Digitalisation in response to the COVID-19 crisis: challenges identification

Workshop 1
28.09.2021

Partner von Connective Cities

Im Auftrag des

AGENDA

10:00 – 11:00   Design Drive Digitalization Presentation
- Case-study: analysing the right challenges to face
- Methodology: system and stakeholders mapping
- Q&A

11:00 – 11:10   Break

11:10 – 12:20   Cities' challenges group discussion

12:20 – 12:30   Break

12:30 – 13:30   Challenges refinement and prioritization in small groups

13:30 – 14:00   Discussion of the groups' work

Closing remarks

ETEREA URBAN WIFI SERVICE

choose which option to connect/search

search by keyword

search by option

my location

rotate view

turn off visibility of spots

basic
connection will
serve most of
your needs

have **fun:**
watch a movie,
listen to music
— up to 2Gb/day
for 4 credits

Connect to
work — get
4Gb/week
and great *speed*
for 3 credits

turbo mode —
superfast 1 hour
for 4 credits

landscape

account

offers

details

Piazza Argentina
24 users, 11 available
space profile

map of options

check market

personal use management and statistics

more info about service

tap to see space profile

WiFi + [QR code] → www, Facebook, Twitter, etc.

DIGITAL
TRANSFORMATION
TEAM

THINGS WE DID
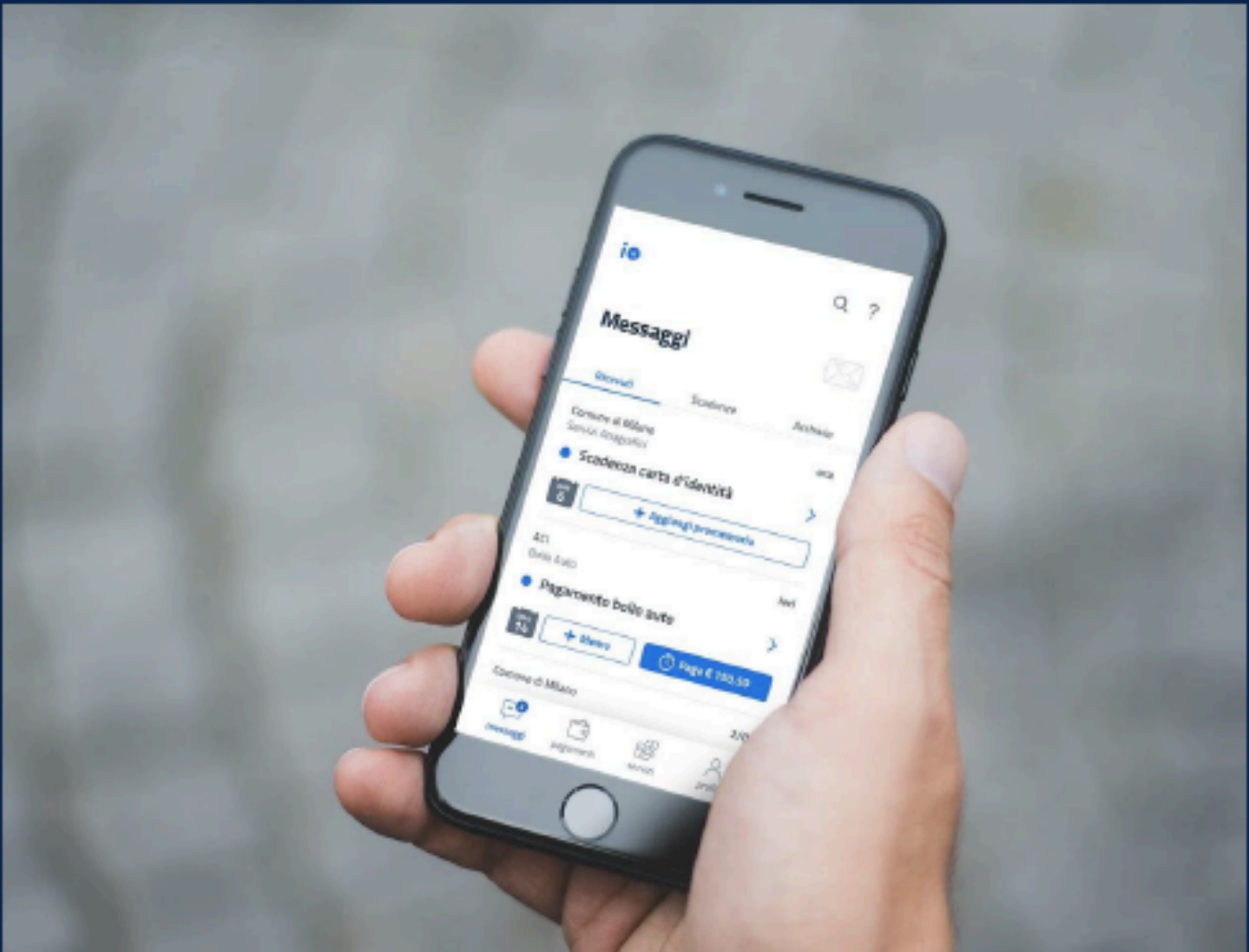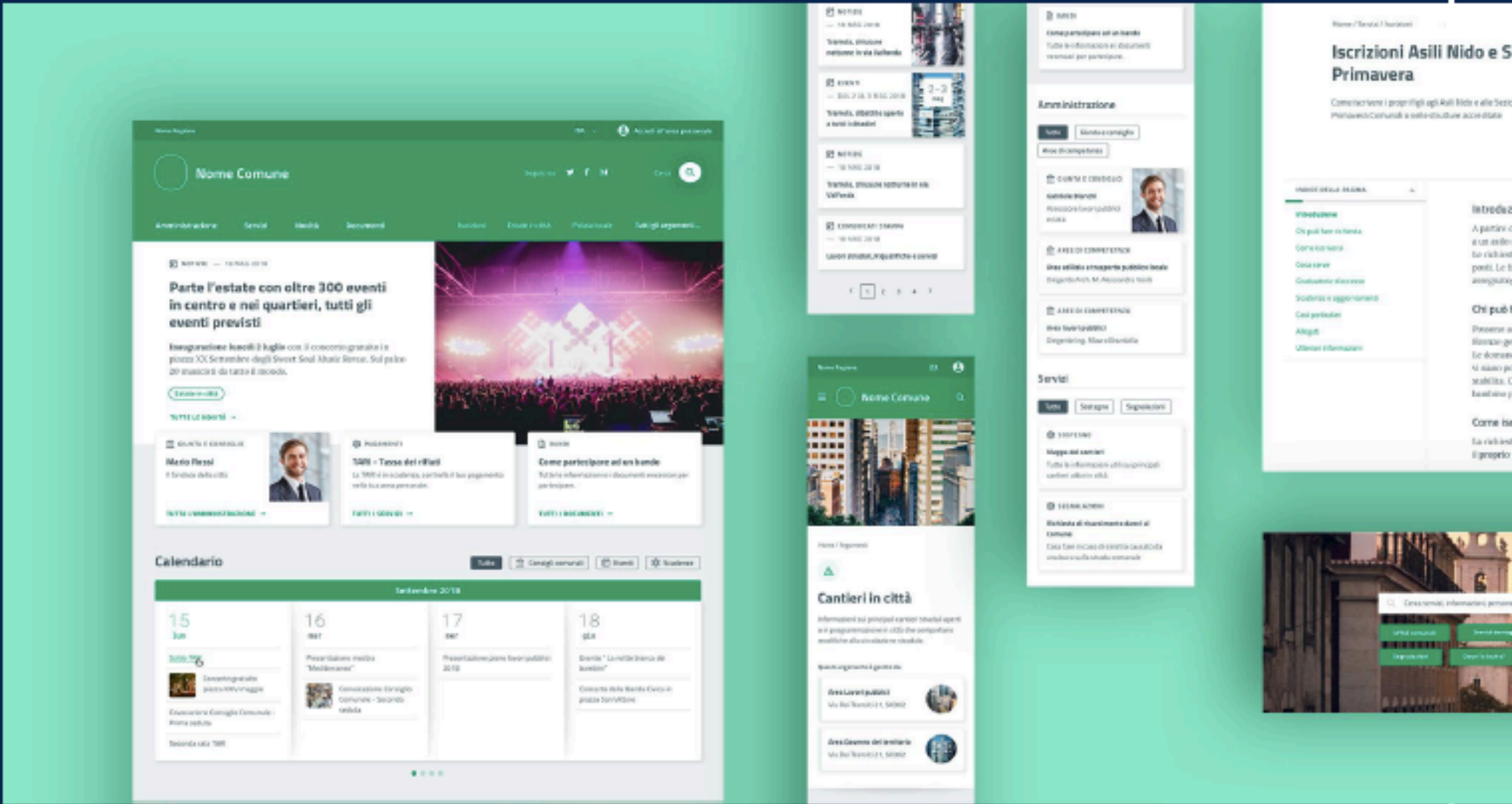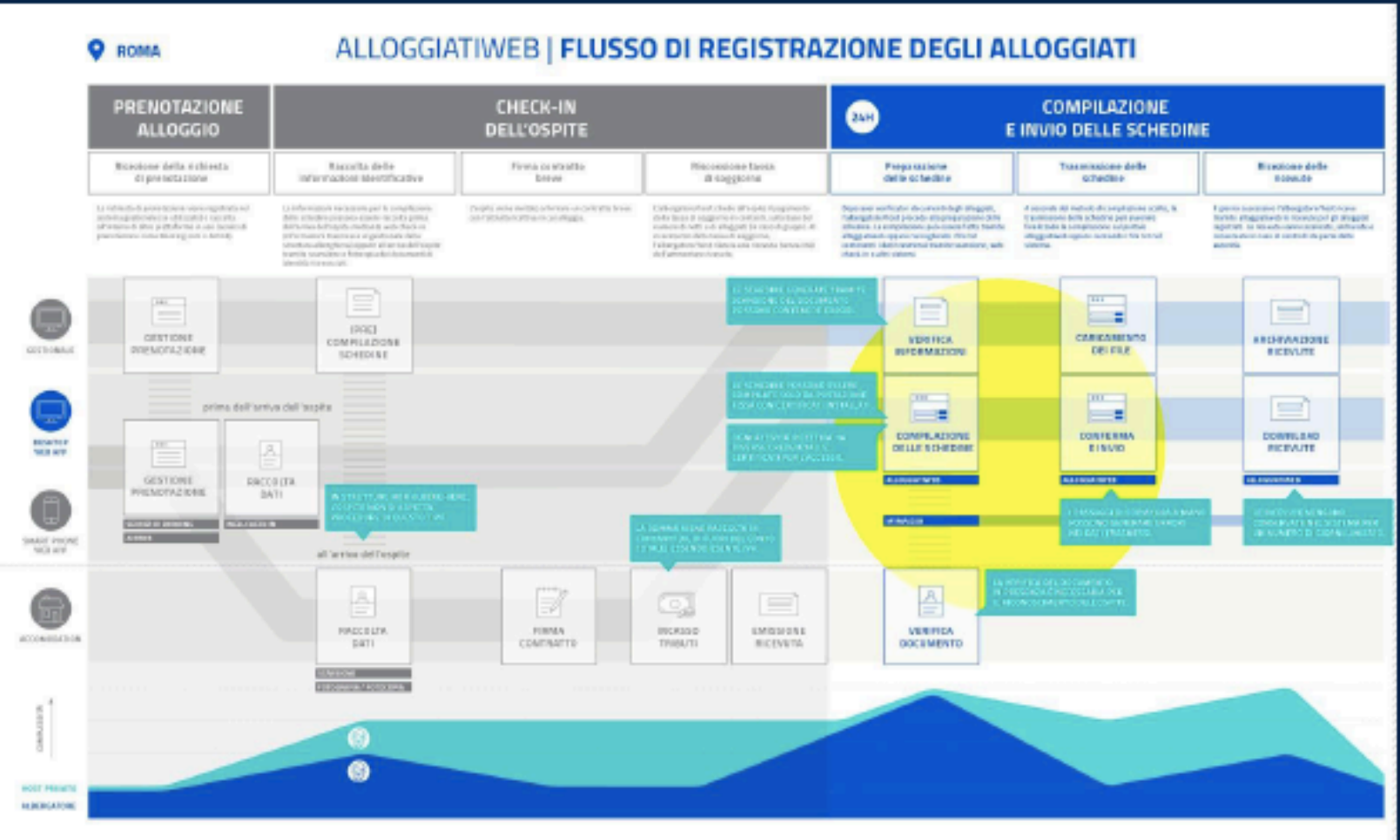
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United Nations OCHA

Enhancing data responsibility

Defining a service strategy to spread data responsibility in the humanitarian context, combining education and practical tools.

