

Service Design at the RCA

**Expanding the impact
of Design in the fourth
industrial revolution**

Nicolás Rebolledo. Arch. MSc. Phd.

Tutor & Lecturer in Service Design– Royal College of Art
Co-founder & Director or Strategy – Service Design UNIT
nicolas.rebolledo@rca.ac.uk

@nrebolledo

Aalto Architecture Lecture, 14th September 2020



About me

unit

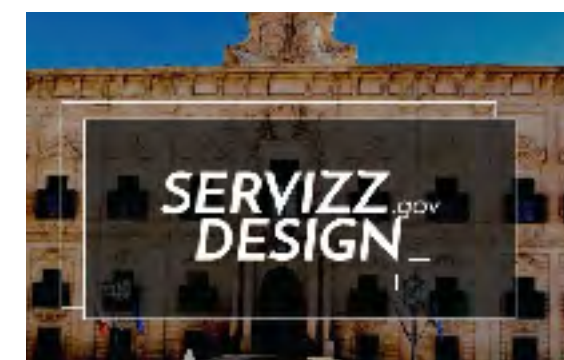
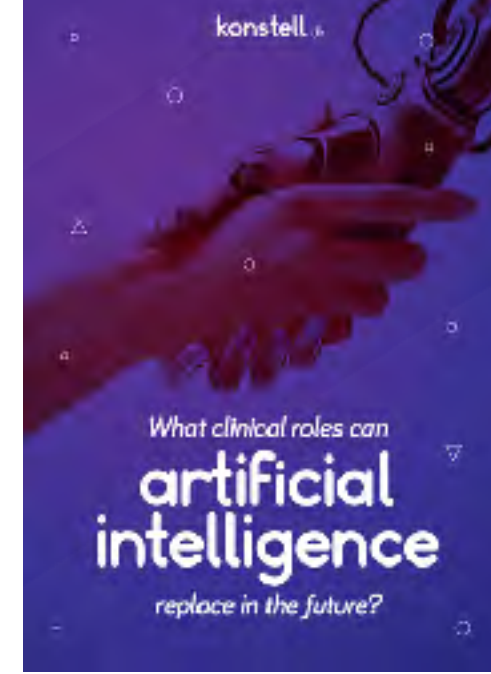
<http://servicedesignunit.com>



Royal College of Art
Postgraduate Art and Design

<https://www.rca.ac.uk/servicedesign>

Chilean Architect.
MSc Technology
Entrepreneurship
UCL, PhD Service
Design RCA.
Co-Founder Service
Design UNIT
Policy Platform
leader RCA.



- **A brief history of Design at the RCA: 180 years linking art, technology and industry**
- **Why a specific Service Design programme?**
- **How do we approach the learning process to "handle the art" of service design?**
- **Service Design methods**
- **Our take on the brief**



RCA: Design & Innovation for 180 Years



Founded in 1837
**#1 in Art & Design: QS World University
Rankings (2015-2016-2017-2018-2019)**



1851 Great Exhibition





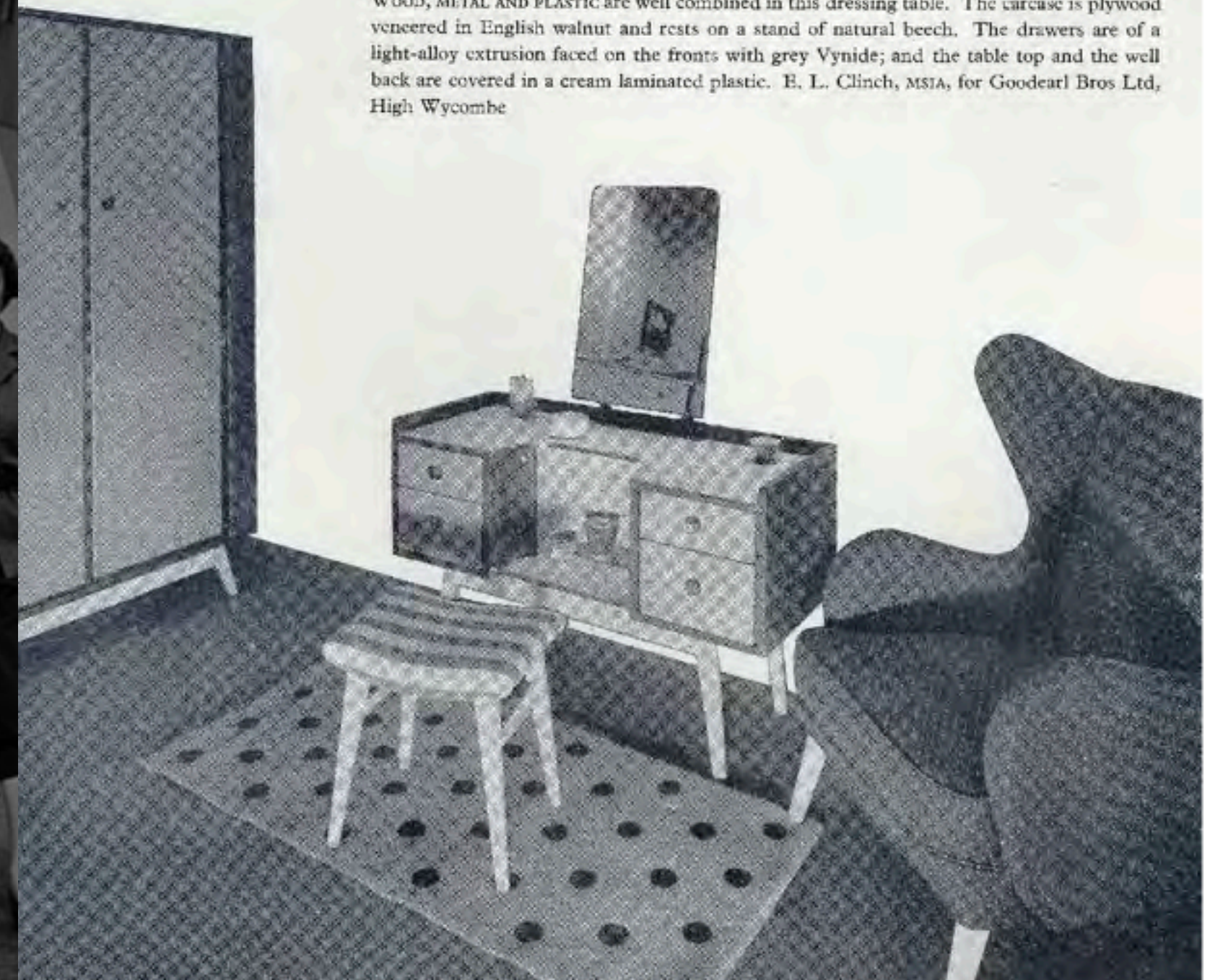
BREAKFAST IN BED becomes really comfortable with this trolley. Specially designed to go between twin beds, its two trays (finished in Formica) slide in when not required. Designed by E. H. Pinto and made in Californian eucalyptus and aluminium by Compactom Ltd, NW2



A COMBINED bed head and bedside table. Here, a right-hand and left-hand model of the *Unad* bed head are placed together and give the impression of a single fitting. Designed by the Story Design Group and made in black-bean and cherry by Compactom Ltd, W8

Furniture for the bedroom

WOOD, METAL AND PLASTIC are well combined in this dressing table. The carcass is plywood veneered in English walnut and rests on a stand of natural beech. The drawers are of a light-alloy extrusion faced on the fronts with grey Vynide; and the table top and the well back are covered in a cream laminated plastic. E. L. Clinch, MSA, for Goodearl Bros Ltd, High Wycombe



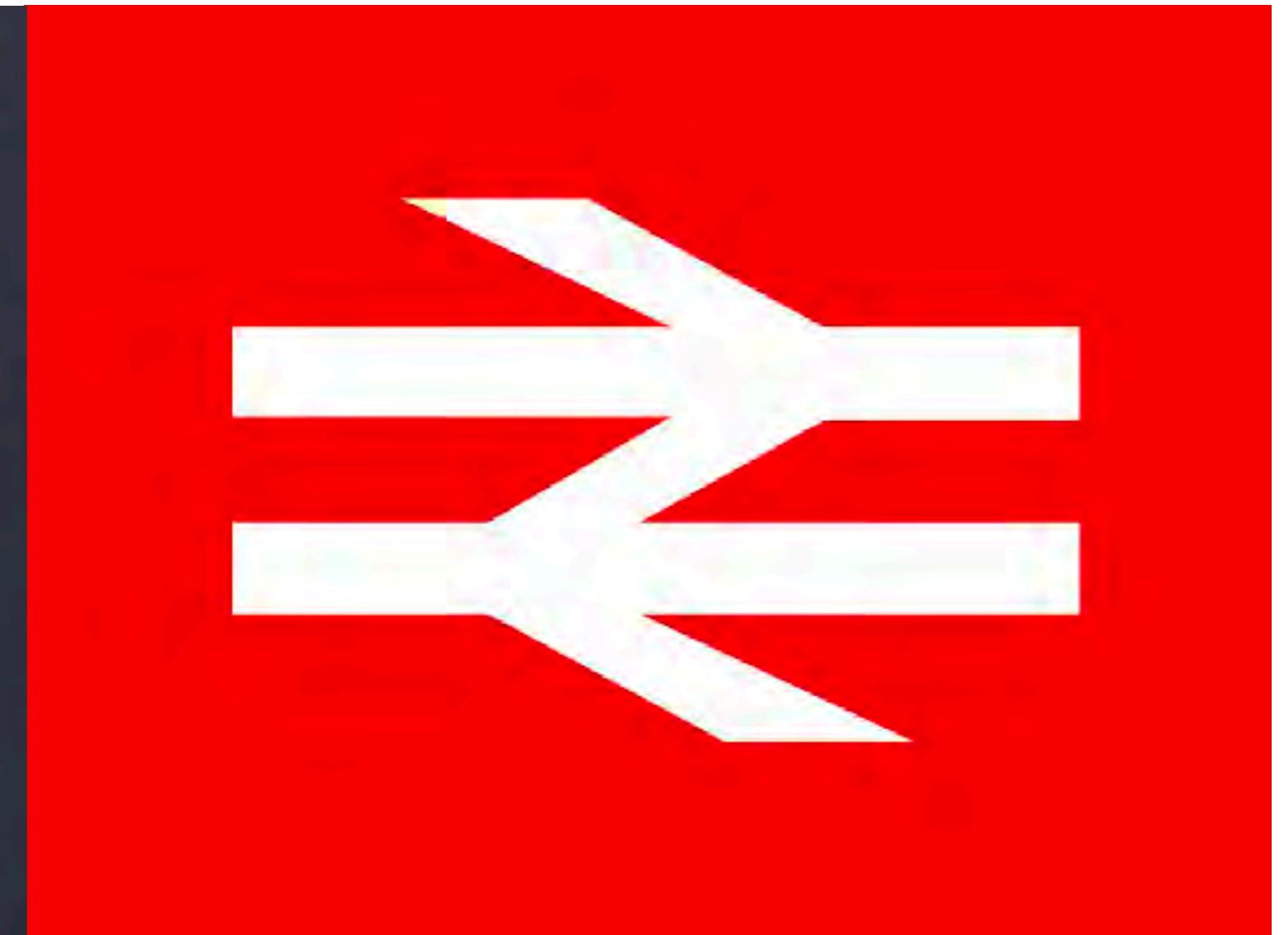
RCA: Design & Innovation for 180 Years

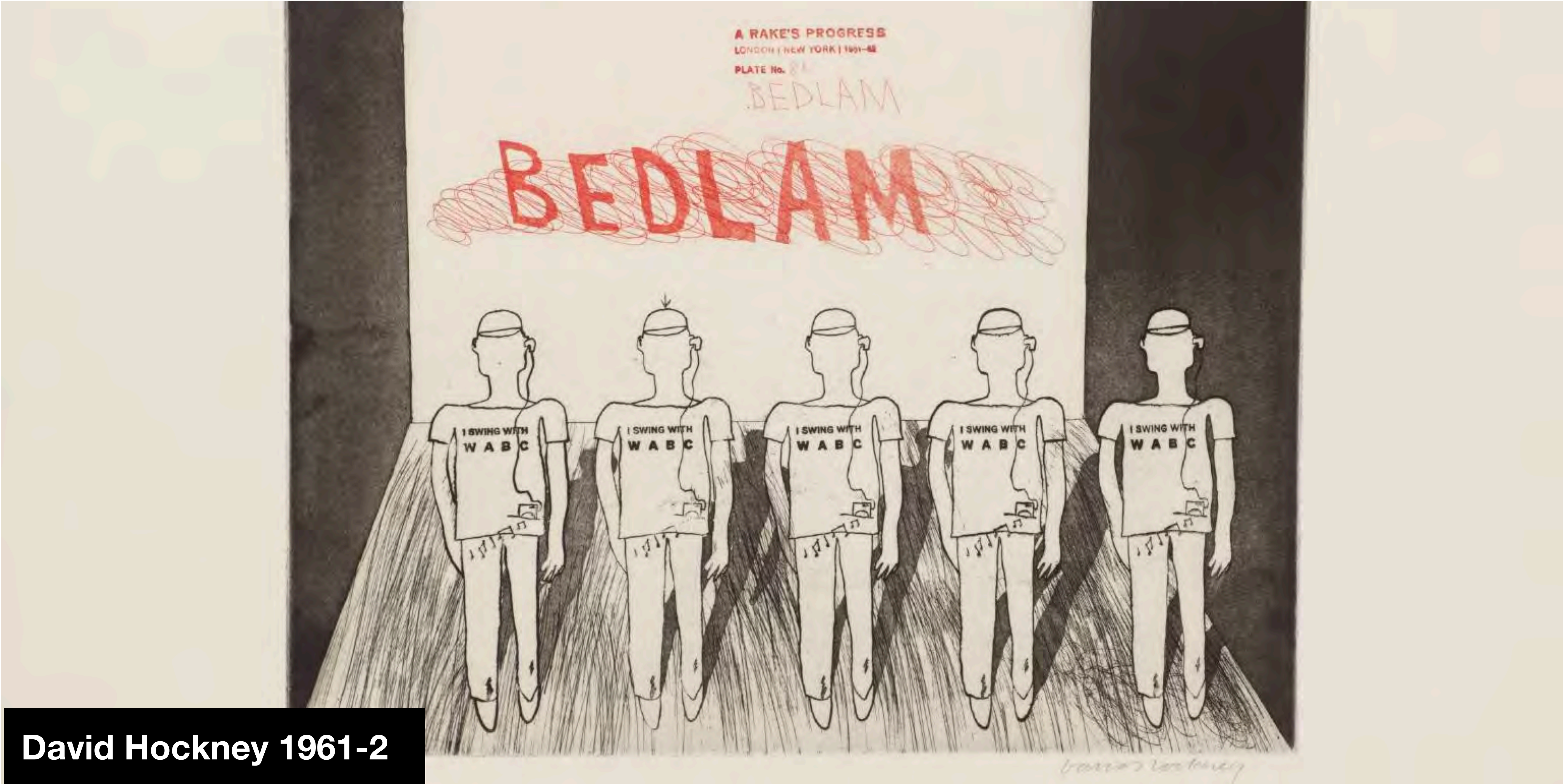


*** The machine is accepted as the essentially modern vehicle of form. Our designs will therefore be essentially designs for mass production, but at the same time we hope to rescue mass production from the ugliness and aesthetic emptiness which has so far characterized the greater part of its output. It is impossible to accept the view that any essential antagonism exists between art and industry, between beauty and the machine. But it is necessary to reintegrate the worlds of art and industry, for only on that basis can we progress towards a new and vital civilization.**

