# Main Lessons
## Future Horizons

There is still a way to go to **evolve the solution into a high-fidelity prototype**, using robust materials or defining an appropriate image and communication.

The focus of the next evolutionary step is **to explore the digital experience**. Because only with the answers obtained in the field of the digital dimension will it be possible to completely transform the citizens' experience with the DPS, empowering and autonomising them, and in this way, promoting the permanent shift to the digital channel.

However, there is an informed conviction that it **is possible to meet the needs and expectations of this particular segment of citizens**, who have remained virtually invisible to public policies promoting digital services. Beyond satisfying citizens proficient in the use of DPS or developing strategies to bridge the digital illiteracy of citizens who feel excluded, it **is possible to accelerate the migration, at low cost, to the digital channel in the use of public services**.

# ACELERADOR
# DE AUTOATENDIMENTO

A solution to enhances citizens' autonomy and ability to use digital public services