After conducting extensive research with humanitarian organisations (interviewing data experts, statisticians, decision-makers), we developed several hypothesis of design interventions that could enable a more responsible approach to data collection, storage and sharing. A mix of those actions have been brought to life, by integrating a de-risking process in the HDX platform and by delivering a learning module through the Center for Humanitarian Data.
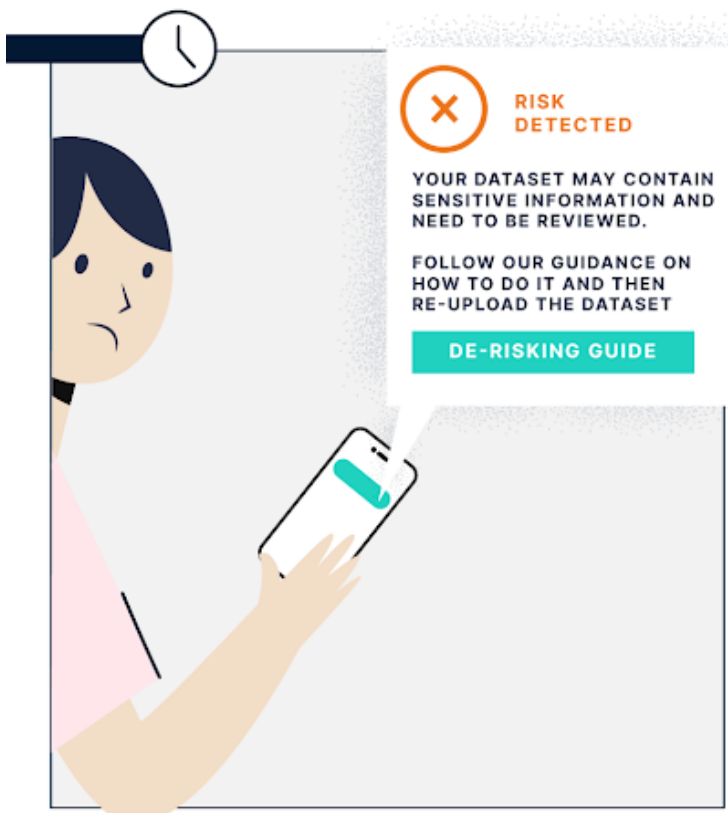
Output:
Service and UX strategy
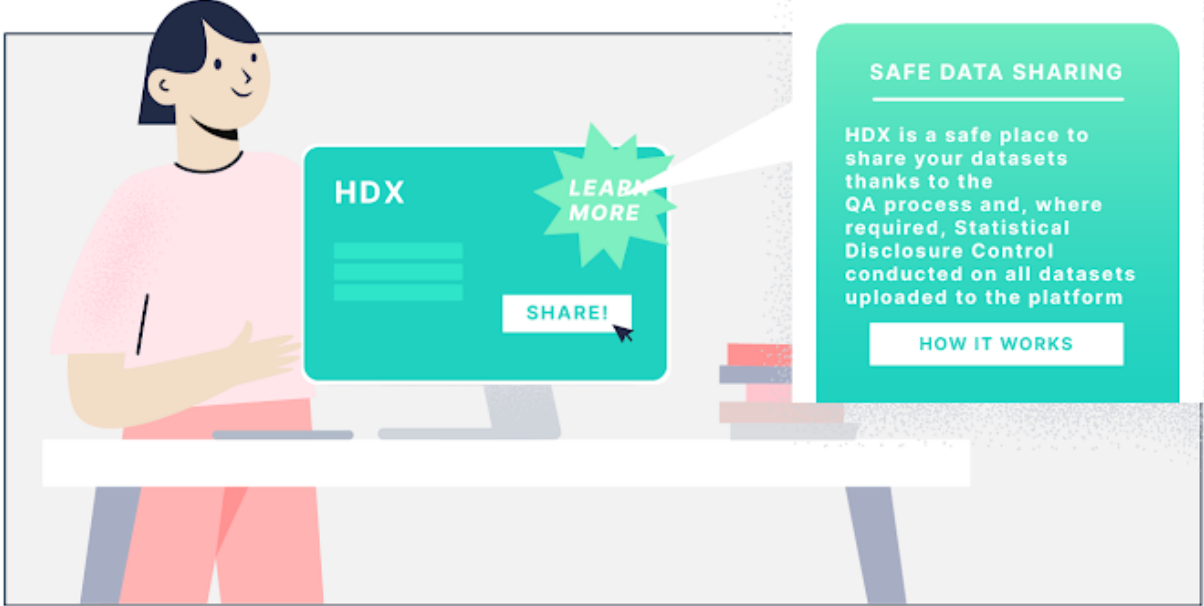
The IMO goes on HDX platform to share the survey data collected and reviewed.
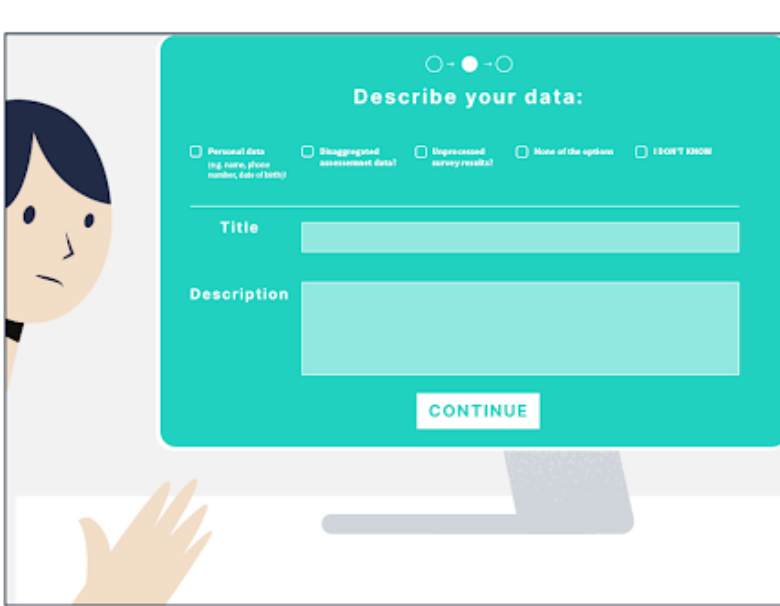
The IMO follows the procedure to describe and upload the datasets, included some questions to qualify the dataset sensitiveness

The IMO is notified via email: the dataset was sensitive and needs some further cleaning in order to be shared publicly.
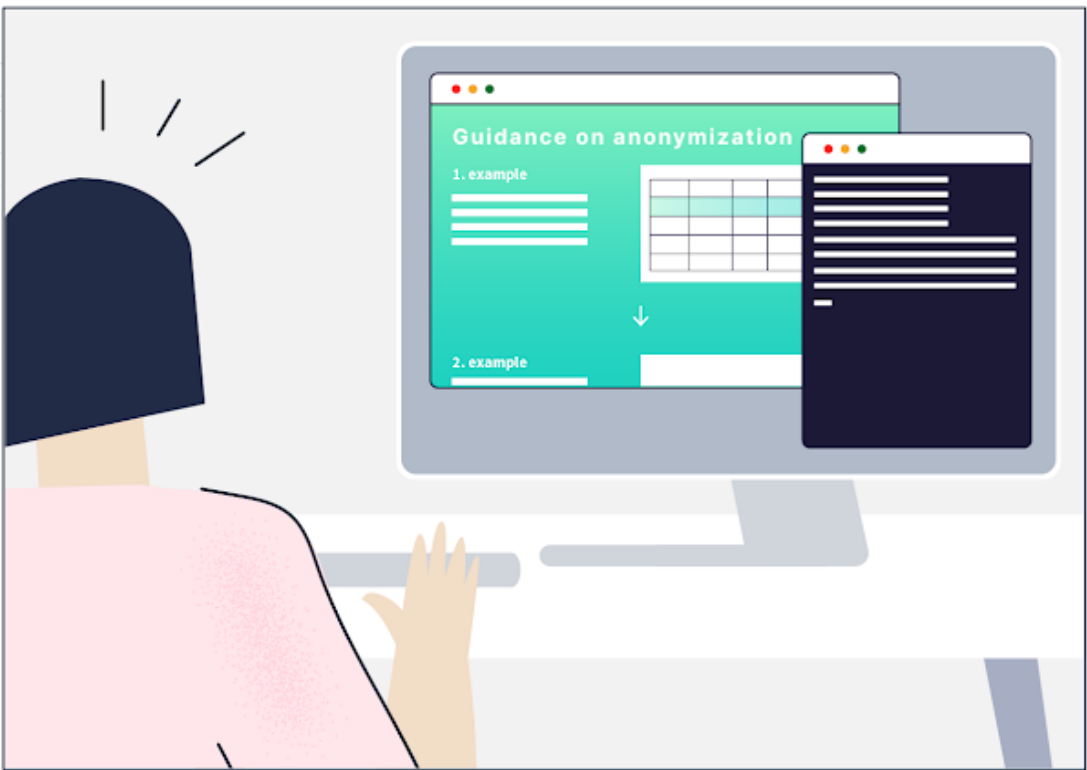
The report includes a link to the HDX section about tips and best-practices to anonymize data.
The IMO understands the risks and wants to apply all the advices that the expert HDX team explained.