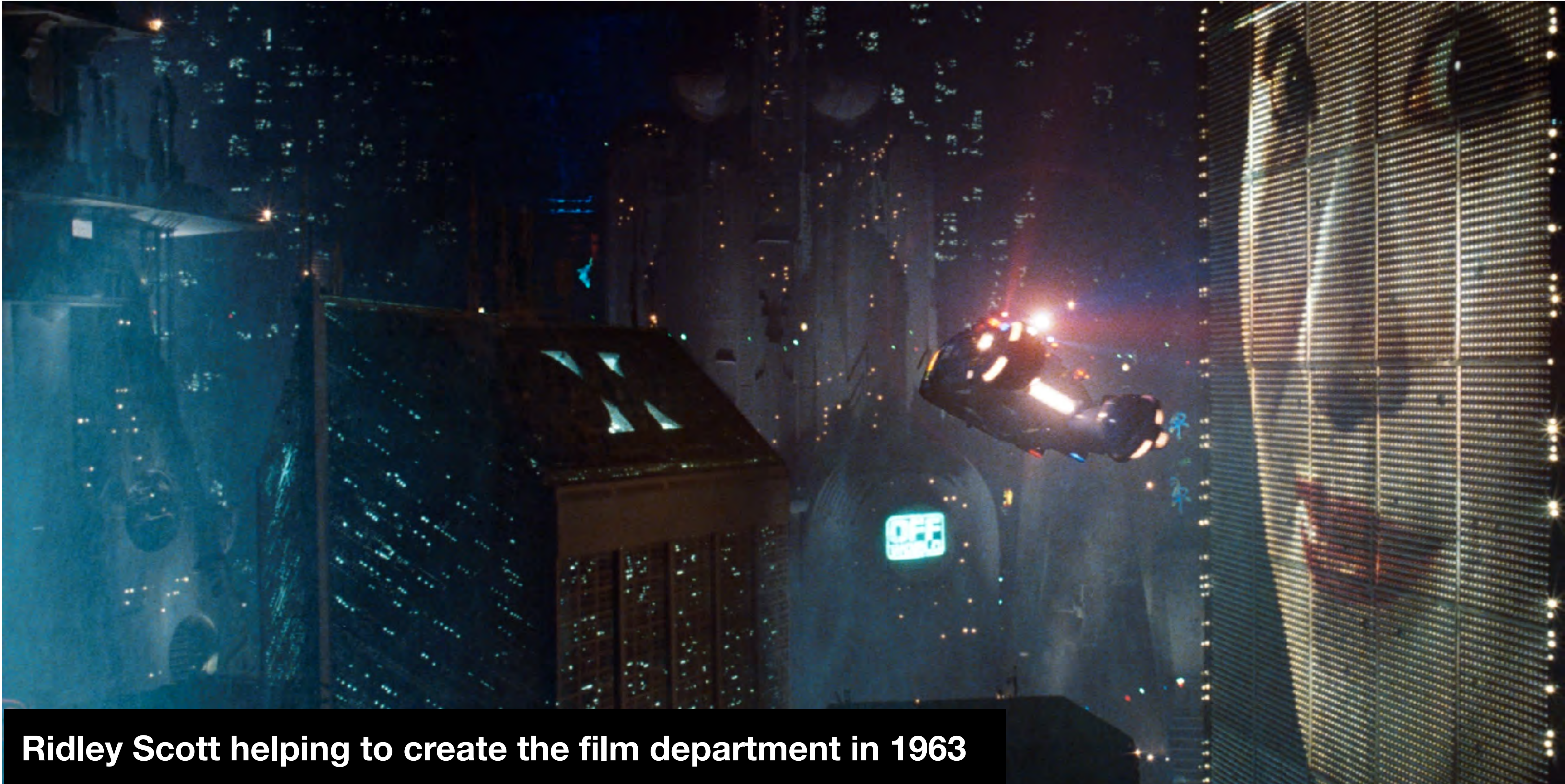
**Design Research Unit
1942-72**

Design Research Unit 1942-1972





David Hockney 1961-2



Ridley Scott helping to create the film department in 1963



Ian Callum reinventing Jaguar brand in the 2000s



Thomas Heatherwick – London Bus 2012

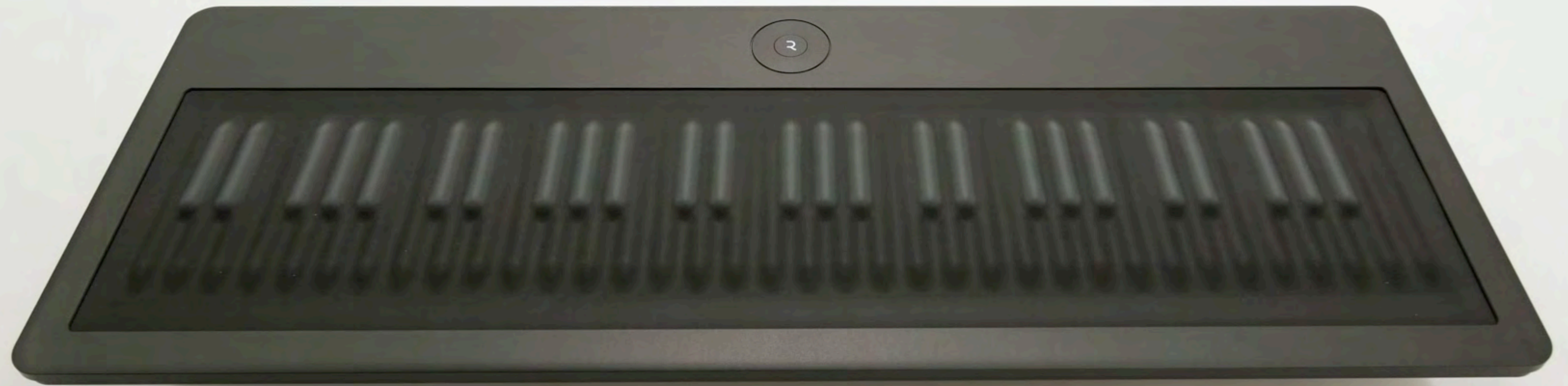


Ten programs that combine creativity, business and technology in close collaboration with industry

<https://www.rca.ac.uk/schools/school-of-design/>

- MA Design Products
- MA Fashion
- MA / MSc Global Innovation Design (with Imperial)
- MA/MSc Innovation Design Engineering. (with Imperial)
- MA Intelligent Mobility
- **MA Service Design**
- MA Textiles

- MA TextilesMRes Healthcare & Design
- MRes RCA Design Pathway
- Design MPhil. /Phd



Seabord - Roland Lamb 2011

From products



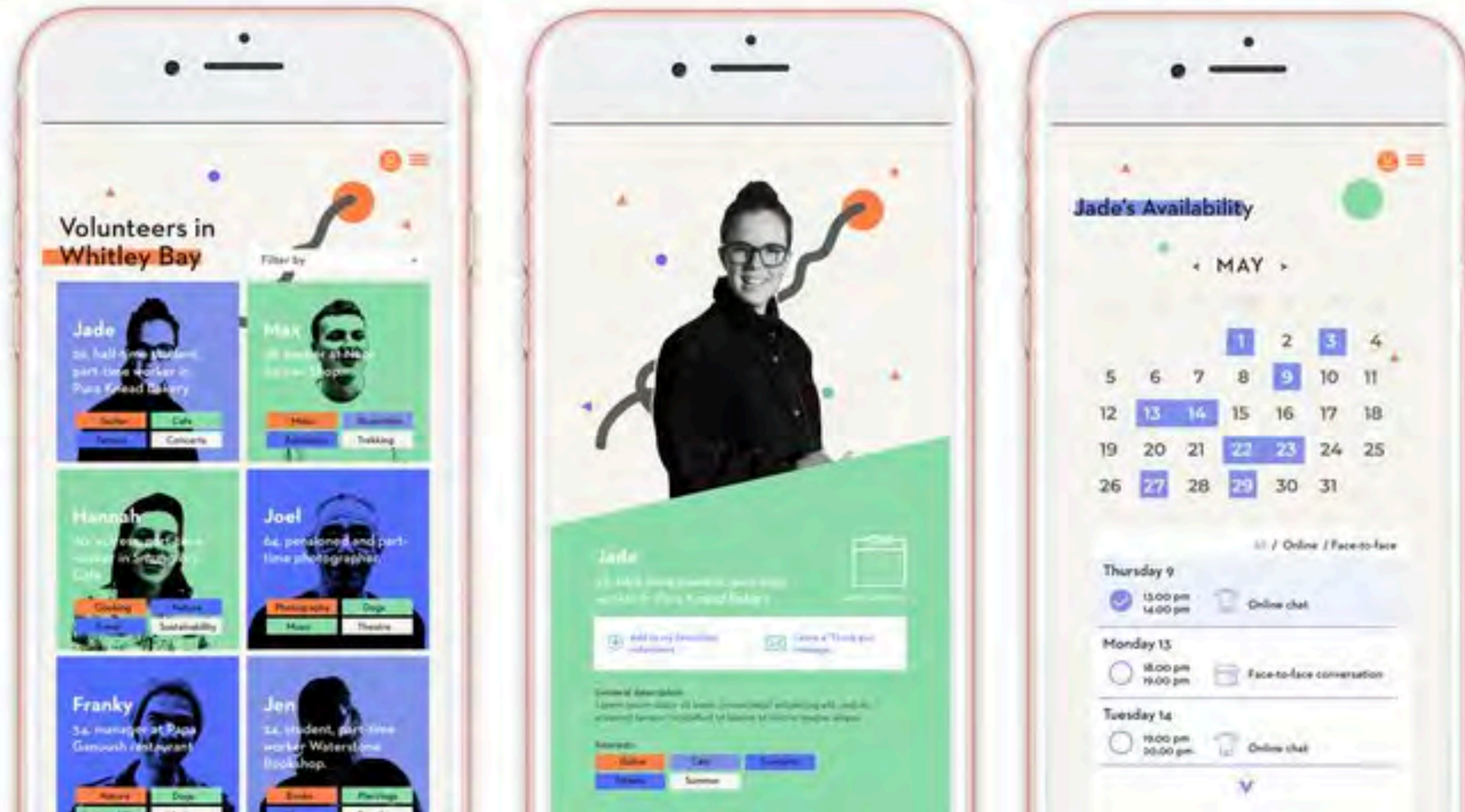
4 months

Petit Pli, Ryan Mario Yasin 2017



Loowatt - Virginia Gardiner 2012

To services with public impact



Good Talk - Bianca Benvenuto / Isabelle Ohlson 2019

To services with public impact



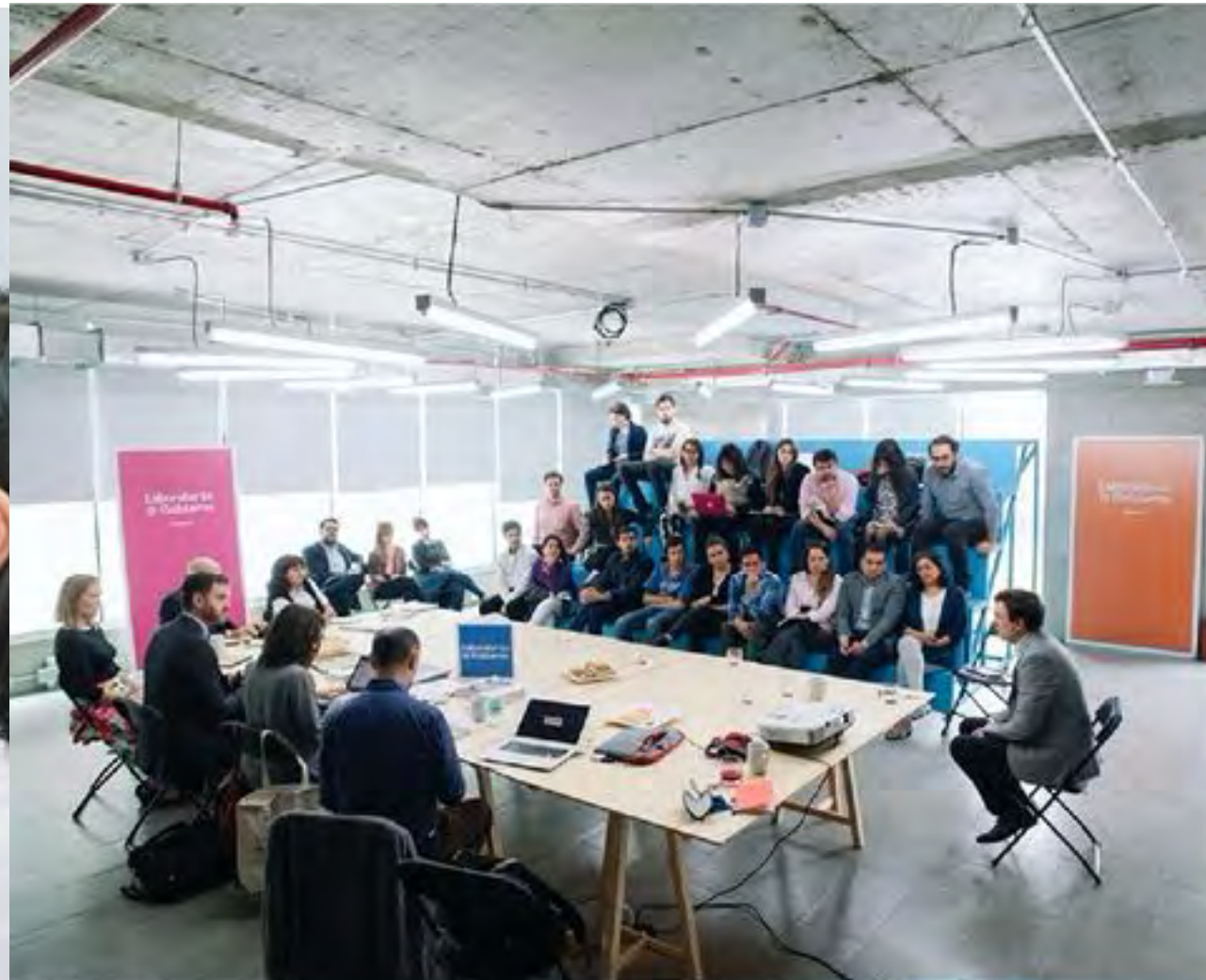
InHouse Records - Judah Armani 2018

A screenshot of the 'insidetime' website. The header features the 'insidetime' logo in white on a red background, with the tagline 'the National Newspaper for Prisoners & Detainees' below it. To the right, there is a 'Breaking News' section with a blue link: '*Breaking News ENGLAND AND WALES IMPRISON NEWS FLASH! MOST PEOPLE...'. Below the header is a navigation menu with links: Home, Headline, Mailbag, Newsround, Comment, Information, Legal, Jailbreak, Poetry. A secondary menu includes: Inside Information, Prison Search, IRC, FAQs, Support, Rules, Grants, Glossary, Library, Solicitors. At the bottom of the screenshot, it shows 'Published On: Tue, Jan 30th, 2018' and a link '*Comment | By Dave Rc'.