The IMO d the HDX w again and
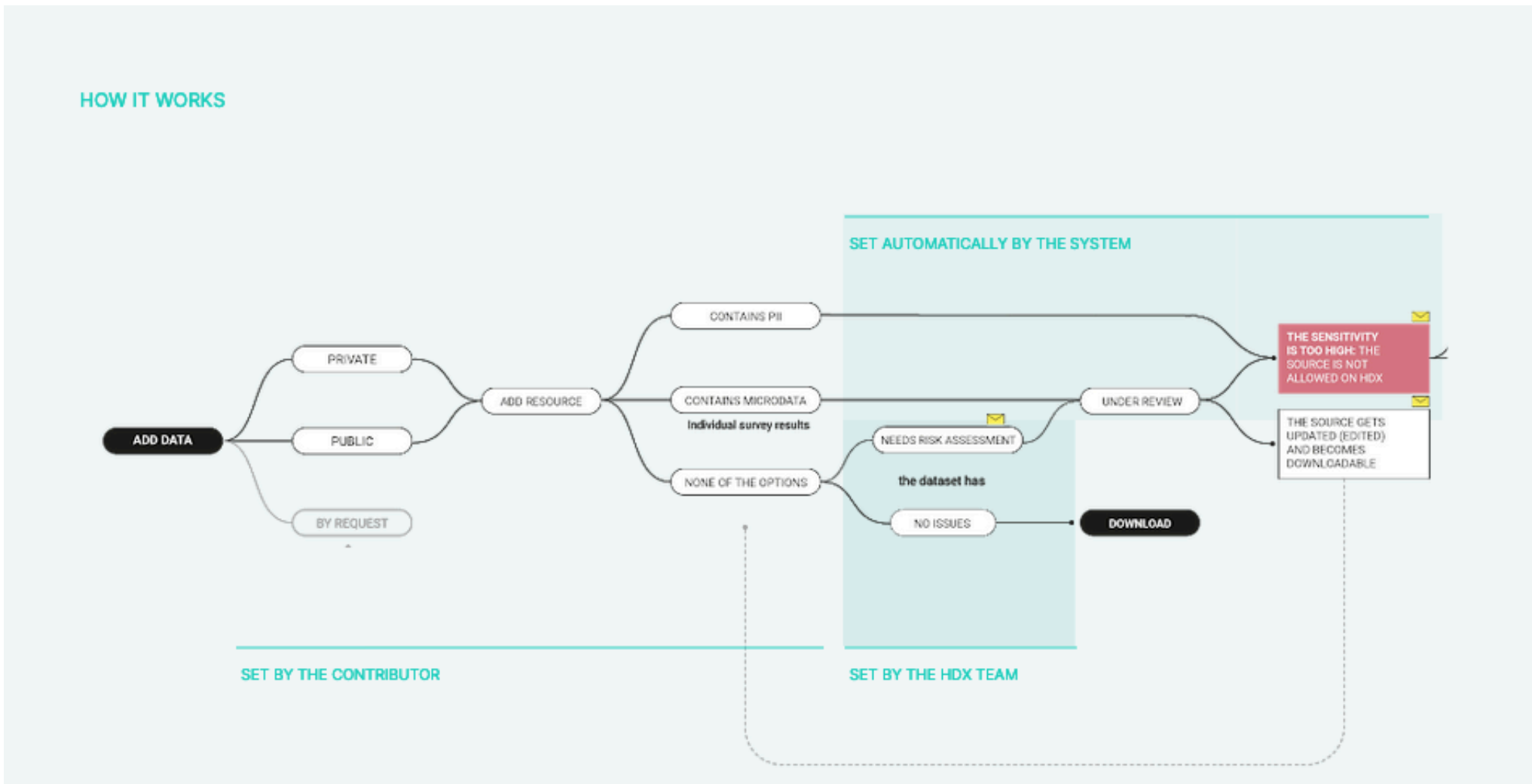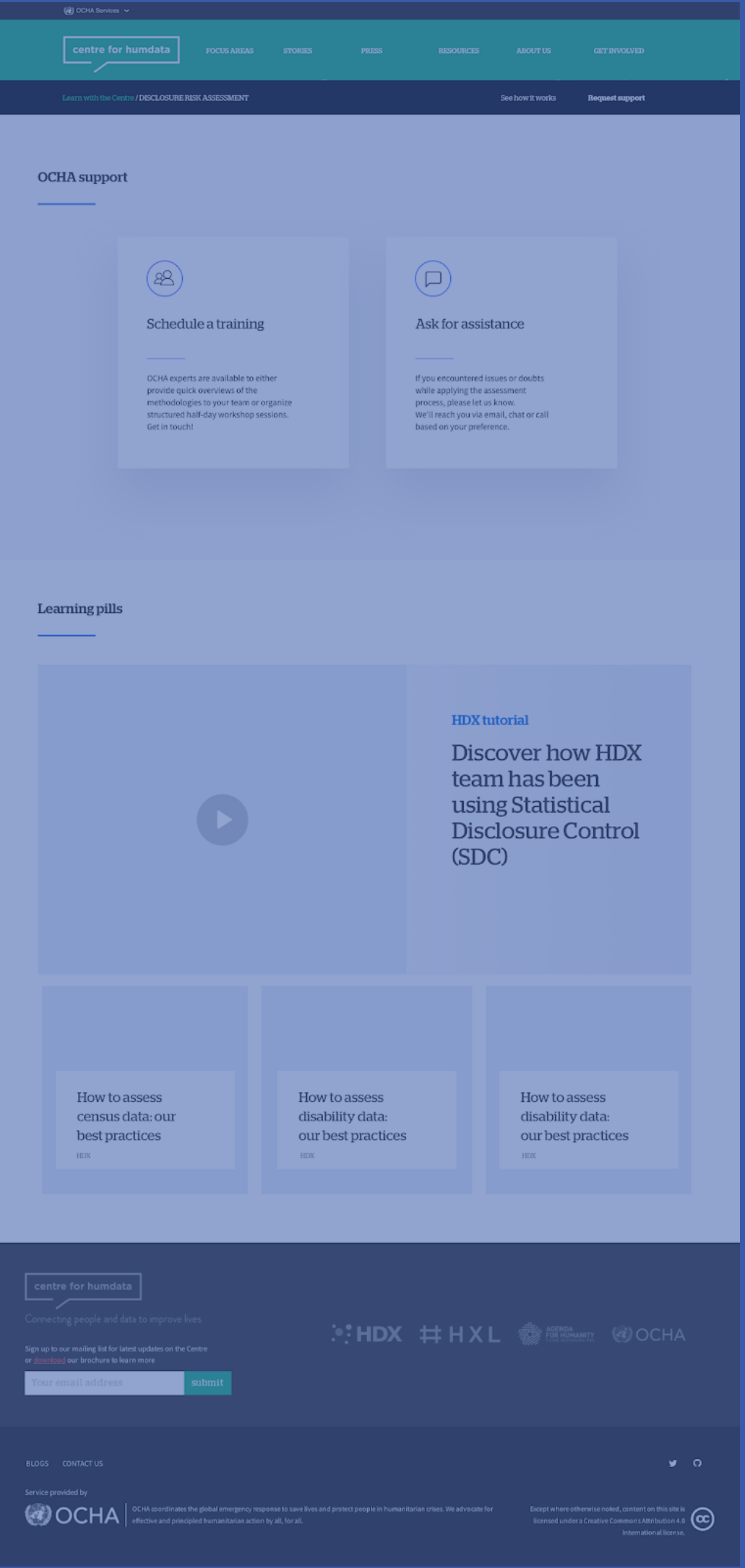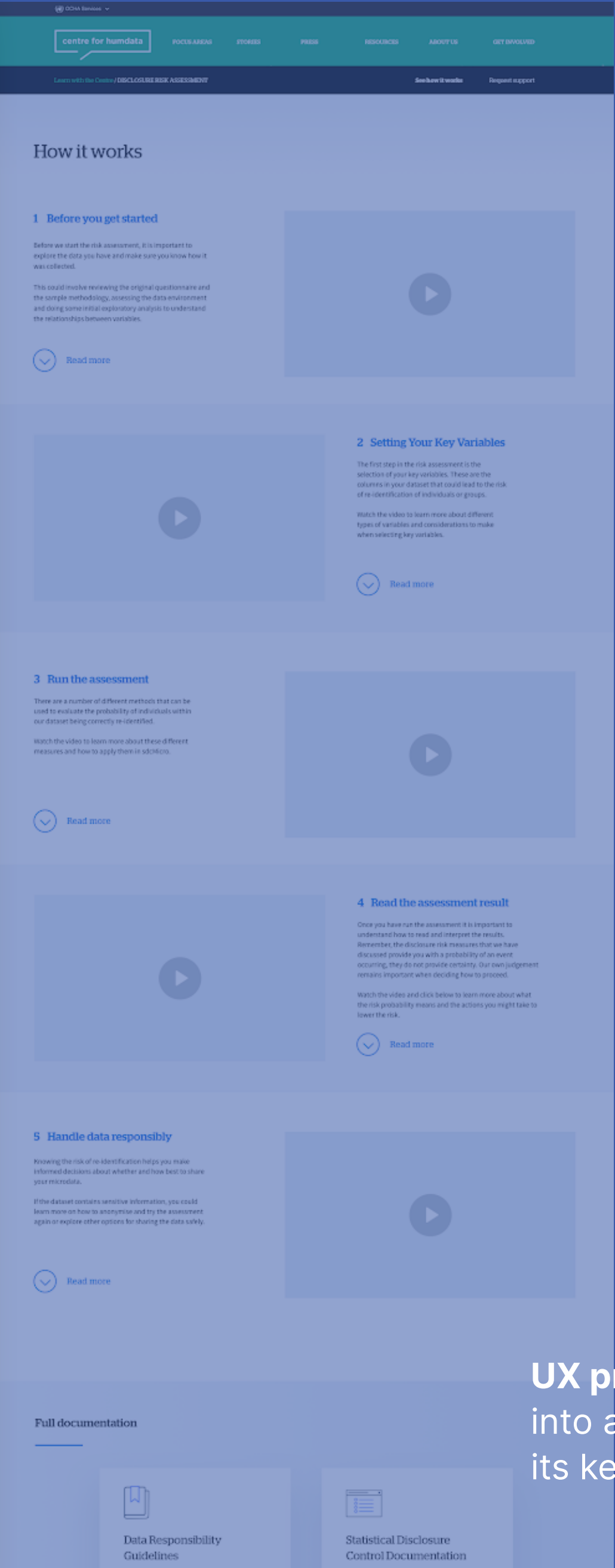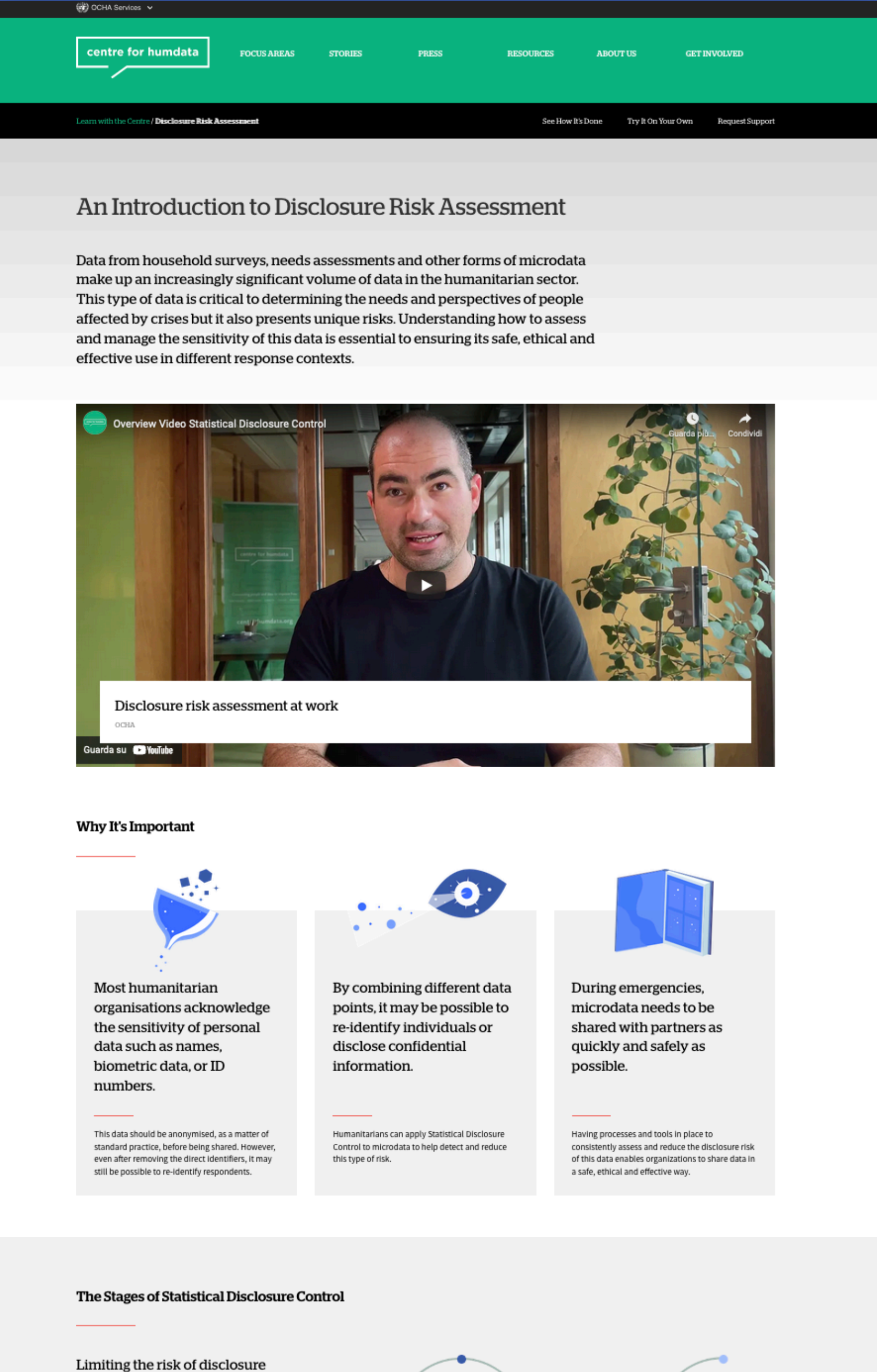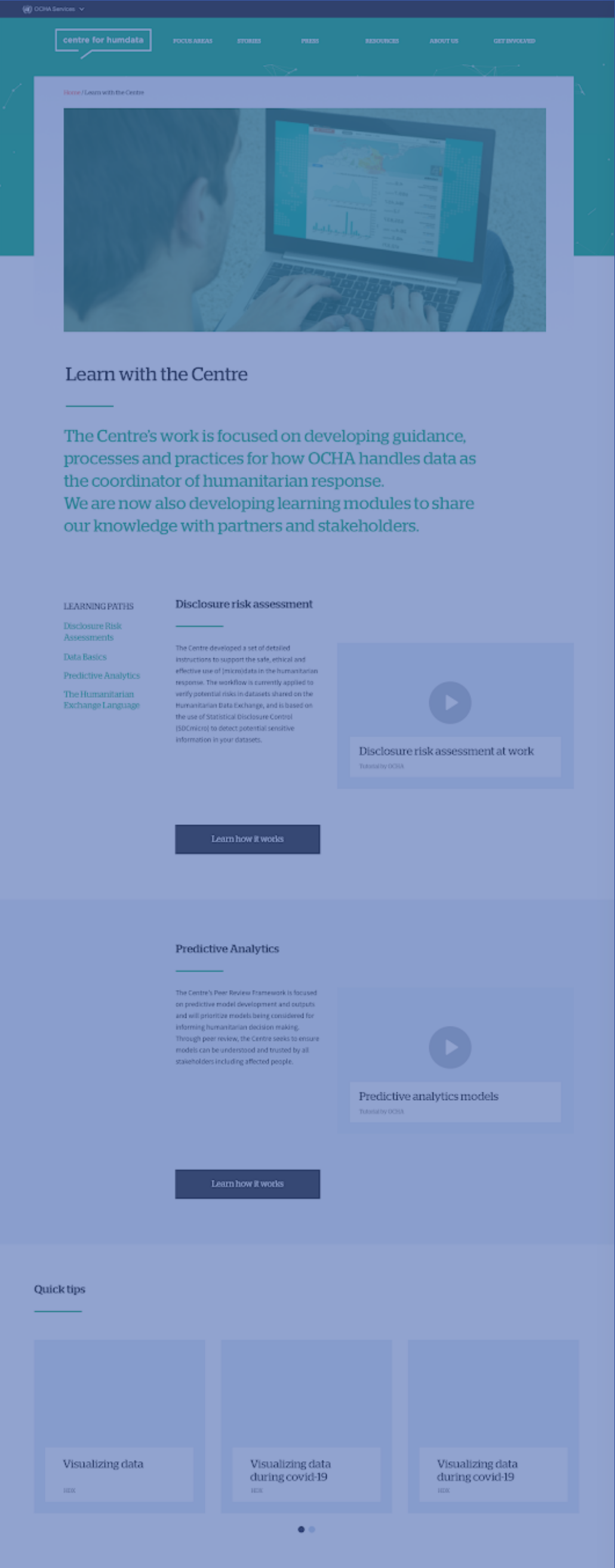
UX prototyping: turning the service idea into a real experience by designing its key touch-points.

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Service Design for Digital Transformation at Municipal Level

Yulya Besplemennova

Connective Cities
international virtual exchange
07.10.2020

Design driven approach to the digital transformation for the public sector

design ≠ beautification
design = problem-solving

"We're not here to change government websites; we're here to change government"

Tom Loosemore, Public Digital, ex. GOV.UK

Service Design

Service Design

The activity of **planning and organizing** people, infrastructure, communication and material components of a service in order to improve **the interaction between service provider and customers.**

Service Design Network

Not physical
VS
digital

DESIGN DRIVEN APPROACH

but the WHOLE service*

*as defined by GOV.UK

The Whole Service

A whole service is a service that solves a whole problem and can be made up of multiple end-to-end user journeys.

A user journey **is all the interactions a user has that relate to a government service. Interactions include transactions, seeing campaign messages, asking questions or advice.** These interactions could take place over any medium or device – online, over the phone, in person, on paper.

GOV.UK

Analogue - Digital Continuum

digital appointments

digital front-end

analogue ←——————————————————————————————————————→ digital

digital info

partial digitalisation (passport issue)

fully digital
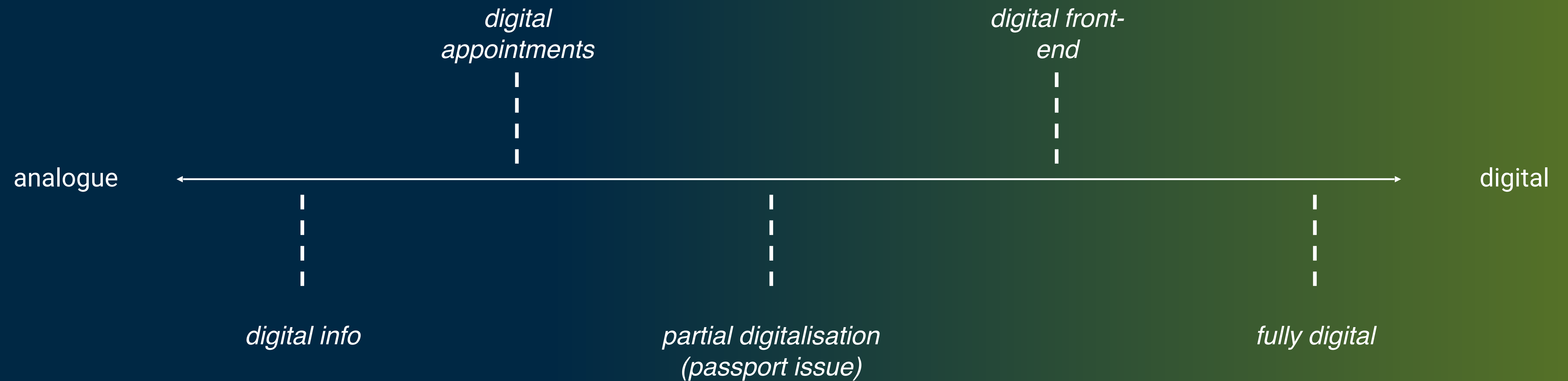
Digitalisation
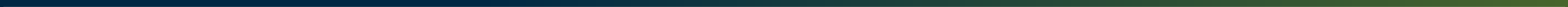
analogue ———————————————————————————— digital

Digital by design

How do we get there?
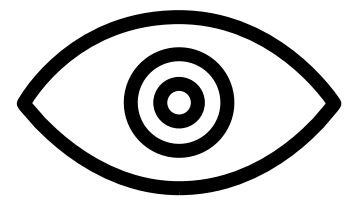
Collecting insights

→ **USER RESEARCH**

we apply **design research and digital ethnography** to observe human behaviours and collect stories that could inspire future ideas and visions
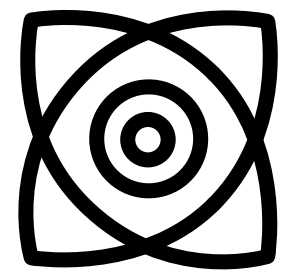
Navigating complexity

→ **MAPPING AND DATA VISUALISATION**

we rely on **visual mapping and systems thinking** to make complexity manageable, as a precondition to fix problems and enlighten new opportunities
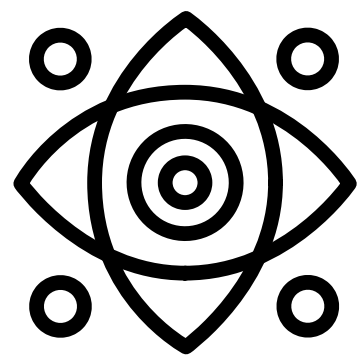
Re/Framing visions

→ **SERVICE DESIGN & STRATEGY**

we encourage **critical thinking and scenario building** to shape design interventions that resonate with both people and organisations needs
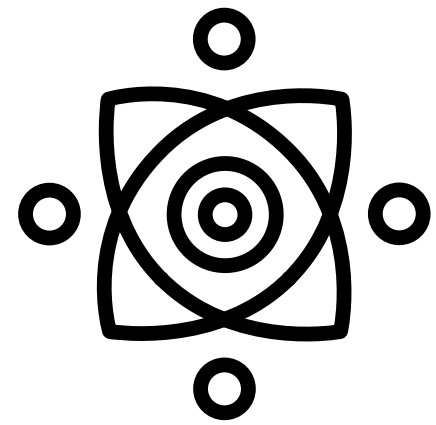
Making ideas tangible

→ **UX DESIGN AND PROTOTYPING**

we use **co-design methods and prototyping techniques** to turn ideas into tangible product and service visions, directly connecting strategy and making

PUT THE PEOPLE YOU SERVE AT THE CENTER OF THE DESIGN PROCESS TO COME UP WITH NEW ANSWERS TO COMPLEX CHALLENGES
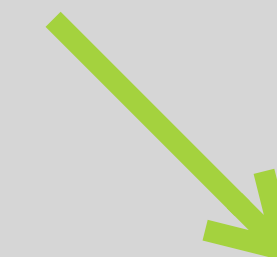
like services

**User-centred design works
for individuals, yet not for people
living together in cities.**

Dan Hill

and on the planet...

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Systems Thinking

The art and science of making reliable inferences **about behaviours** by developing an increasingly deep understanding of the **underlying structures.**

Barry Richmond, systems scientist

Systems are made of **hard and soft components**
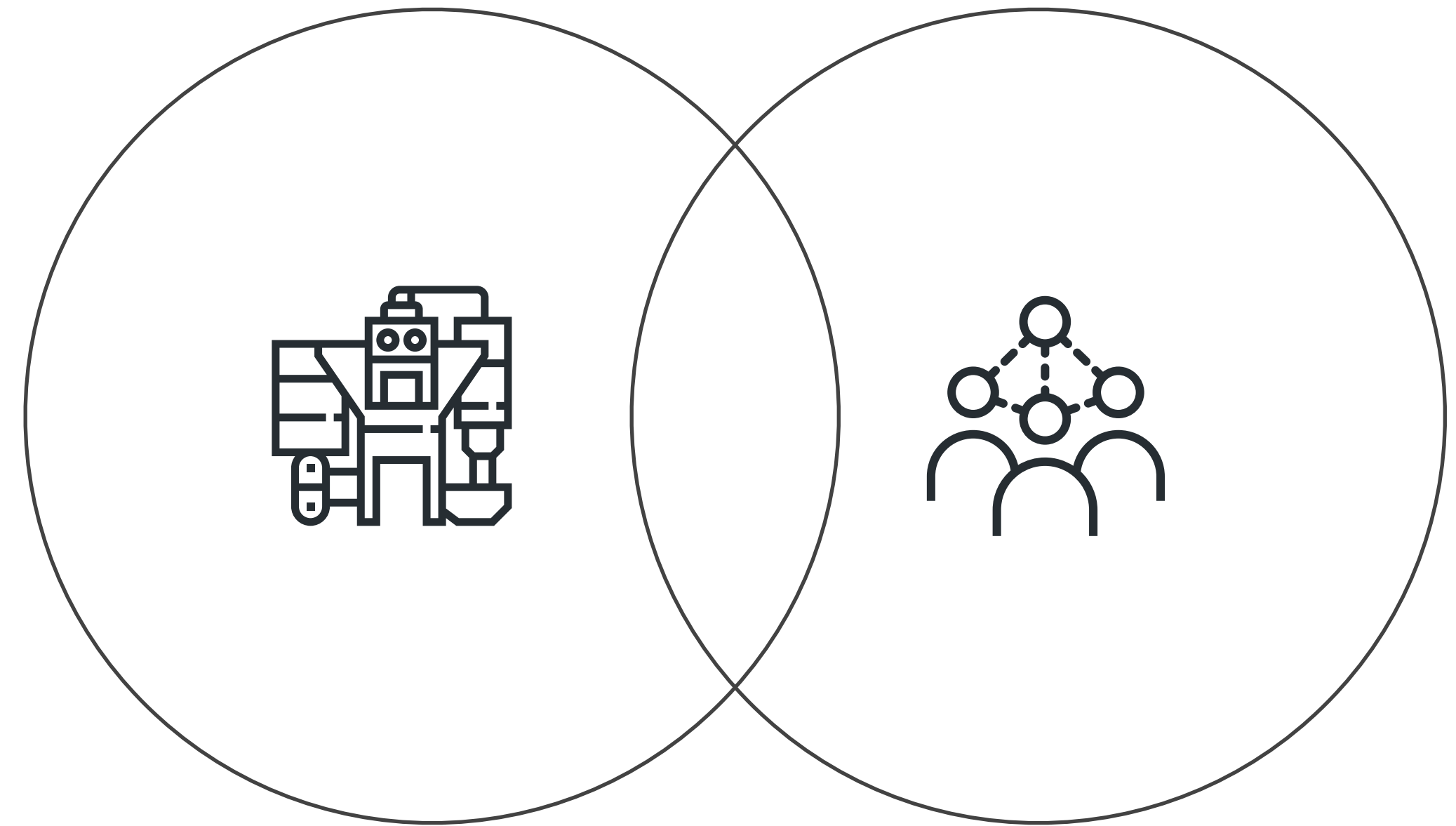
HARD COMPONENTS