Prison escape!



To services with public impact



Laboratorio de Gobierno - 2014-2015

**Design as a
change process**

“Everyone designs who devises courses of action mined at changing existing situations into preferred ones” (Simon, 1969)

**Creativity with
purpose**

“Design may be described as creativity deployed to a specific end. It has the capacity of shaping ideas to become practical and attractive propositions for user or customers.” (Cox, 2005)

**An enquiry into
future ways of
living**

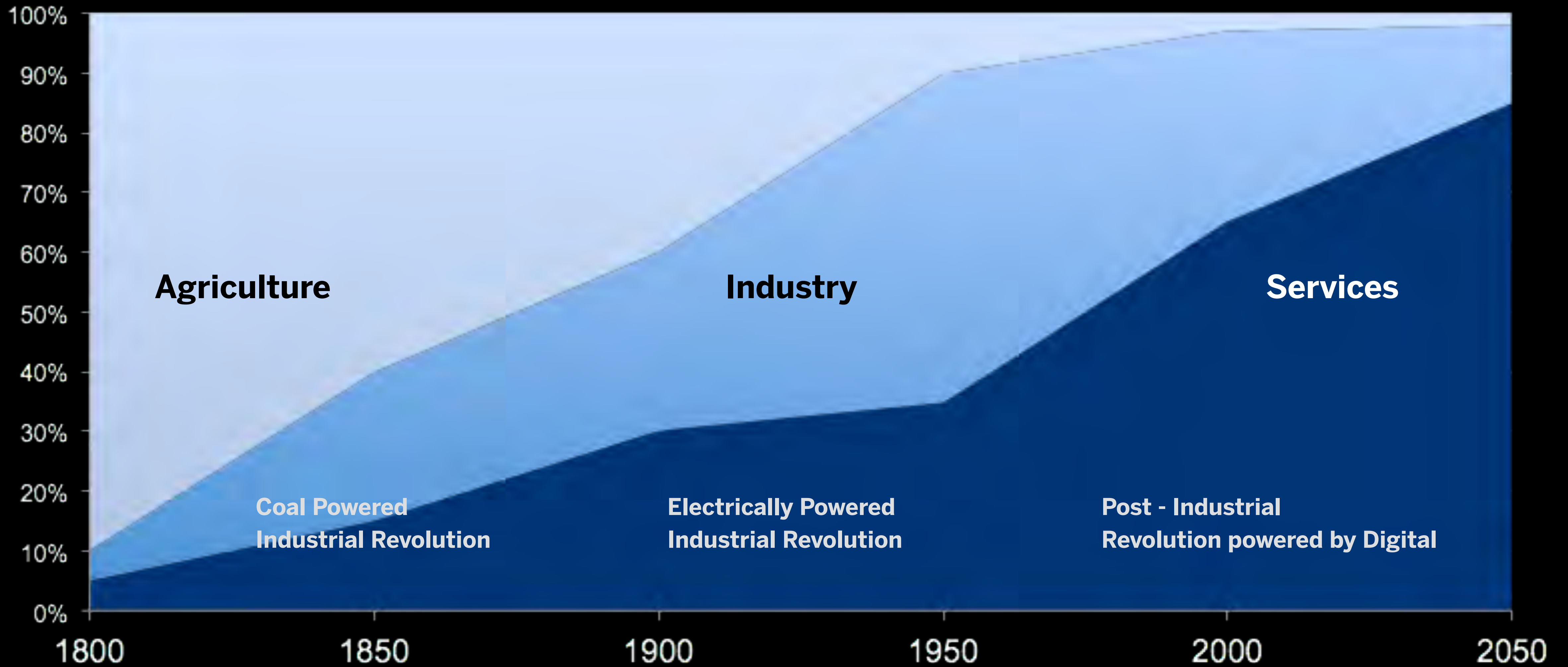
“Design is an exploration about people and their future ways of living” (Sanders, 2014)



Why a specific Service Design programme?



To tackle the challenges of the service economy

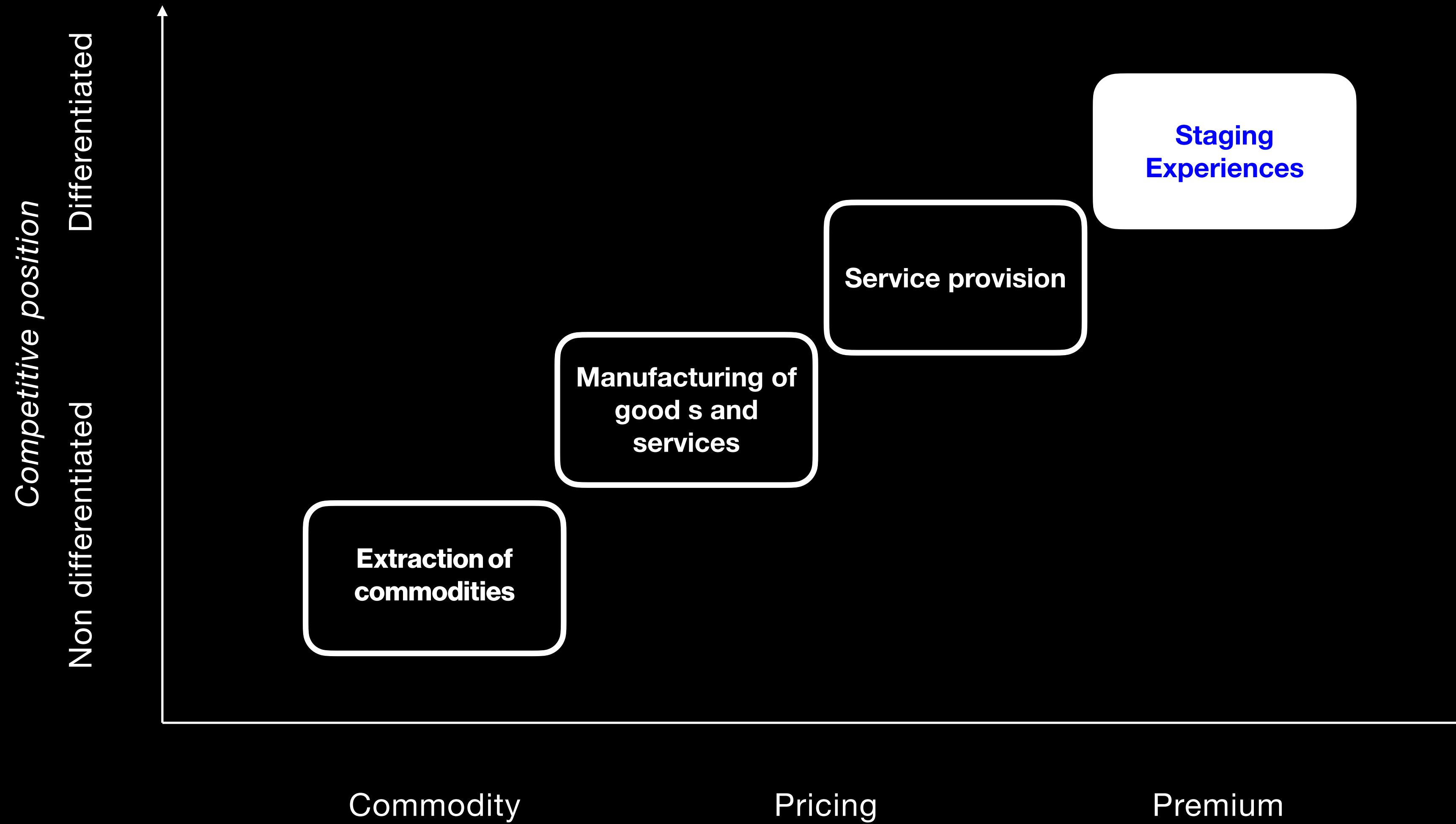


70% OECD (2005) | 46% China (2013)

Services as a % of US Economy | Source: US Bureau of Statistics (Leon, 2013)



Towards an experience economy



Source: Pine & Gilmore 2011

To broaden the spectrum of impact of contemporary design



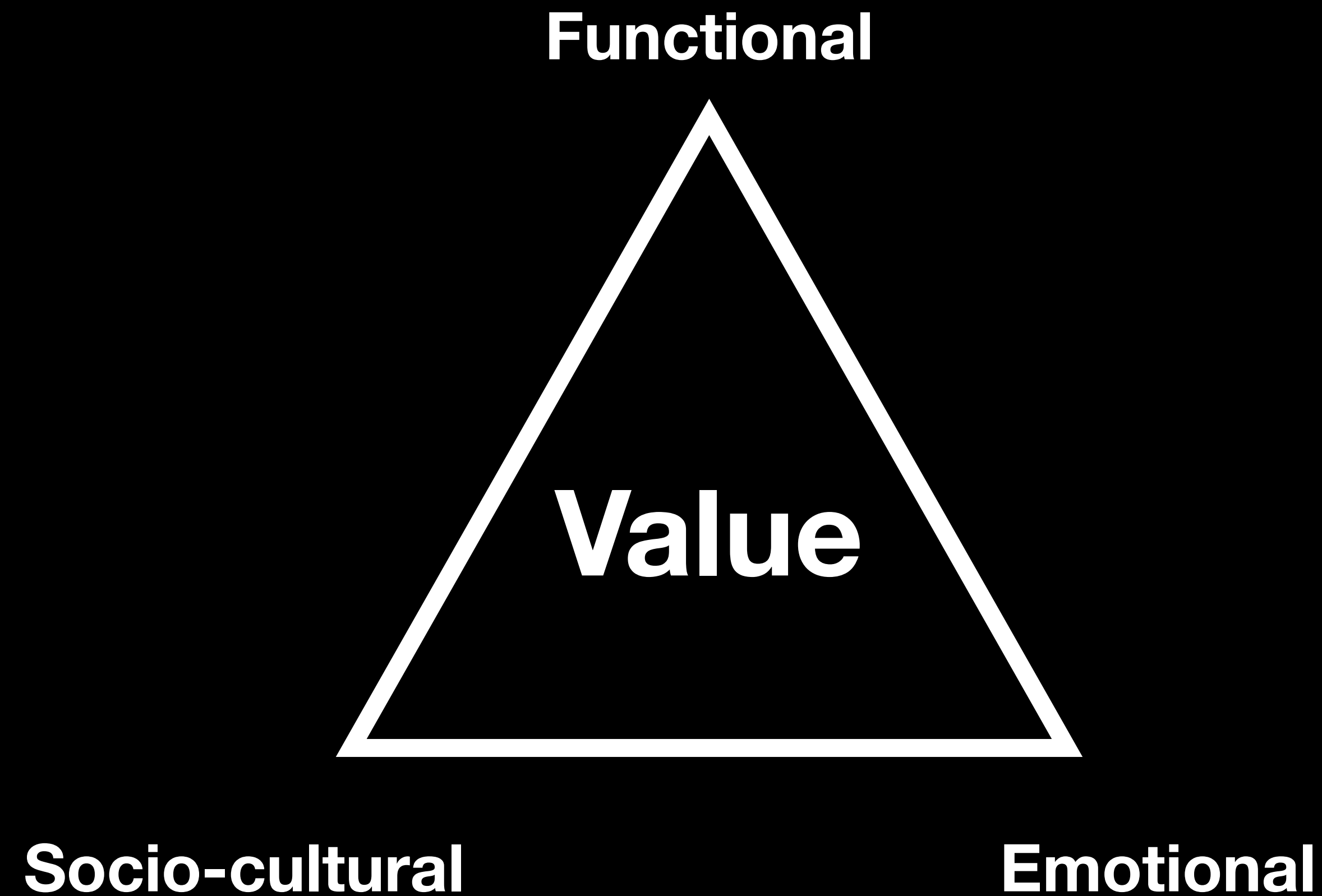
Services are the drivers of the new economy

“Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world’s largest accommodation provider, owns no real estate. Something interesting is happening.”

• <i>Airbnb</i>	<i>\$31 bn</i>
• <i>Uber</i>	<i>\$68 bn</i>
• <i>Facebook</i>	<i>\$357 bn</i>
• <i>Alibaba</i>	<i>\$356 bn</i>

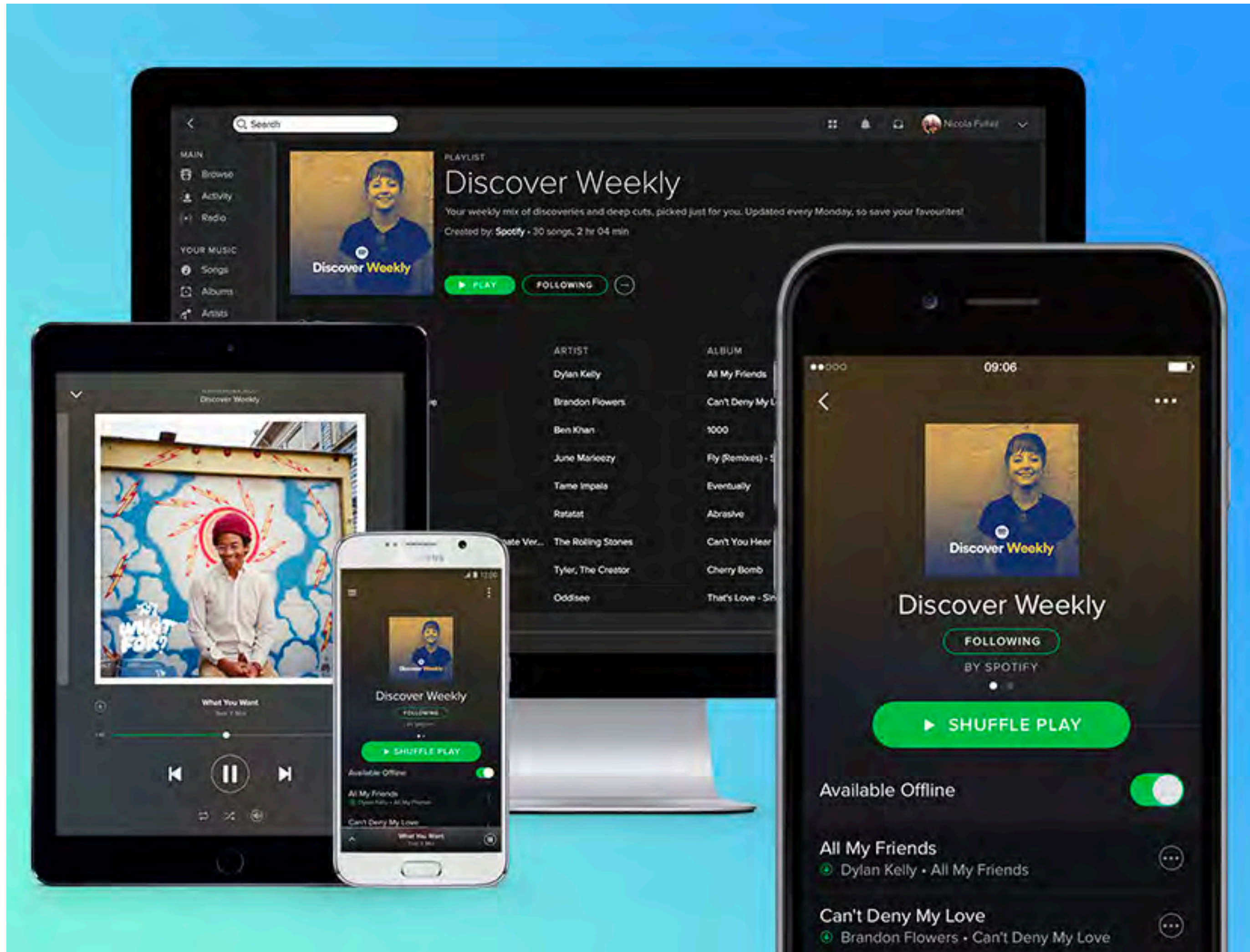
Tom Goodwin

Senior vice president of strategy and innovation at Havas Media

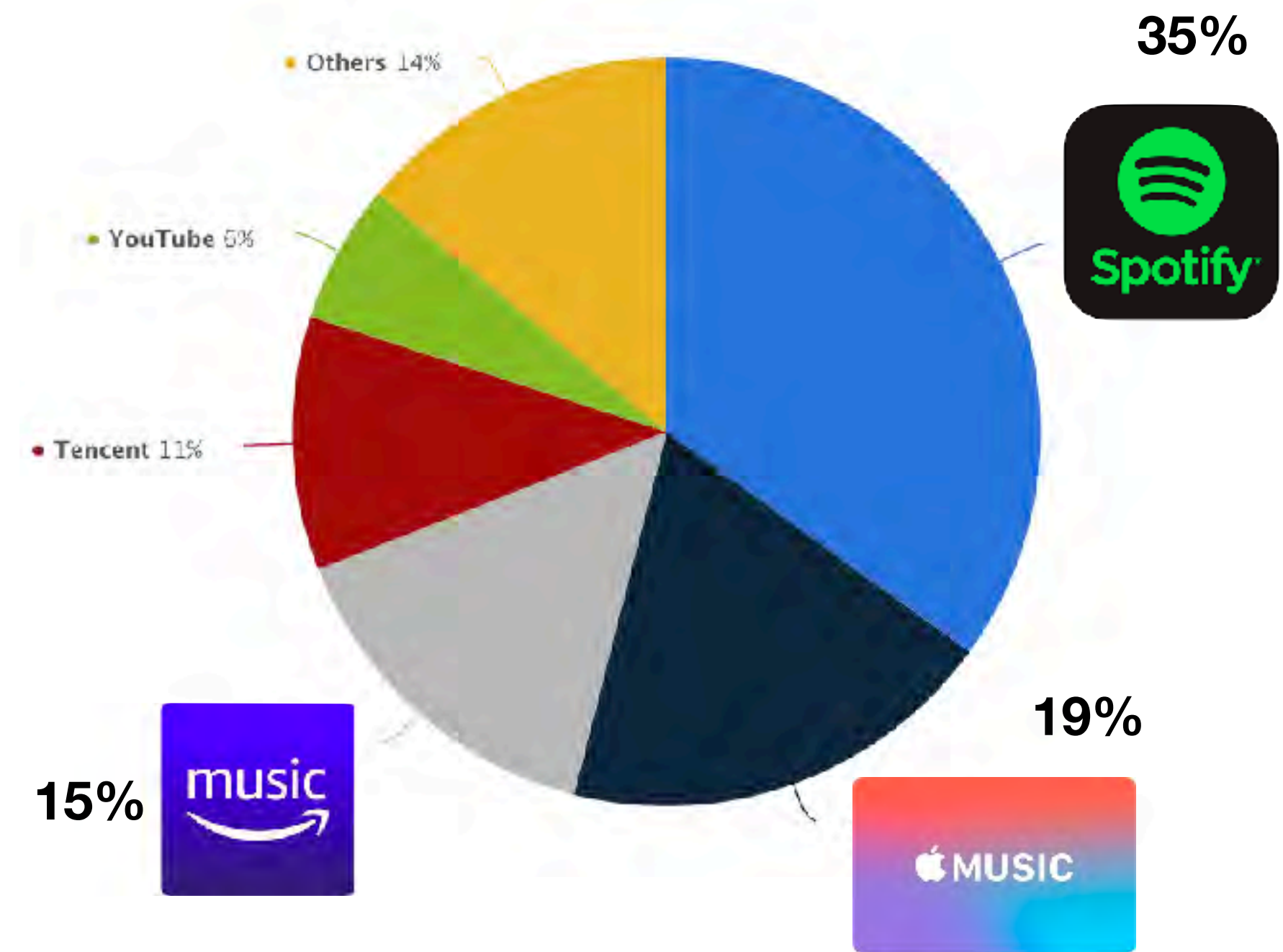


- **Service experiences (SX) are the sum of all interactions a user has engaging with a business in the context of value co-creation.**
- **They are delivered through the orchestration of system of resources, people and organisations that we call service systems**

Service Experience – Spotify



Spotify: launched 2008 – \$23.5 billion in 2018

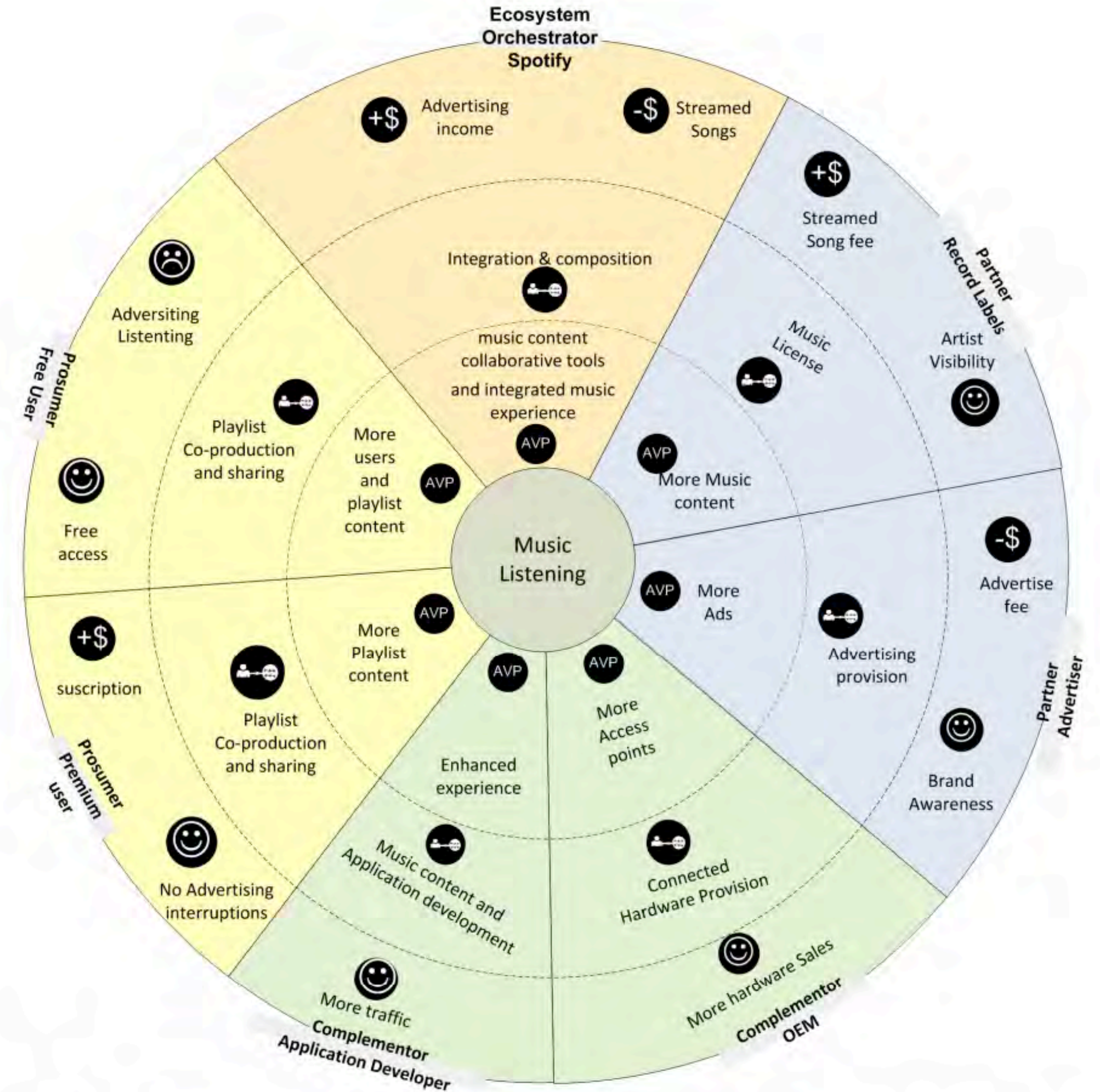


(Statista, 2019)

Service Experience – Spotify

“The value propositions is what each actor delivers to the ecosystem. This can be thought as a network effect, where the value proposition of one actor enhances the overall value for the same or other group of actors”.

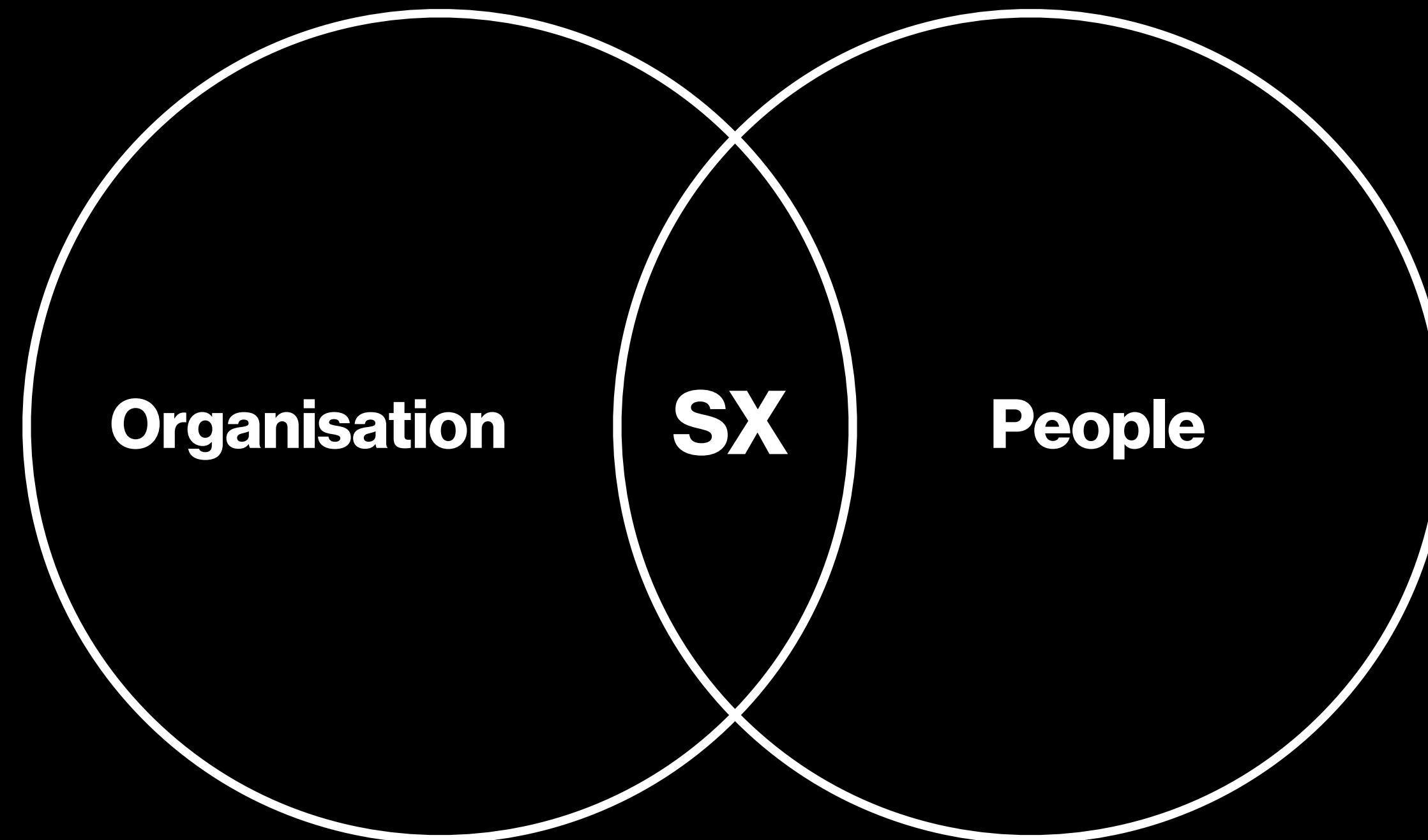
(Lüftenegger. Et al, 2017)





Service experience – Amazon





SX is the intersection between people's desires and needs and the capabilities (human, operational, technological) of organizations placed at the service of those needs and desires.