Dealing with machines and technical elements

SOFT COMPONENTS

Dealing with the evolving social complexity

Human-centered System-minded

The understanding of forces and relationships in the system is matched with the beliefs and behaviors of the people in the system

THOMAS BOTH

WHAT STRUCTURES AND FORCES ARE DRIVING OUTCOMES IN THE SYSTEM?

WHERE AND HOW MIGHT WE HAVE THE MOST LEVERAGE?

INSIGHTS

OPPORTUNITIES

WHAT ARE PEOPLE'S MOTIVATIONS, BELIEFS AND BEHAVIORS?

WHAT DO WE AIM TO DO FOR PEOPLE?

WHAT ARE PEOPLE'S EXPERIENCES?

WHAT INTERVENTIONS SHOULD WE CREATE?

DATA

SOLUTIONS

WHO ARE THE STAKEHOLDERS AND HOW DO THEY INTERACT?

HOW DO WE DEPLOY AND INTEGRATE INTERVENTIONS INTO THE SYSTEM?

2018

Rethinking
<u>Alloggiatiweb</u>

————

A co-design journey to redefine the public service of visitors registration by the accommodation facilities

WITH DIGITAL TRANSFORMATION TEAM OF ITALIAN GOVERNMENT

All the operators of hotel and accommodation facilities have the obligation to communicate personal data of guests to the Police, via the portal "Alloggiatiweb", within 24 hours from the arrival. This is what Article 109 of the Consolidated Law of Public Security establishes.

HOST AIRBNB

TEAM AIRBNB

THE CHALLENGE

"Non è pensabile utilizzare un servizio come *alloggiatiweb* per tutti quelli che - come me - gestiscono tutto dal proprio telefono."

HOST AIRBNB
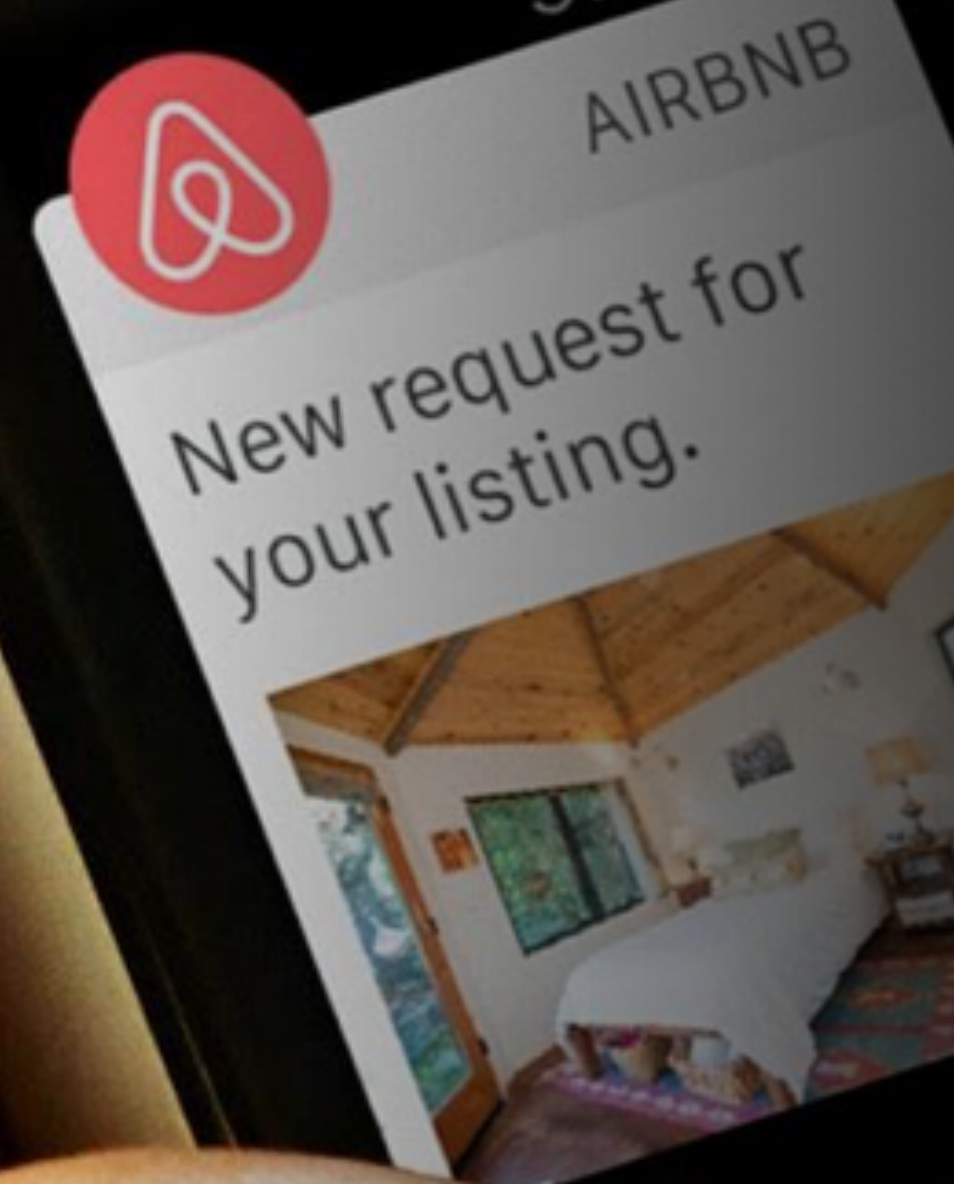
"L'interfaccia del portale *alloggiatiweb* fa pensare agli ospiti internazionali che si tratti di un tentativo di scam (furto dati)."

TEAM AIRBNB

oblo

The portal does not perform its function as it should: the barriers of use of the system cause a series of infractions and shortcomings.

Not all accommodation facilities regularly register their guests failing to comply with legal obligations.

Not always the registration of the guests takes place within the expected 24 hours, limiting the objectives of internal security pursued by the Police Headquarters.

Possible insertion of incorrect information into the system due to manual transcription of data from documents.

Infringement of the law 168 due to the transmission and storage of personal information of the guests (eg photos of documents).

Failure to file archive the receipts, breaking the obligation to keep files for 5 years from their issue.

ANALYSIS OF REQUIREMENTS AND PROCESSES

Municipal and regional regulations of three cities (Milan, Rome, Florence); AIRBNB host community; Documentation provided by the police headquarters; Documentation provided by AirBnB

INTERVIEWS WITH STAKEHOLDER

Interviews with hoteliers, accommodation owners, public administration stakeholders, management software producers and members of the AirBnb team

QUESTIONNAIRE OF AIRBNB HOSTS

Answers received from 12 AirBnb superhost from all over Italy who manage at least one business.

ANALYSIS OF WEBPORTAL ALLOGGIATIWEB

Registration, filling in and sending the forms

CO-DESIGN WORKSHOP

Co-design activities with the stakeholders involved in the process
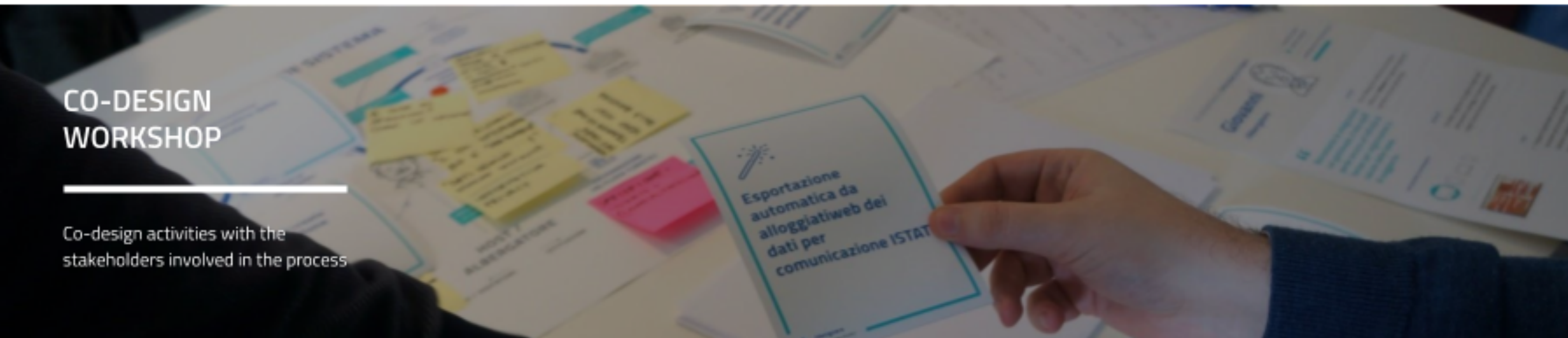
"Despite it being a semi-automated process, my staff still loses a lot of time filling out the registration forms."
HOTELIER

"It is not thinkable to use a service as alloggiatiweb for all those who - like me - manage their activity from the mobile device. "
OWNER OF VACATION HOUSE

"I do not want to take pictures of my guests' documents because it's illegal, so I fill in the forms on the spot, copying the data by hand, even if it takes so much time this way!!"
HOST AIRBNB