The experience Gap

Source: Customer led growth diagnostic.
Satmetric NPS database / Mckinsey



80%

Companies that believe they deliver a superior value proposition

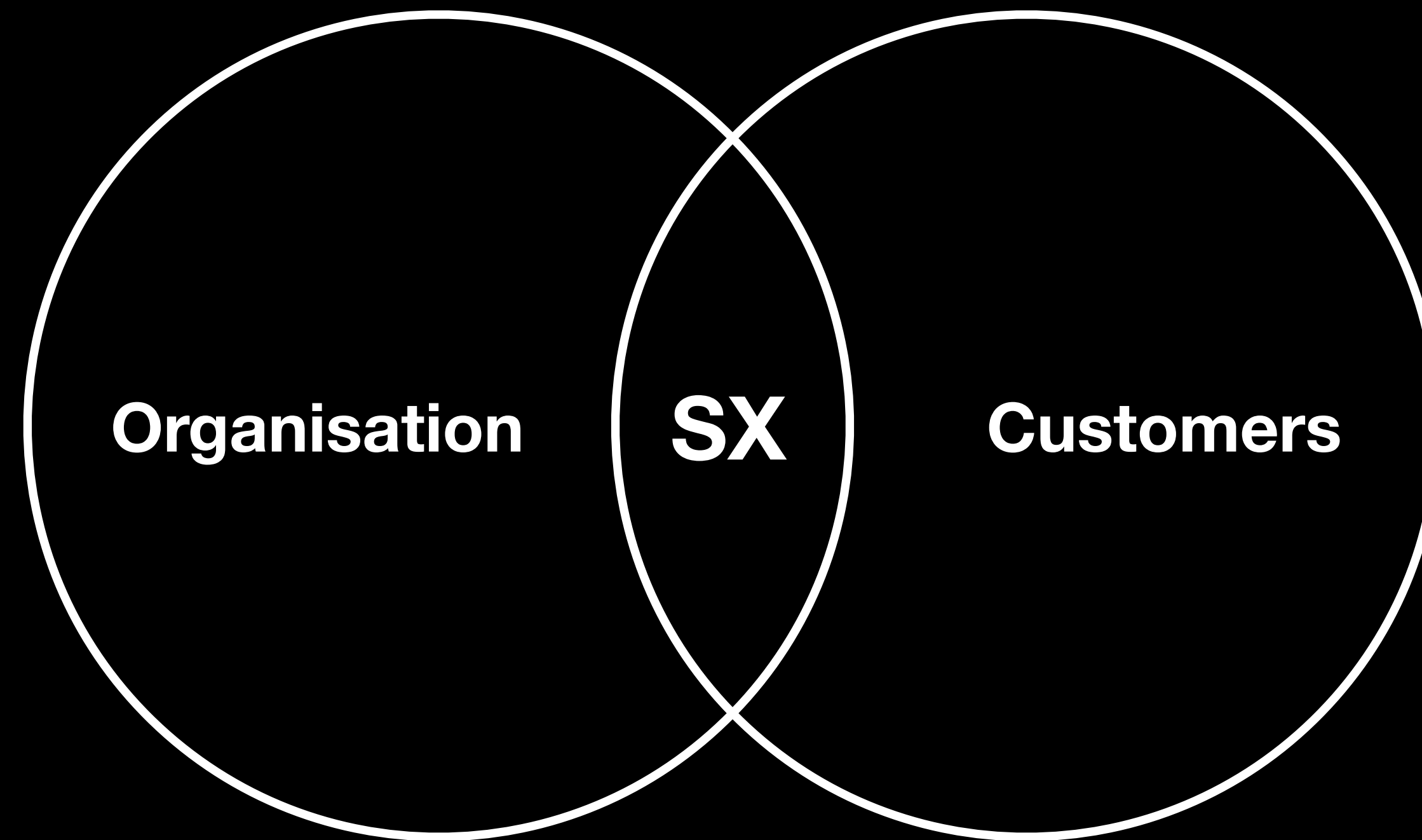


8%

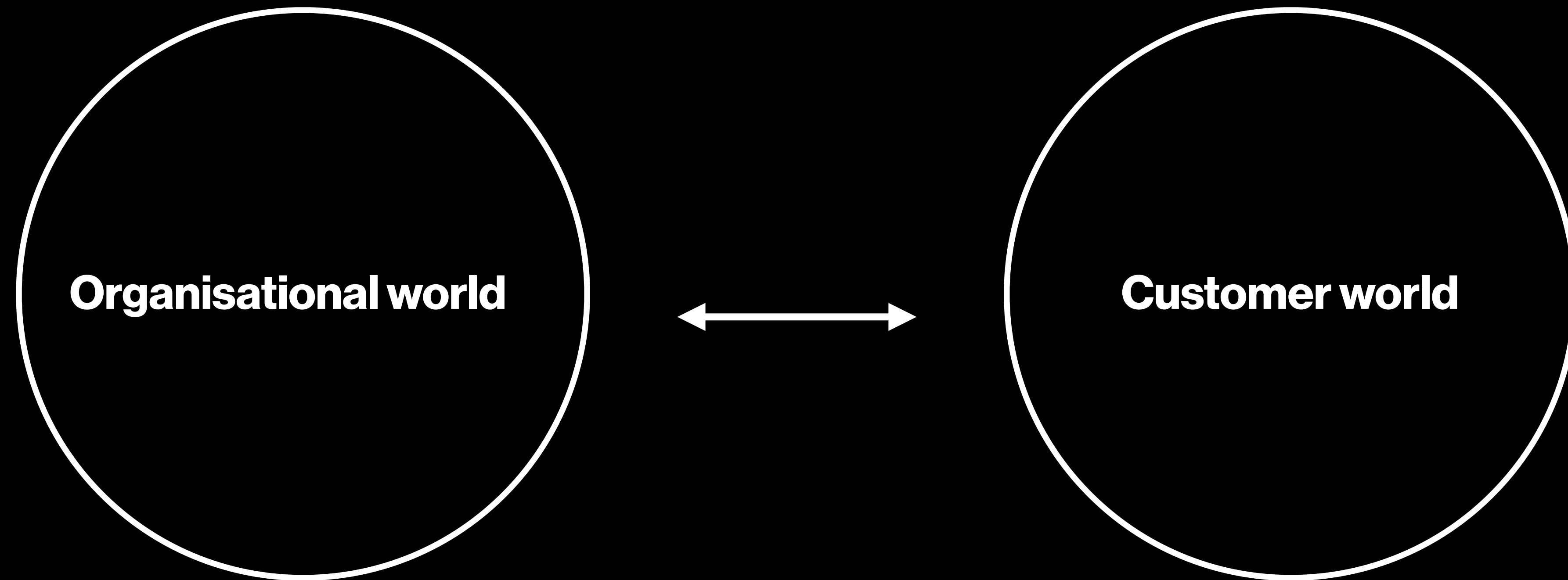
Companies whose customers agree

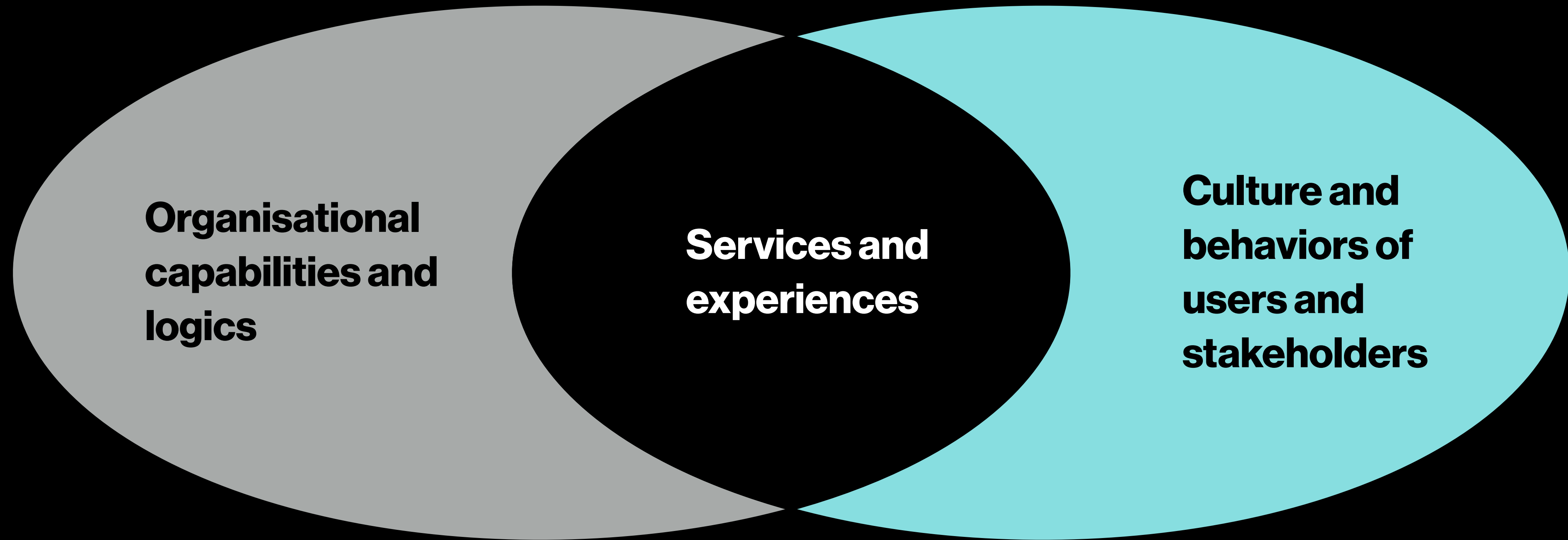
Delivery gap

Why this gap?



A disconnection between two worlds





It is about moving towards organisations whose human, technological and operational resources are at the service of the people's experiences, understanding and empathising with their world and lifestyle.

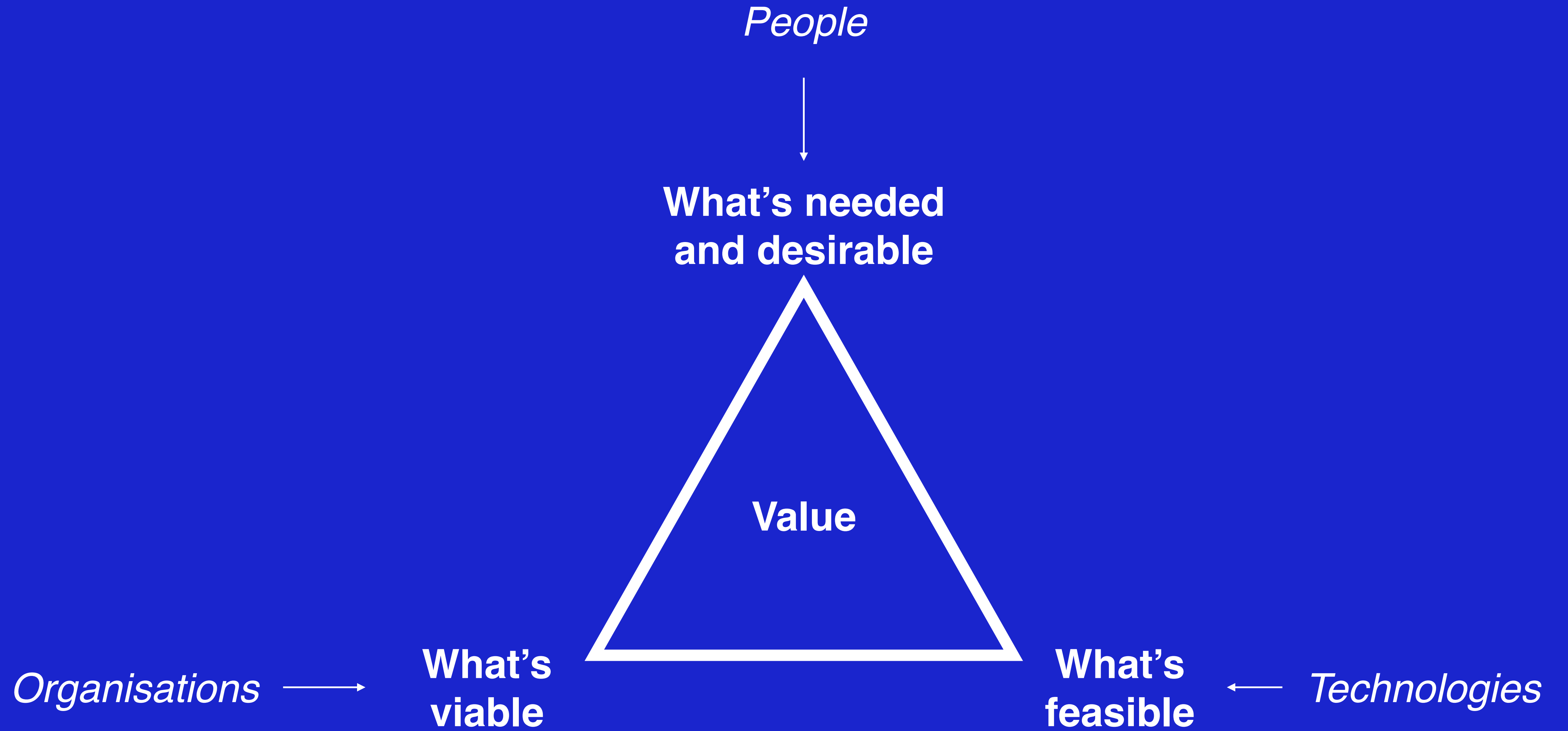


We understand Service Design as the application of Design (as practice and epistemology) to innovation in services and experiences bridging people and organizations through leveraging the new capabilities offered by technology.



**How do we approach the learning
process to "handle the art" of
service design?**





A new agenda for design

Socio cultural shifts

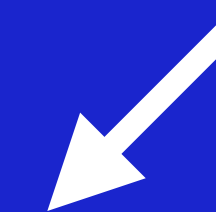
- Ageing Population
- Global Warming
- Inequality
- Natural Resources
- Globalisation
- Loneliness / happiness
- Trust



New desires, challenges and needs

Fourth Industrial Revolution

- Virtual Reality
- Ubiquitous Computing
- Artificial Intelligence
- Internet of Things
- Social Media
- Big Data & Data Science



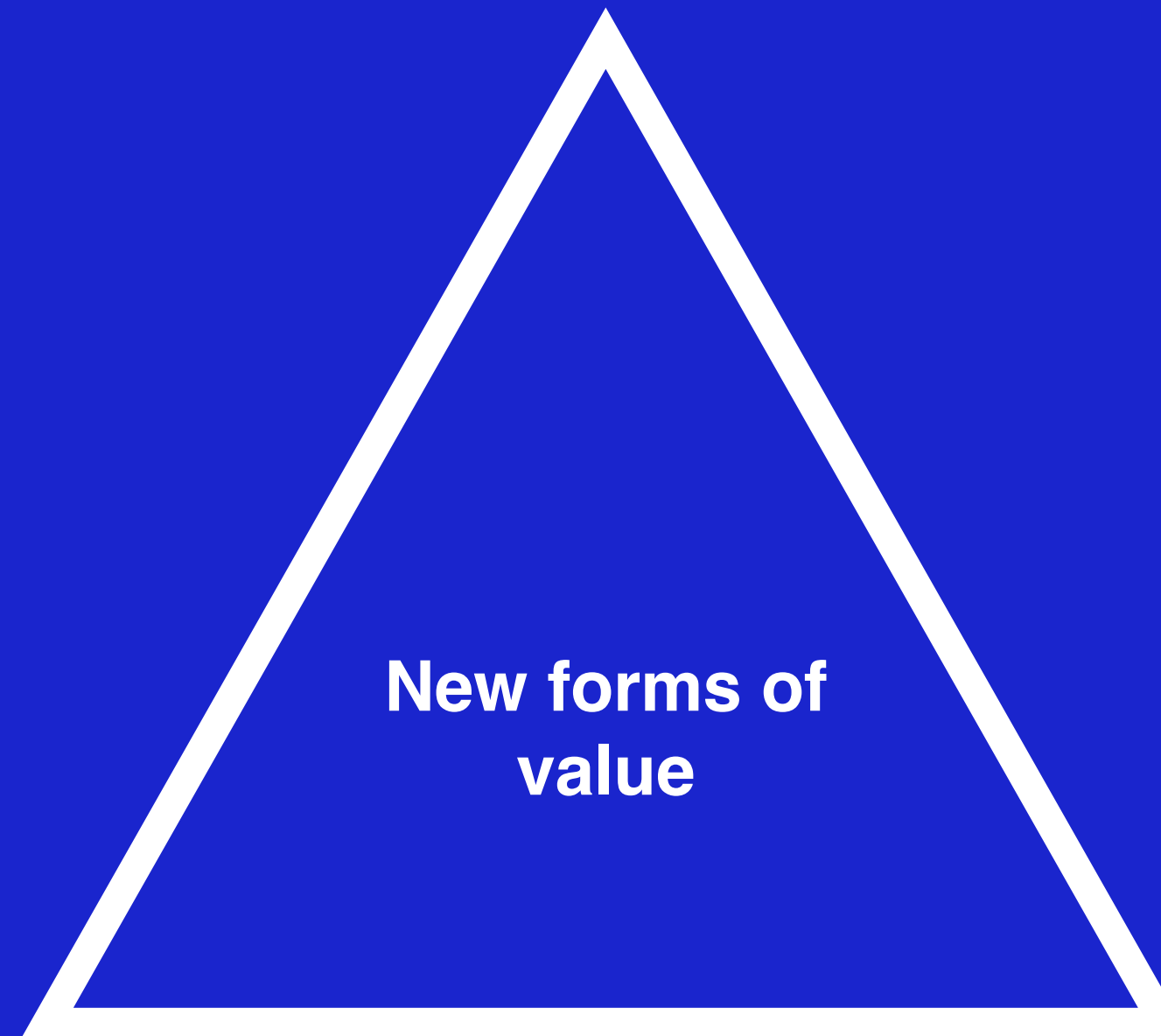
Platform Economy

Service Economy:
70% OECD (2005)

Platforms & Networks:
New forms of value creation in complex environments

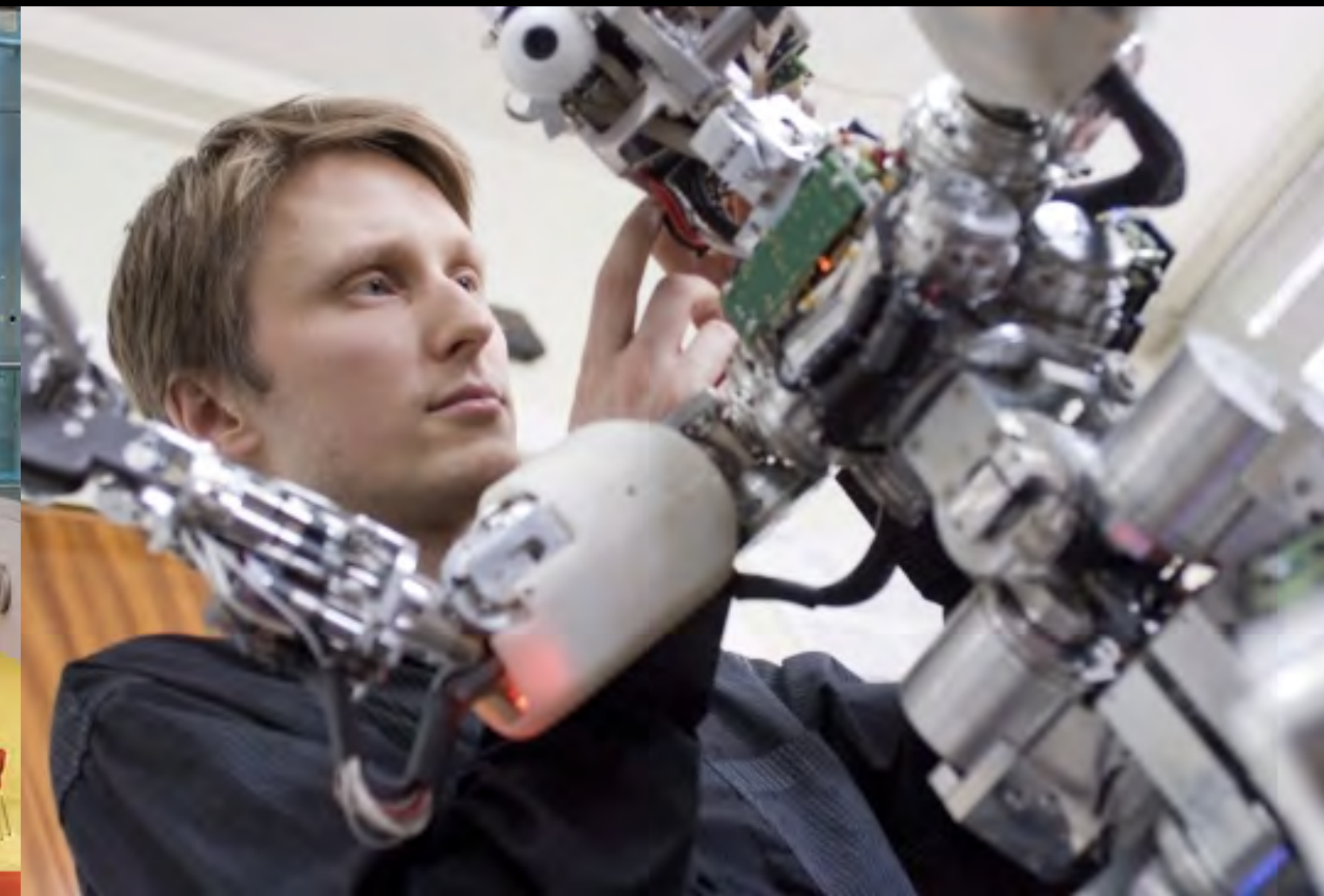


New logics of value creation



New possibilities enabled by technology





RCA School of Art & Design

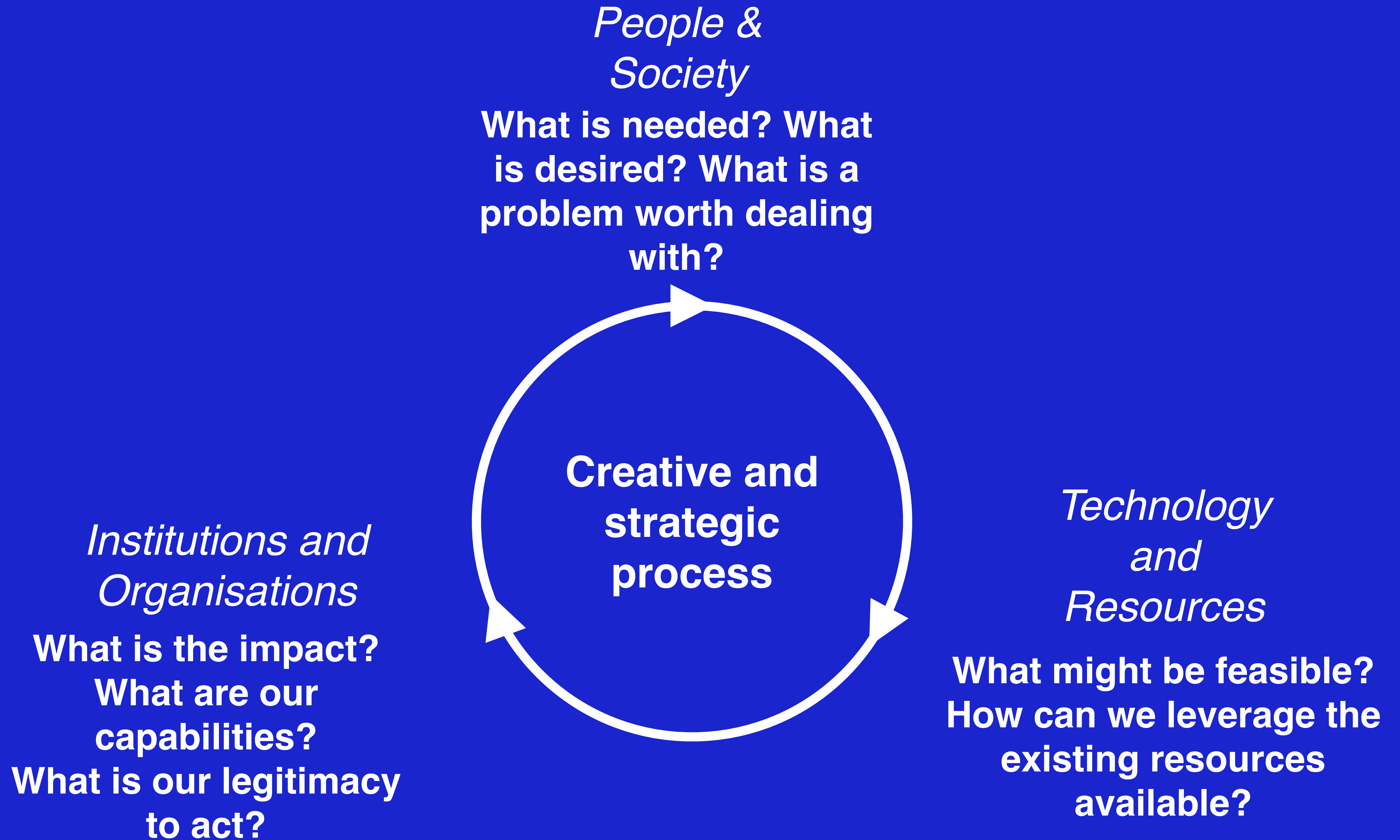
Imperial Business School

Imperial Computing

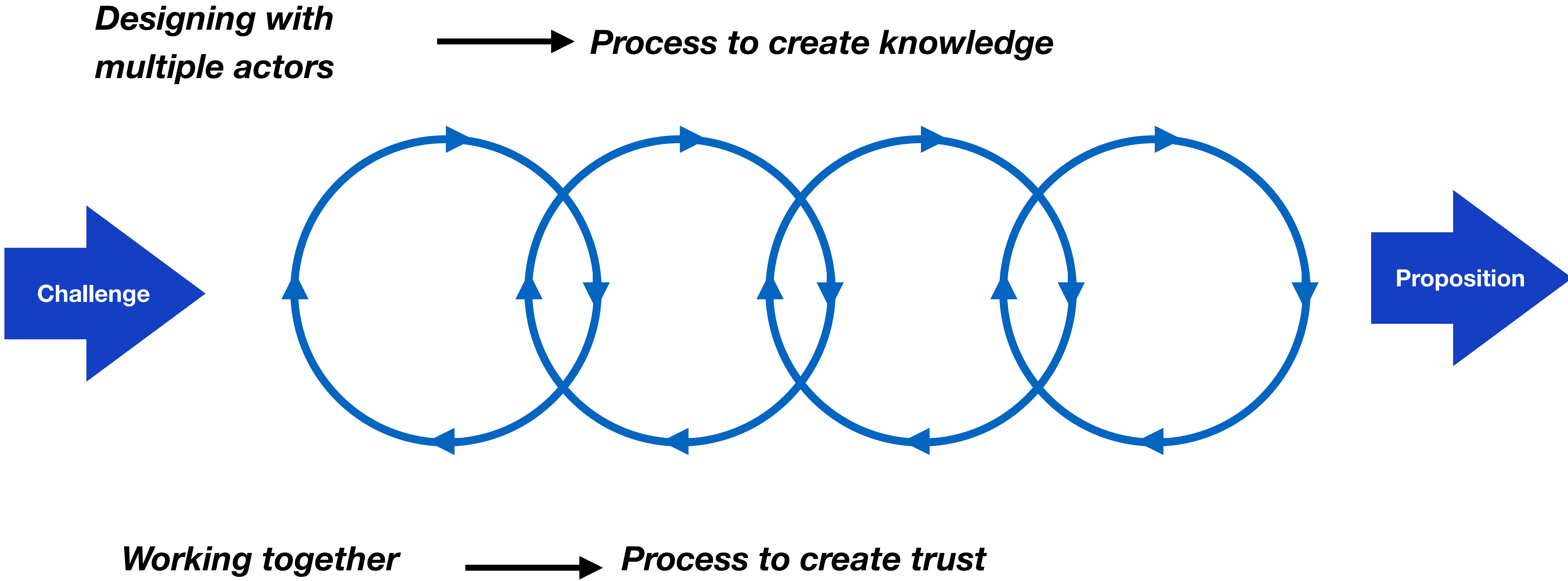
**New social
insights for
people's
experiences**

**New forms of
value creation**

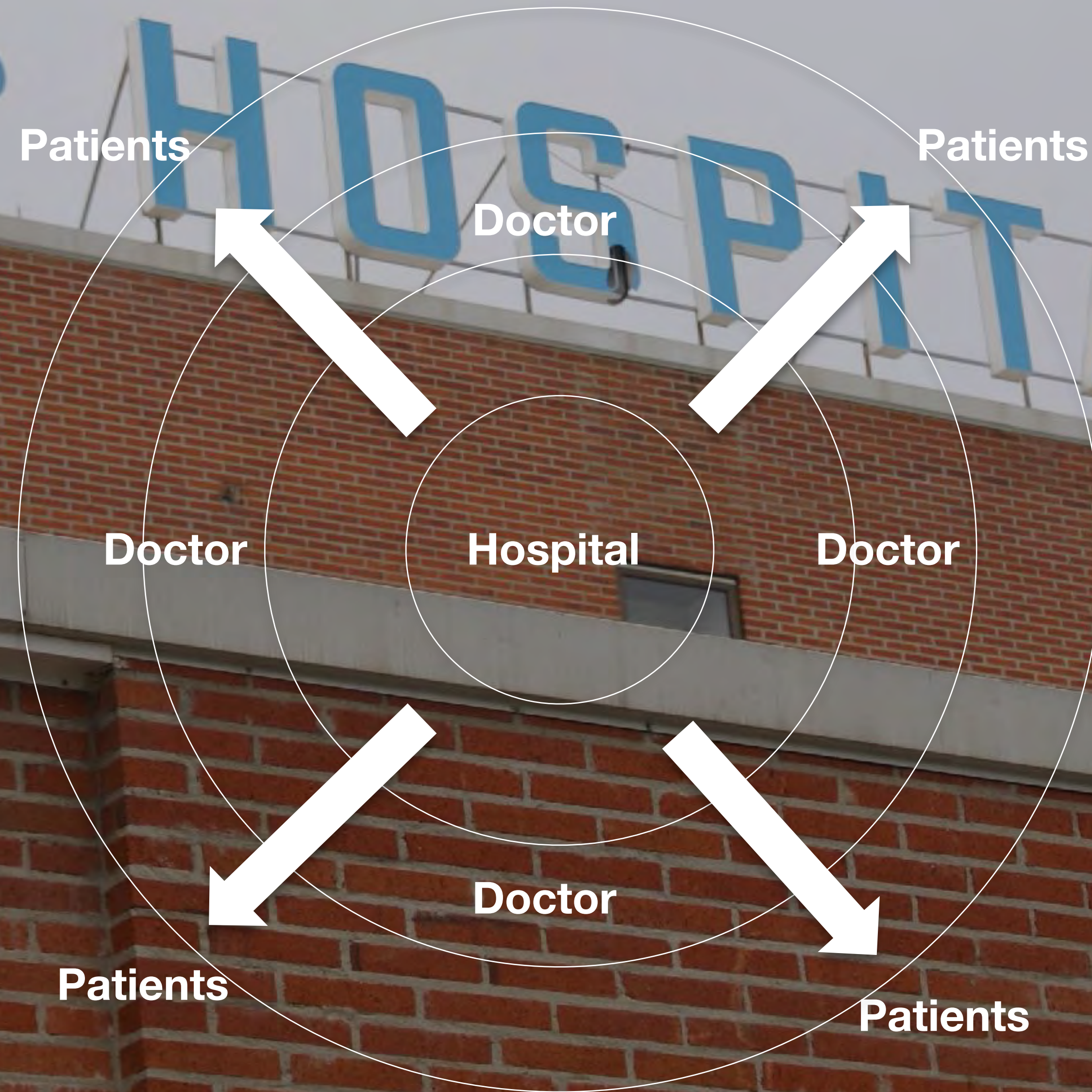
**New digital
Technologies**



Iterative cycles of learning and trust building



Change in orientation from a focus on things...