ANALISI DELL'ESPERIENZA UTENTE
INTRODUZIONE

L'esperienza di utilizzo del sistema prevede diversi momenti:
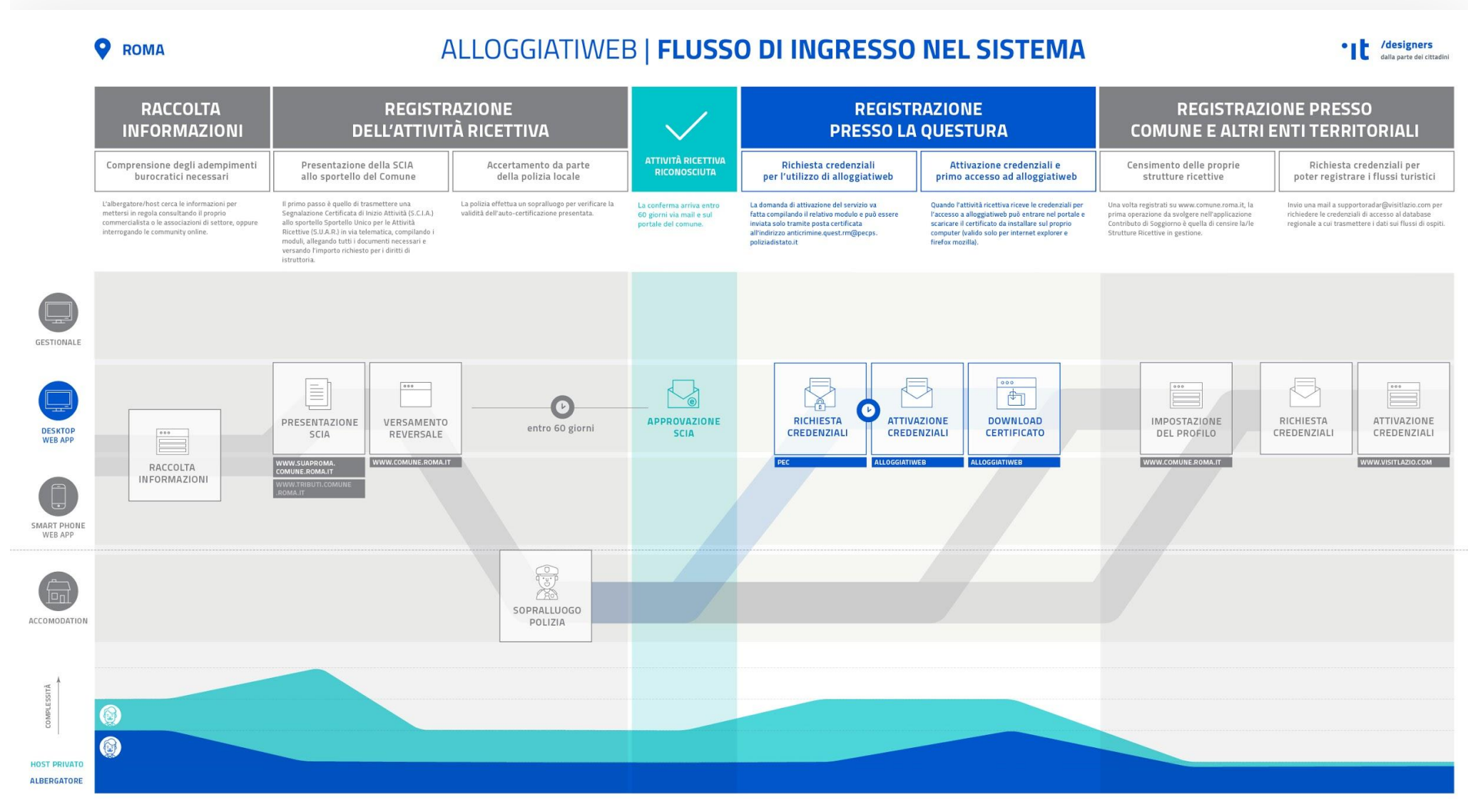
Il flusso di **richiesta** delle credenziali
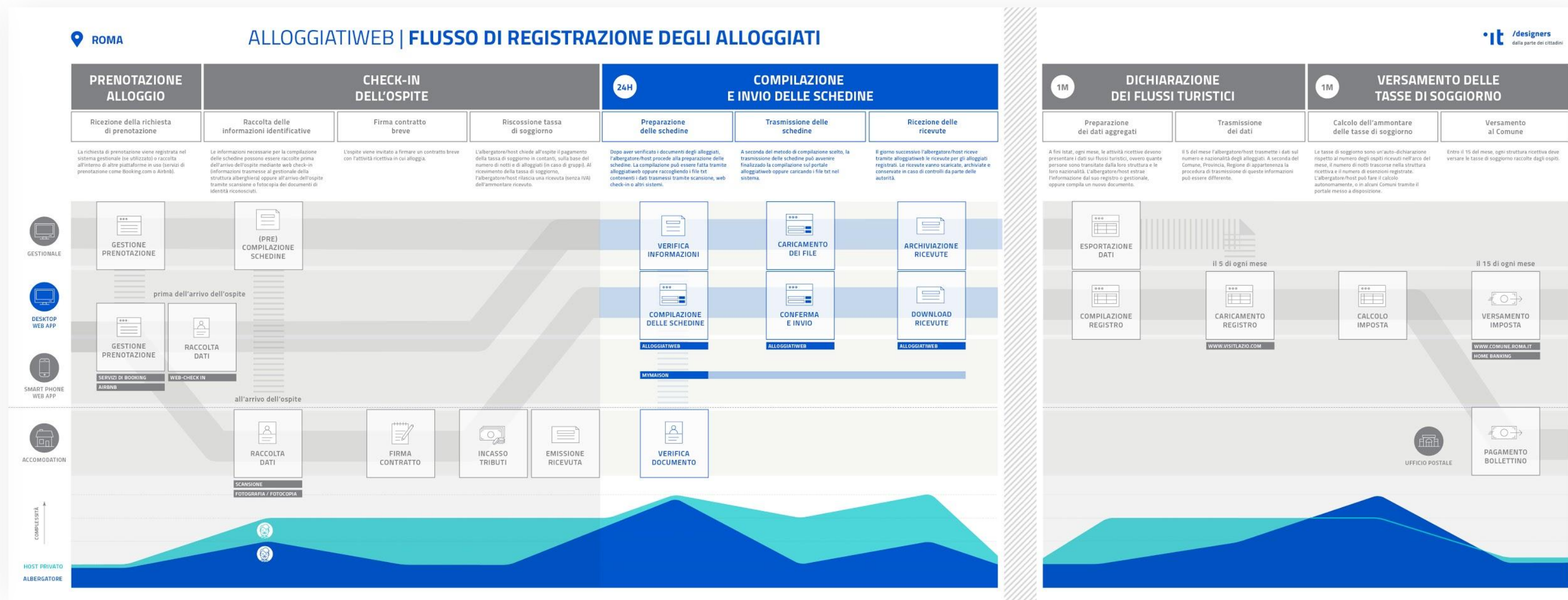
il flusso di **registrazione** degli alloggiati (entro 24 ore)

altri flussi di gestione da svolgere mensilmente.

The needs and difficulties change according to the type of accommodation (private host vs hotelier).

The registration of the guests is not the only fulfillment required from the hospitality structure (see declaration of tourist flows and payment of tourist taxes).

TOURIST TAX
PAYMENT

TOURIST TAX
PAYMENT

REGISTRATION
RECEIPTS

TOURIST
TAX

GUEST

POLICE

MUNICIPALITY
PROVINCE / REGION

PERSONAL
DATA
+ ID check

24h
REGISTRATION
FORMS
alloggiatiweb

HOST /
HOTELIER

DECLARATION OF
TOURIST FLOW
for istat purposes

MONEY EXCHANGE
INFORMATION EXCHANGE

CITIZENS / VISITORS   INSTITUTIONS

6

annualmente

PAGAMENTO
DELLE IMPOSTE
SUI REDDITI

CALCOLO E GESTIONE
NON AUTOMATIZZATA

TRANSAZIONE SEPARATA
(SOLO CONTANTI)

mensilmente

TASSA DI
SOGGIORNO

RICORDARSI DI SCARICARLE
ENTRO 30 GIORNI

VERSAMENTO
TASSE DI
SOGGIORNO

PAGAMENTO
DEL SOGGIORNO

RICEVUTE
SCHEDINE

in contanti

NESSUNO STRUMENTO
DI VERIFICA DEGLI IMPORTI

OSPITE

QUESTURA

COMUNE
PROVINCIA / REGIONE

AGENZIA
DELLE ENTRATE

NON CONOSCE QUESTE
PROCEDURE

DATI
IDENTIFICATIVI

24h

SCHEDINE
ALLOGGIATI

+ verifica ID

alloggiatiweb

SCANSIONE O COPIA
A MANO DEI DATI

RICORDARSI ENTRO
24 ORE DAL CHECK-IN

mensilmente

HOST /
ALBERGATORE

DICHIARAZIONE
DEI FLUSSI TURISTICI

a fini Istat

CITTADINI / VISITATORI   ISTITUZIONI

DUPLICAZIONE DI FLUSSO
(STESSI DATI AGGREGATI)

CONNECTIVE CITIES | DIGITALIZATION | WS 1

MAPPA DI SISTEMA

CRITICITÀ AGGIUNTIVE PER L'HOST PRIVATO

(F) **L'ospite non è a conoscenza di queste procedure** e l'host è in difficoltà nel chiedere documenti e tassa di soggiorno.

(G) **Alloggiatiweb non è accessibile da dispositivi mobili** - solo da pc tramite certificati.

(H) In caso di proprietà multiple, **è necessario ogni volta registrarsi con un diverso certificato.**

(I) Mentre l'albergatore può migliorare alcuni passaggi attraverso un'integrazione con il gestionale o l'adozione di dispositivi ad hoc, **l'host privato non ha strumenti per gestire tutta questa complessità.**

SCAMBIO DI DENARO
SCAMBIO DI INFORMAZIONI

annualmente
PAGAMENTO DELLE IMPOSTE SUI REDDITI

mensilmente

B **VERSAMENTO TASSE DI SOGGIORNO**

PAGAMENTO DEL SOGGIORNO

A

RICEVUTE SCHEDINE

TASSA DI SOGGIORNO
in contanti

OSPITE

F

I

QUESTURA

COMUNE
PROVINCIA / REGIONE

AGENZIA DELLE ENTRATE

DATI ANAGRAFICI
+ verifica ID

24h
SCHEDINE ALLOGGIATI
alloggiatiweb

G **H**

C **D**

mensilmente

E

DICHIARAZIONE DEI FLUSSI TURISTICI
a fini Istat

HOST / ALBERGATORE

CITTADINI / VISITATORI — ISTITUZIONI →

System access barriers

Digital certificates required to access Alloggiatiweb **make it difficult to use it on mobile devices and are not compatible with all browsers.**

In the case of multiple properties, it is necessary to register each time with a different certificate.

For private citizens, it is difficult to retrieve the initial information and **carry out the registration procedures of the tourist accommodation without the help of a professional.**

Repetitive, time-consuming tasks

Transmission of guests data within 24 hours or immediately in case of guests staying one night.

Document collection (photo or scan) and manual transcription of the personal data, with the need to carry out **the recognition of the guest** and the verification of the document **in the presence.**

Manual management of the receipts archivation.

Greater complexity for host/private citizens

The guests are not all aware of these procedures and the hosts get in difficulty in requesting documents and tourist tax.

While the hotel owner can improve some steps through an integration with the management software or the adoption of ad hoc devices, **the private host has no tools to manage this complexity.**
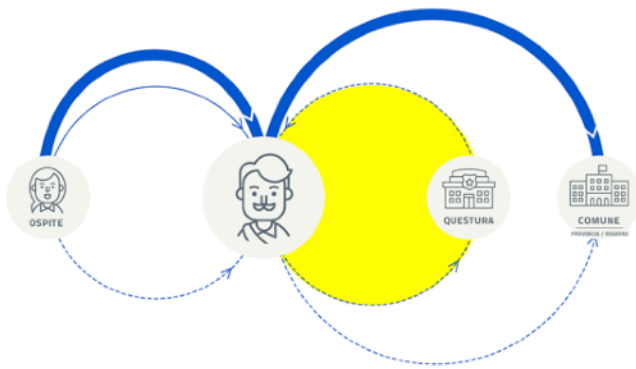
Not optimized data flows

The same information collected for registration must be aggregated in a different way and transmitted to another system for the declaration of tourist flows for ISTAT purposes.