Towards a focus on people and their needs

Health Service

Health Service

Doctor

Doctor

People

Doctor

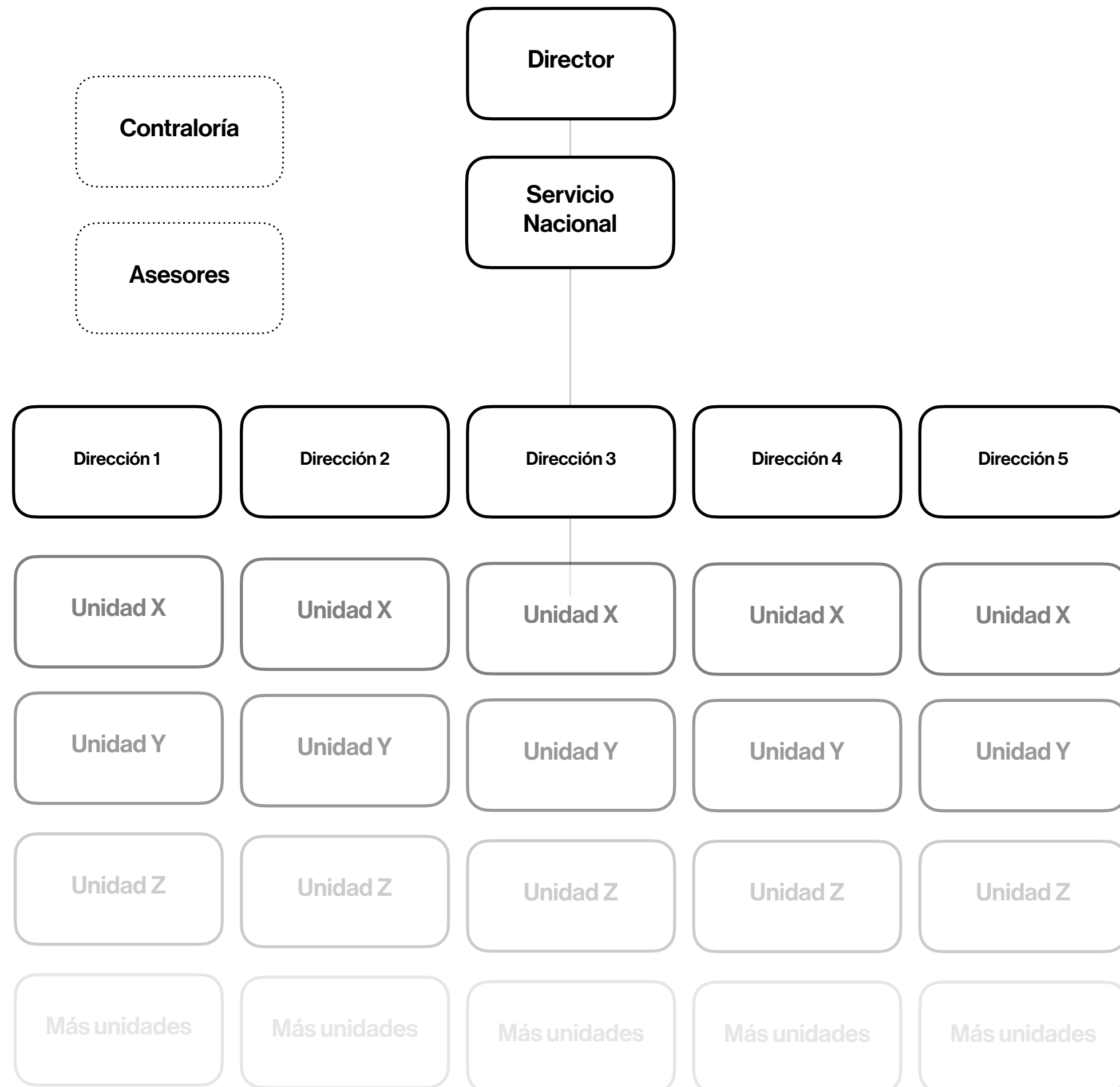
Doctor

Health Service

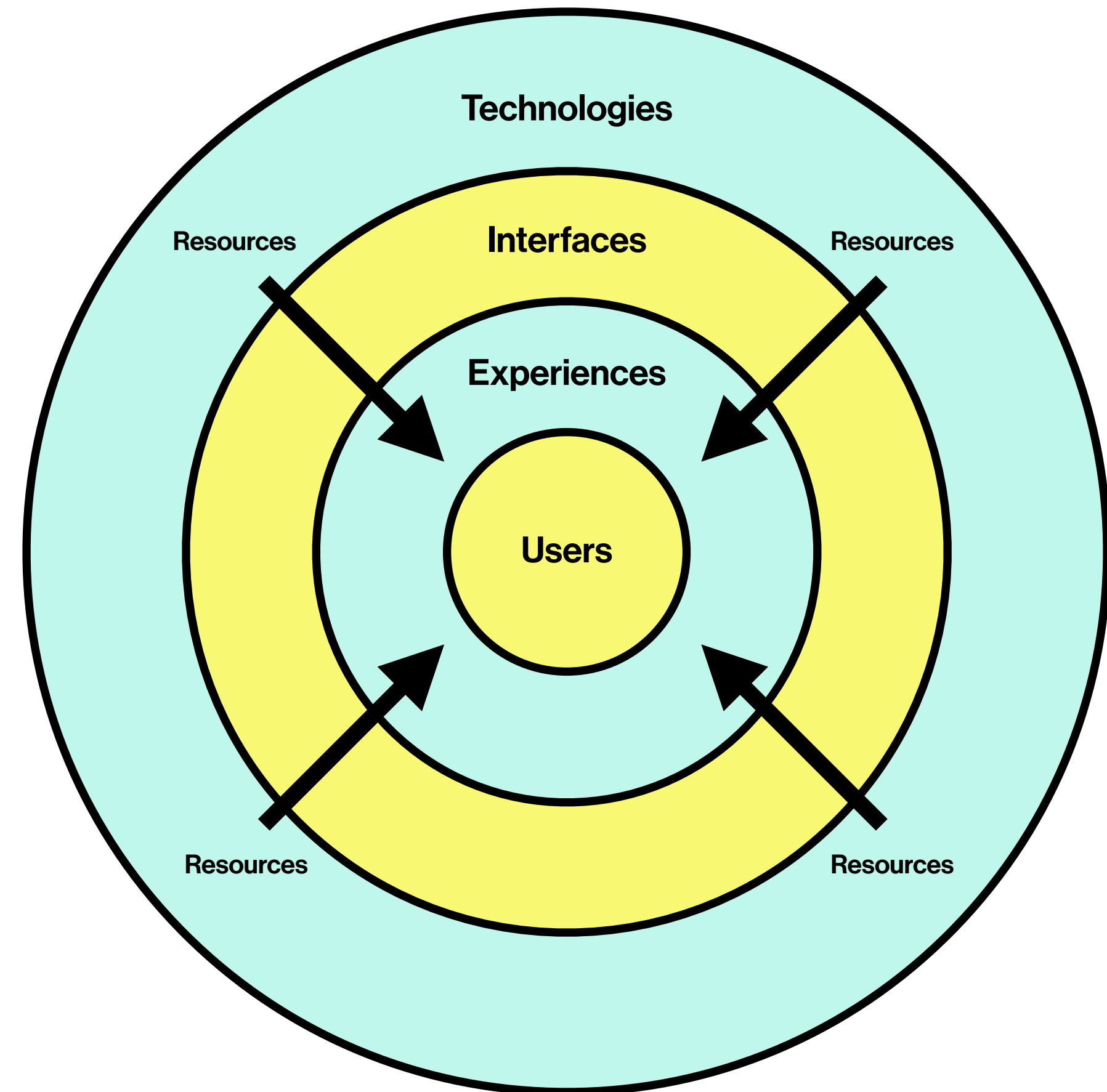
Health Service

Implying a change in orientation

From the organisational structure



Towards a users perspective



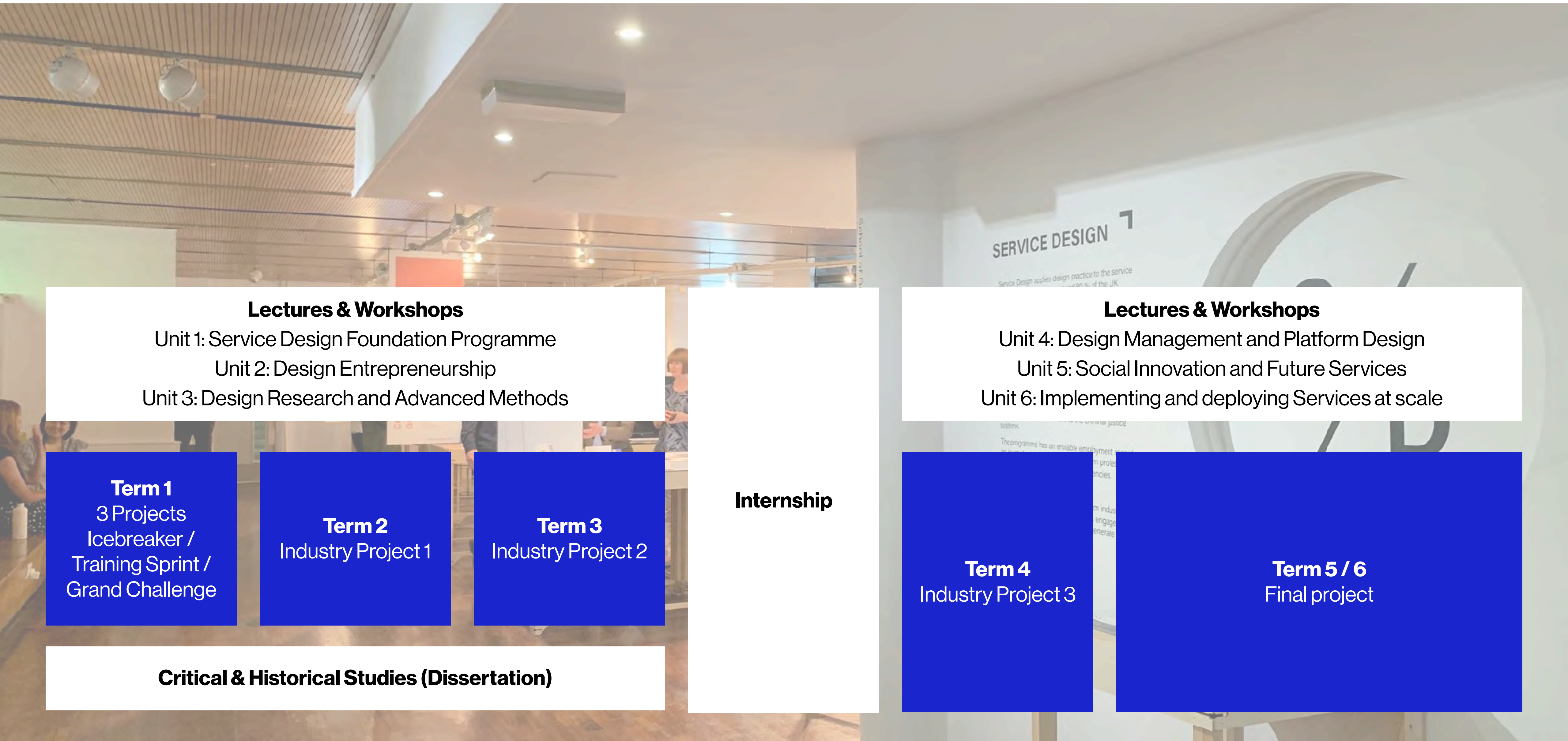
And has the future as the operational horizon