The self-declaration of the tourist tax based on the number of guests and nights **is often not automated** and is made complex by exceptions and variables.
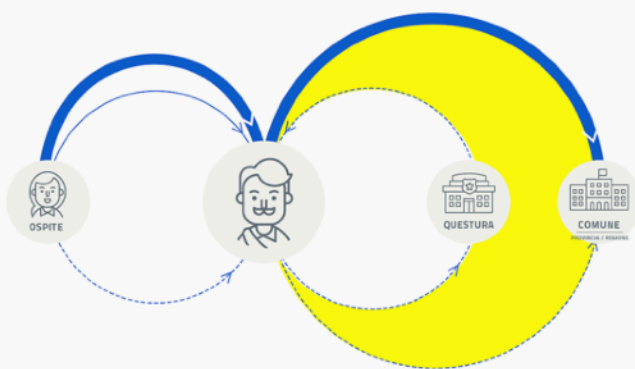
Improve the usability of the webportal on all platforms, supporting the workflows of different accommodation facilities.

Eg. platform accessible from mobile and simplification of the form for fill in.

Reduce the entry barriers in the system, both at the initial registration level and at access for daily use.

Eg. use SPID (Public System, of Digital ID) to facilitate user authentication - instead of credentials with certificates.

Reduce manual information transfer steps to reduce waste of time and errors.

Eg. scan the documents to pre-fill the registration forms.

Distribute more responsibilities among the different actors and systems, in order to lighten the workload required to the accommodation.

Eg. create a public API system to integrate functionality into other systems (eg management software or Airbnb).

Reduce or eliminate redundant operations through greater system integration.

Eg. facilitating the transmission of data to ISTAT by aggregating the information collected from the registration of guests
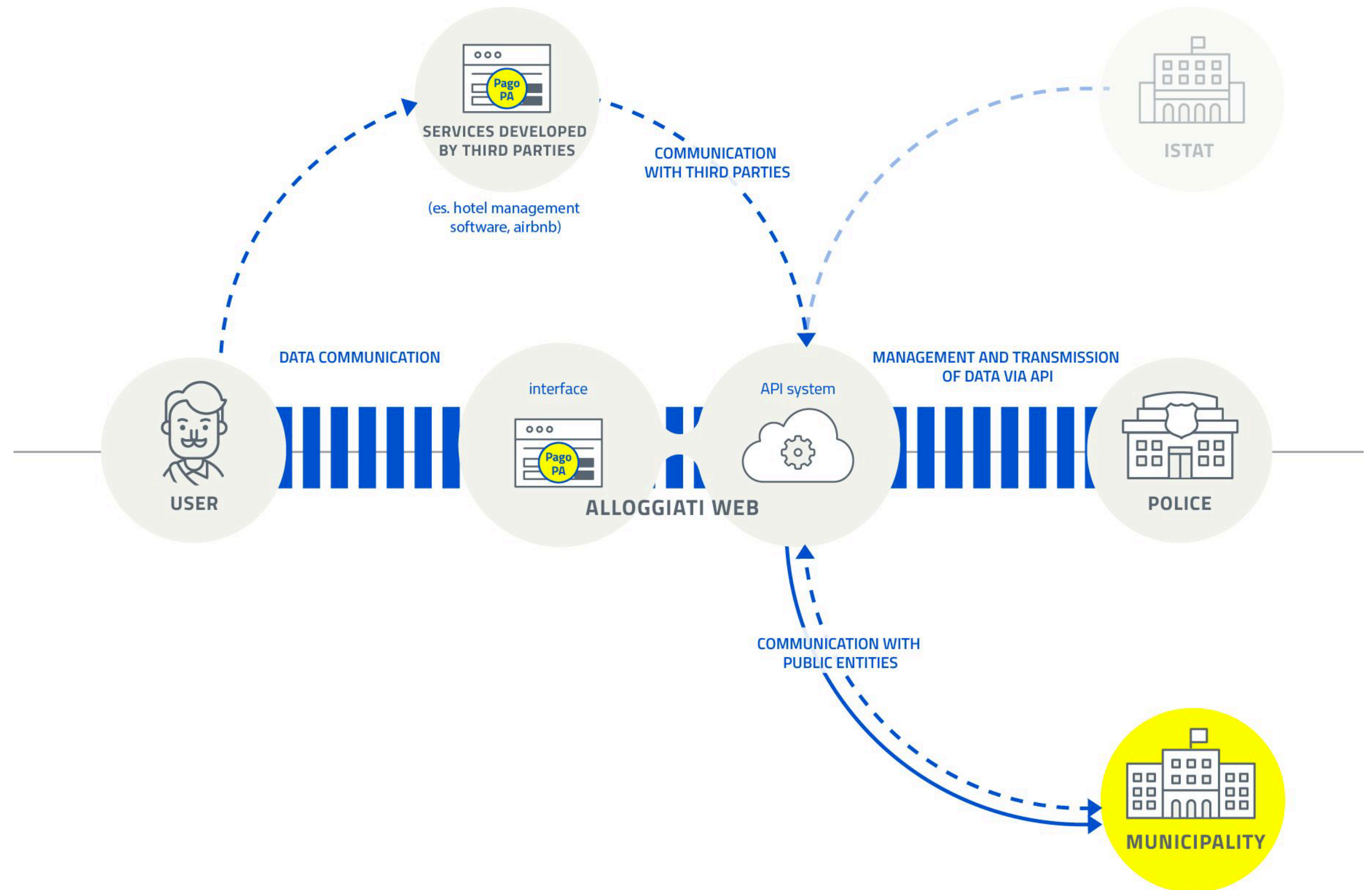
From a close platform to an open system based on the use of API for data access and management

SERVICES DEVELOPED
BY THIRD PARTIES

(es. hotel management
software, airbnb)

COMMUNICATION
WITH THIRD PARTIES

ISTAT

DATA COMMUNICATION

interface

API system

MANAGEMENT AND TRANSMISSION
OF DATA VIA API

USER

ALLOGGIATI WEB

POLICE

COMMUNICATION WITH
PUBLIC ENTITIES

MUNICIPALITY

City tax
payment

Transfer of
statistical data
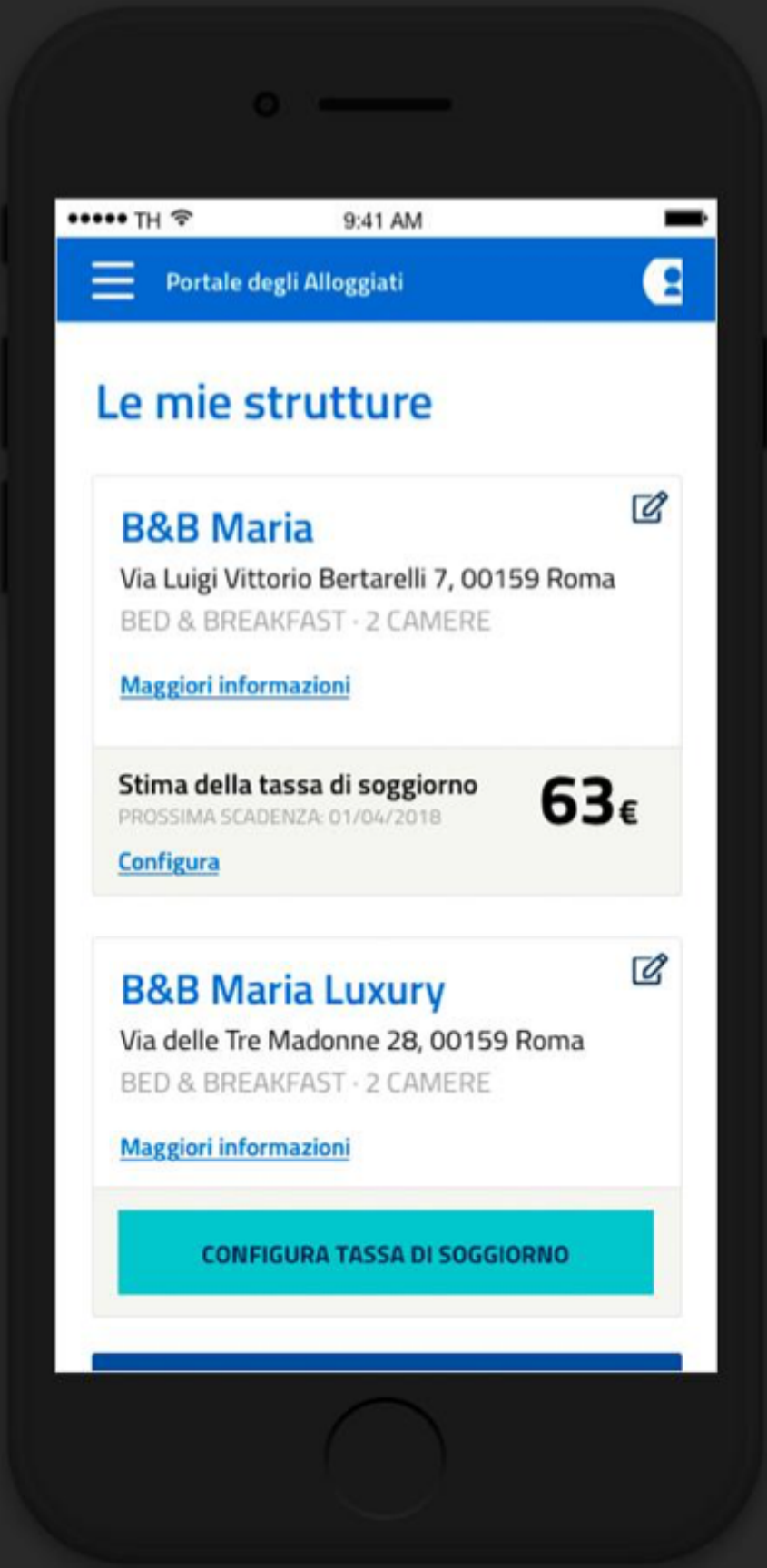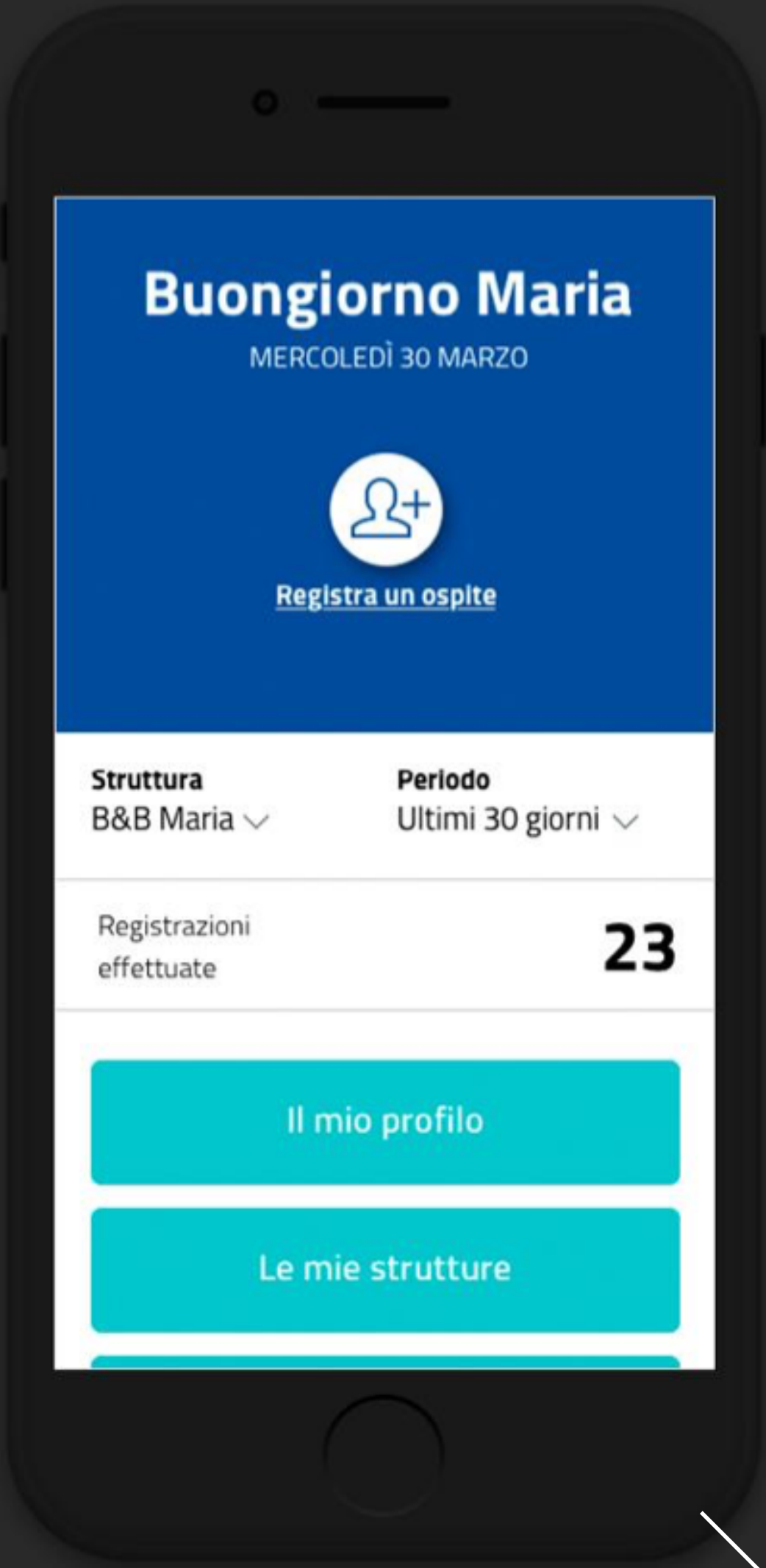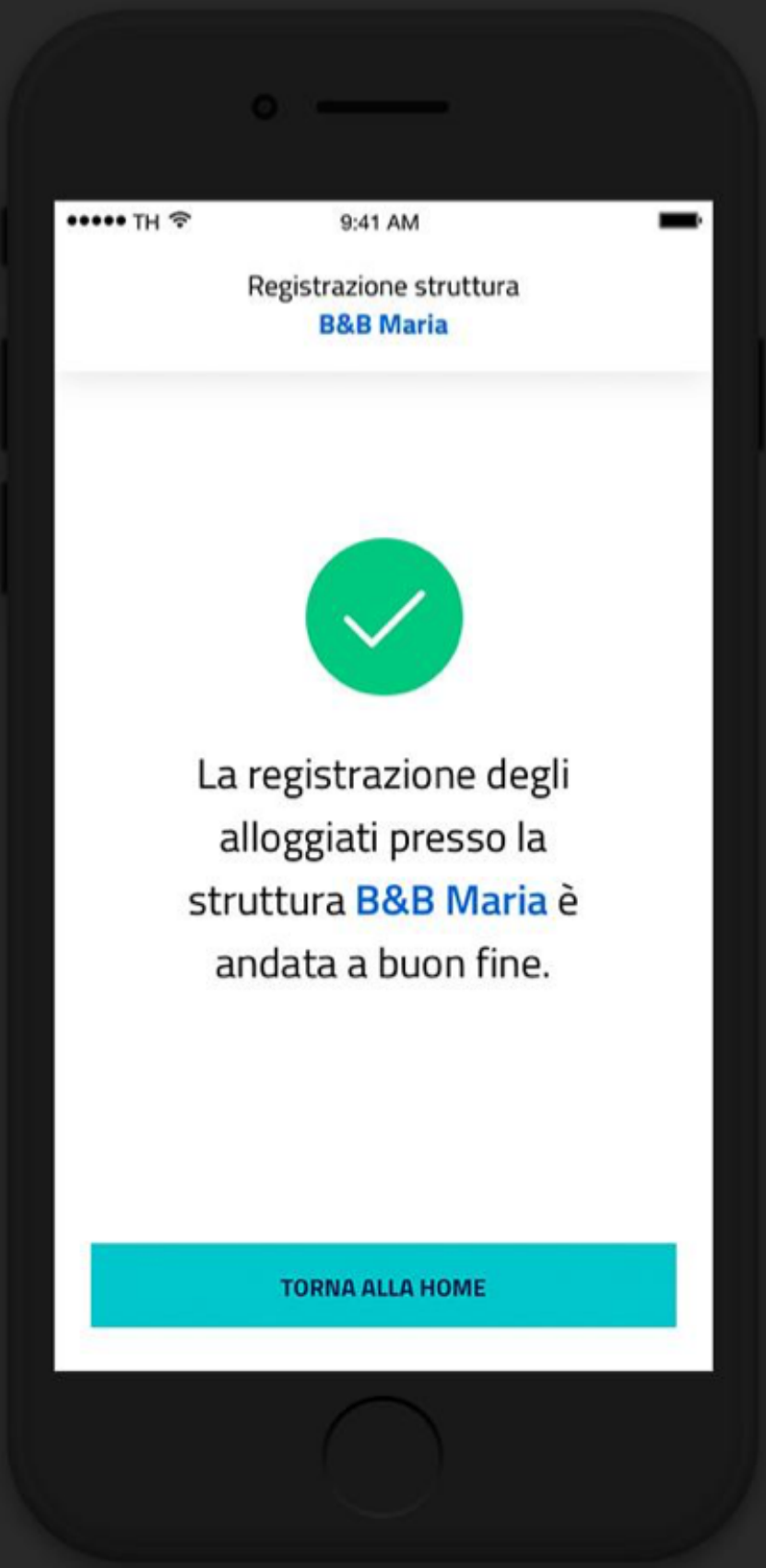
Buongiorno Maria
MERCOLEDÌ 30 MARZO

Registra un ospite

Registrazione struttura
B&B Maria

La registrazione degli
alloggiati presso la
struttura **B&B Maria** è
andata a buon fine.

TORNA ALLA HOME

Struttura
B&B Maria ⌄

Periodo
Ultimi 30 giorni ⌄

Registrazioni
effettuate

23

Il mio profilo

Le mie strutture

Portale degli Alloggiati

Le mie strutture

B&B Maria
Via Luigi Vittorio Bertarelli 7, 00159 Roma
BED & BREAKFAST · 2 CAMERE

Maggiori informazioni

Stima della tassa di soggiorno
PROSSIMA SCADENZA: 01/04/2018

63€

Configura

B&B Maria Luxury
Via delle Tre Madonne 28, 00159 Roma
BED & BREAKFAST · 2 CAMERE

Maggiori informazioni

CONFIGURA TASSA DI SOGGIORNO
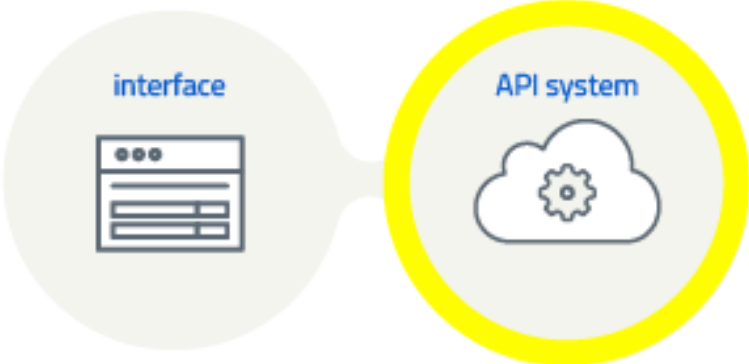
Guests
registration

What we did here:

- We went beyond the initial boundary to analyze bigger system and understand where the core problem can be located

- We involved users and stakeholders to participate and see the problem from various perspectives

- We reframed the challenge based on that - not "improve the usability of the interface", but optimise the overall data processing

- We discovered that the challenge was too complex

The Design System of the Italian Government

LEARN
- ⊞ Usability Test
- ⊞ Ecosystem Map
- ⊞ User Interview
- ⊞ Kit Web Analytics
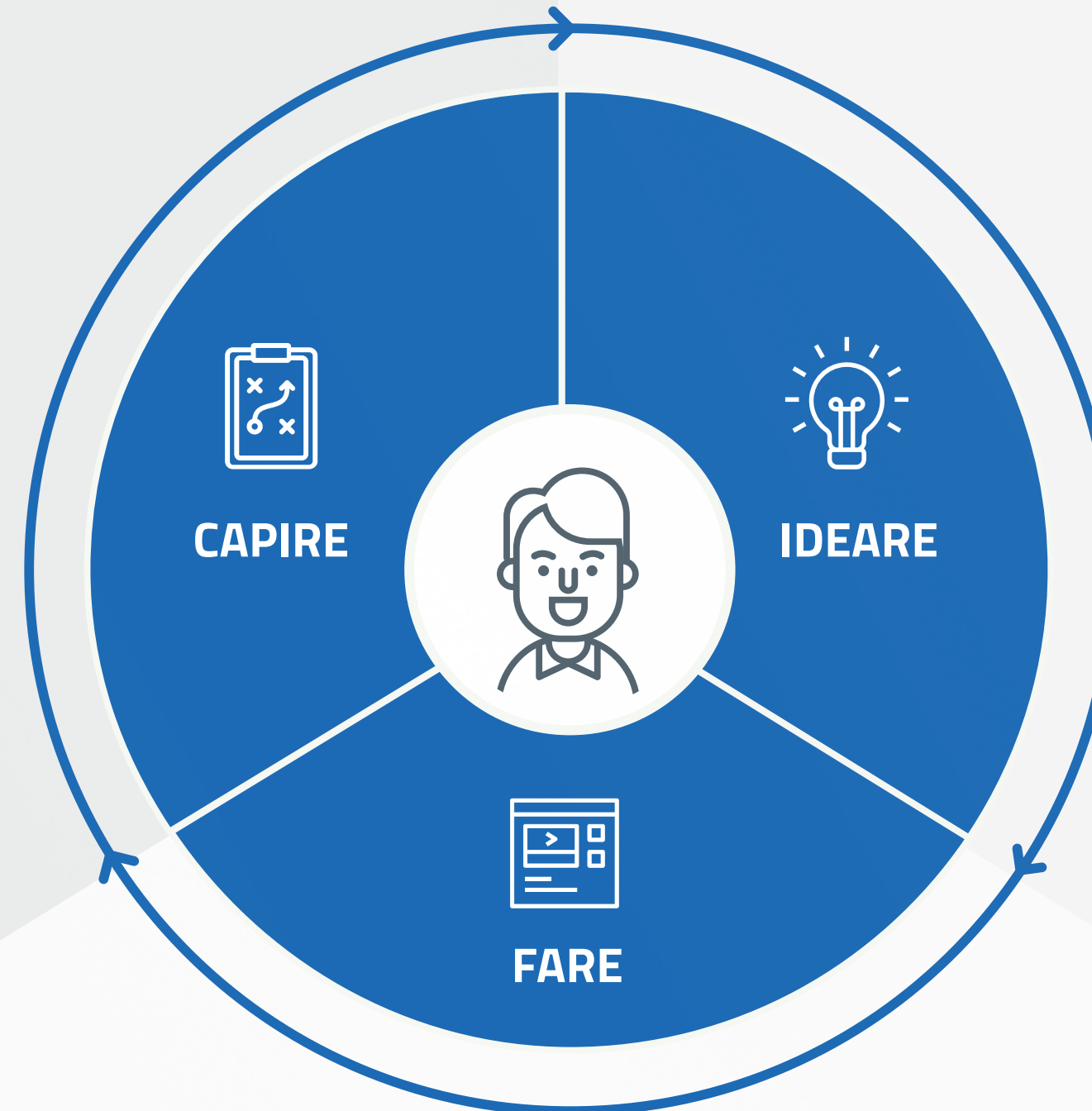
THINK
- ⊞ User Stories
- ⊞ Information Architecture
- ⊞ Co-design Workshop
- ⊞ Personas
- ⊞ User Journey

MAKE
- ⊞ UI Kit
- ⊞ Wireframe Kit
- ⊞ Content Kit
- ⊞ SEO
- ⊞ Web Toolkit

CAPIRE · IDEARE · FARE

?

Any question?