45

**“The future is already here –
it's just not evenly distributed”**
— William Gibson

The Economist, December 4, 2003





Close collaboration with the industry

Telefonica



BESTIVAL



BELMOND



Department
for Education



Ministry
of Justice



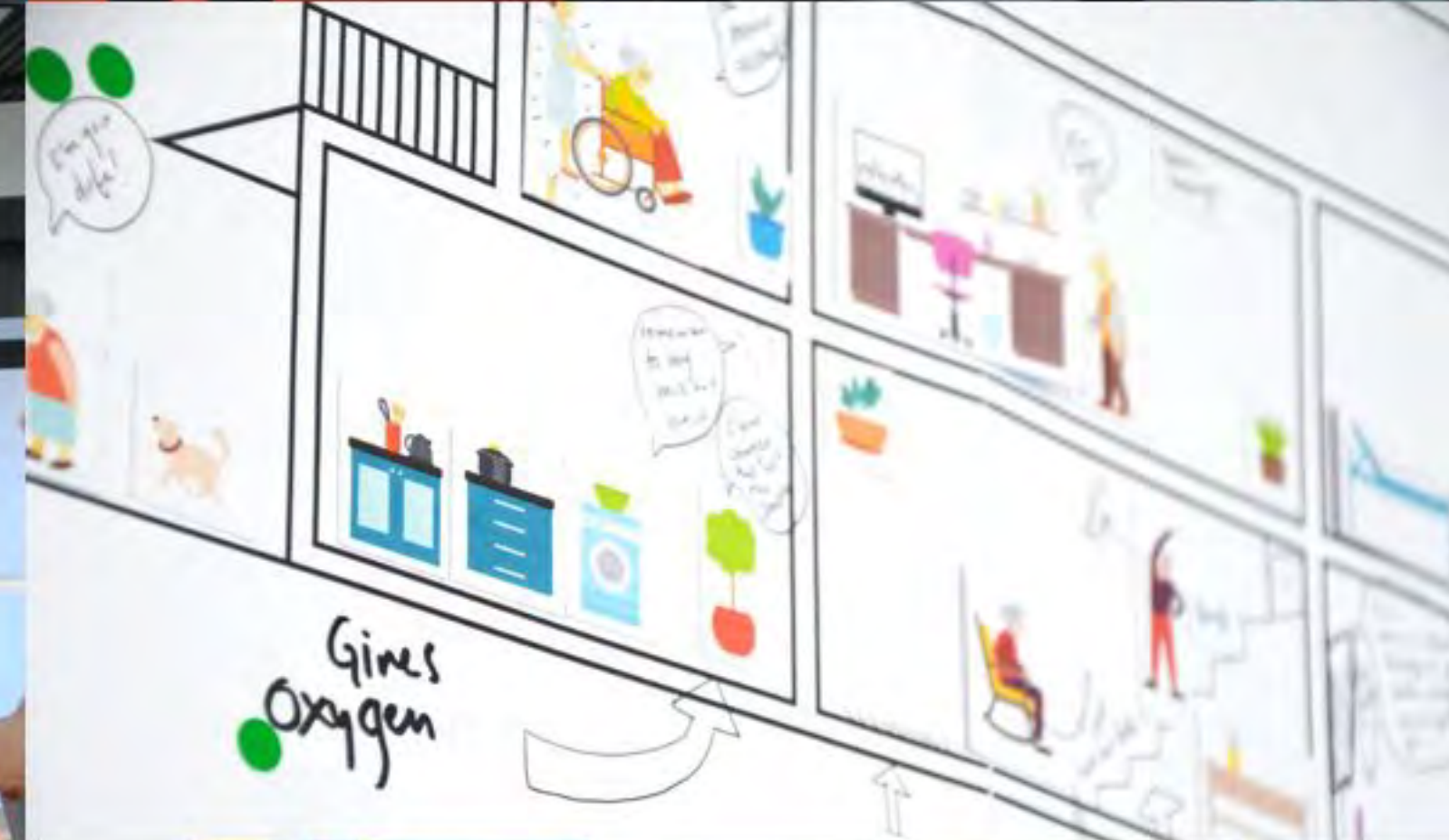
FUTUREGOV



Focus on users, their culture and behavior / ethnographic techniques

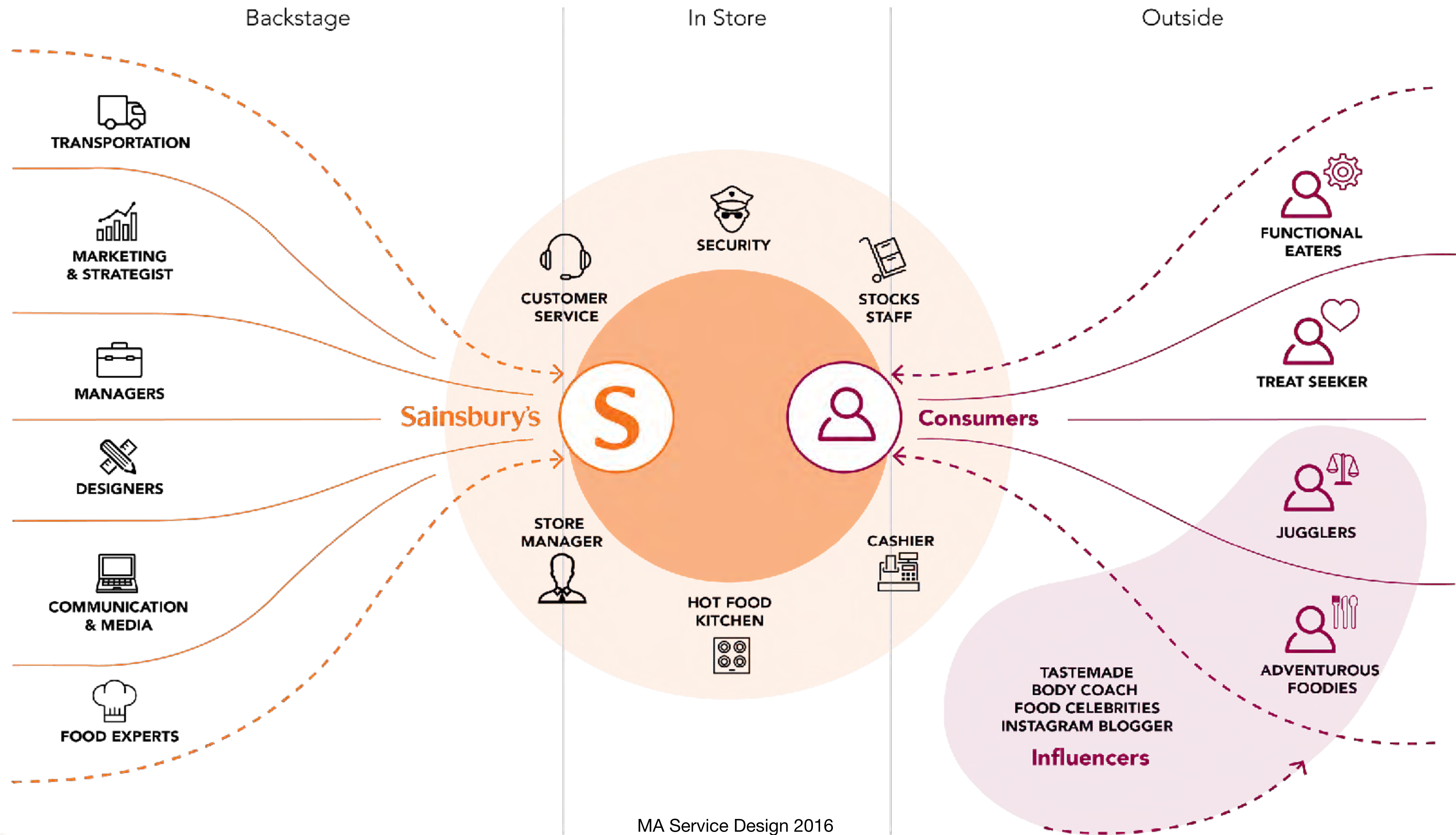


Focus on users, their culture and behavior / forms of co-creation

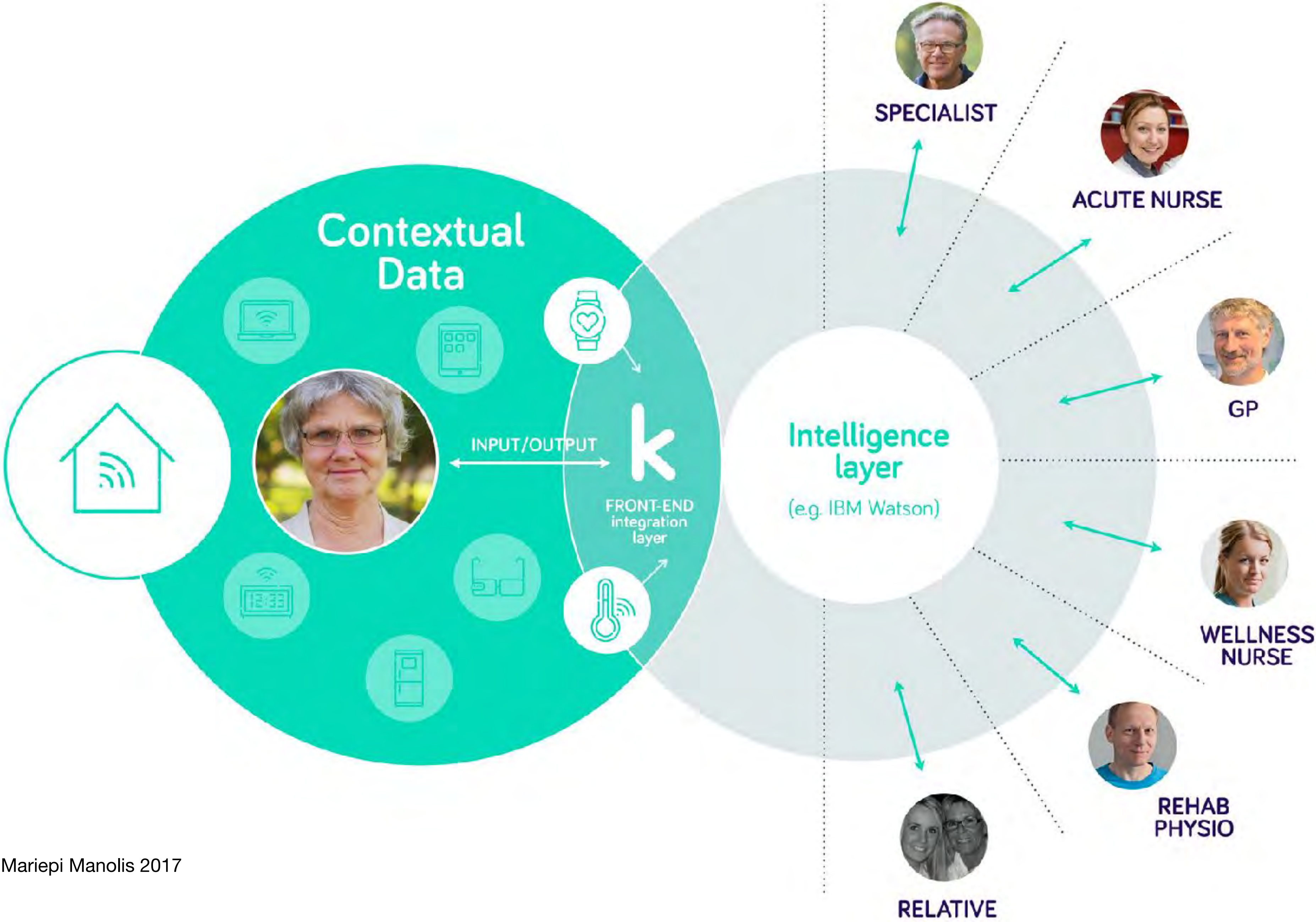


Estefanía Trissotti, Mariepi Manolis 2017

Designing services for various actors in the organisation

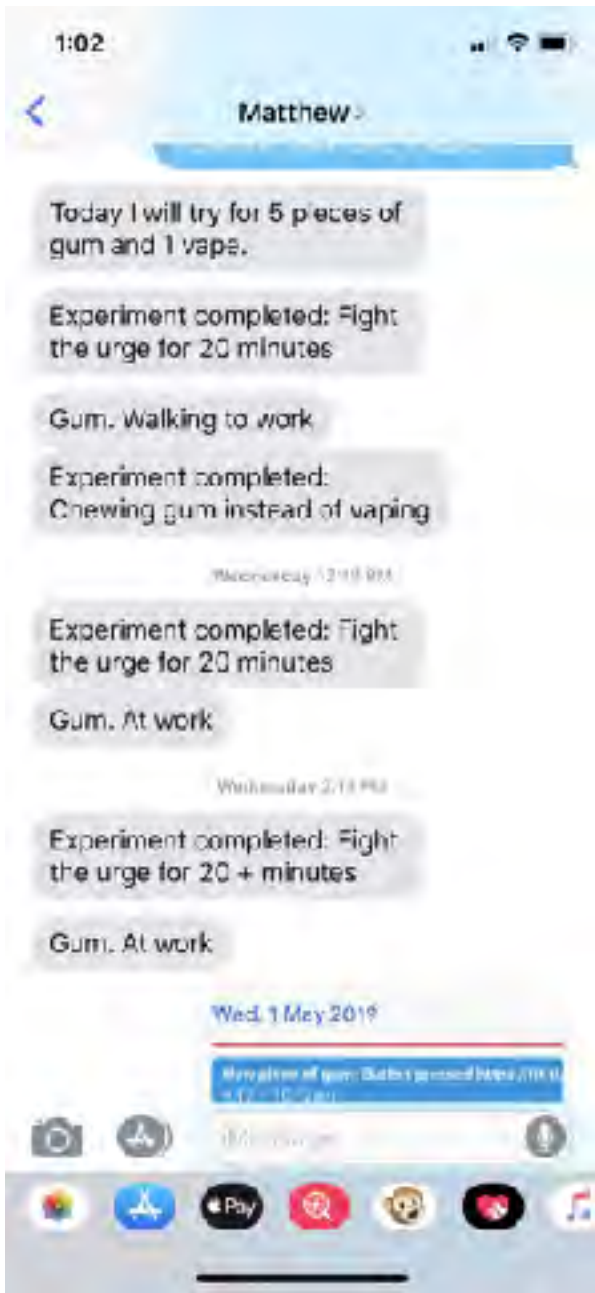
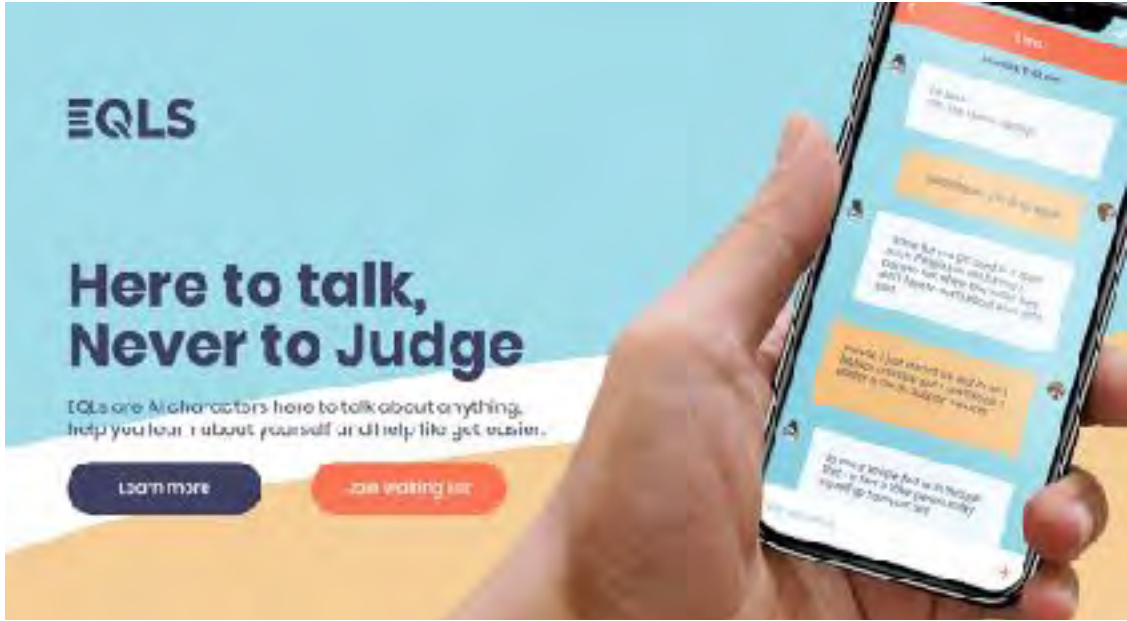
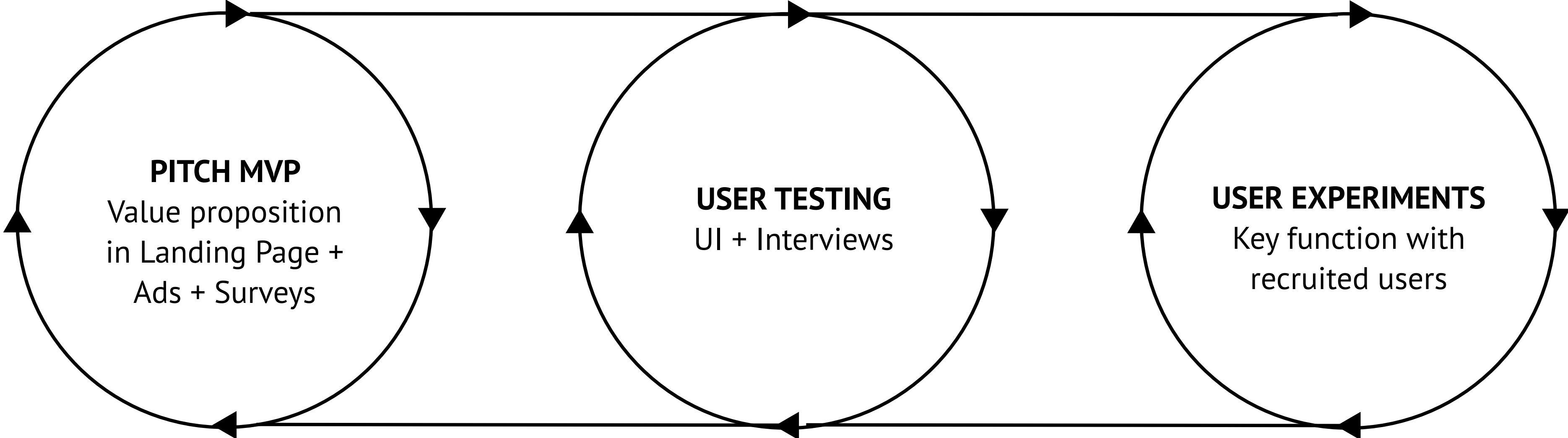


In the context of technology management models



Estefanía Trissotti, Mariapi Manolis 2017

Using experimental entrepreneurship techniques as a form of prototyping



Various formats of action and implementation



Speculative projects

Planet Impact Tax

Becky Miller

Winner of the Future of Money Design Award 2018.

Start-ups

InHouse Records

Judah Armani

Implemented in 13 prisons in UK

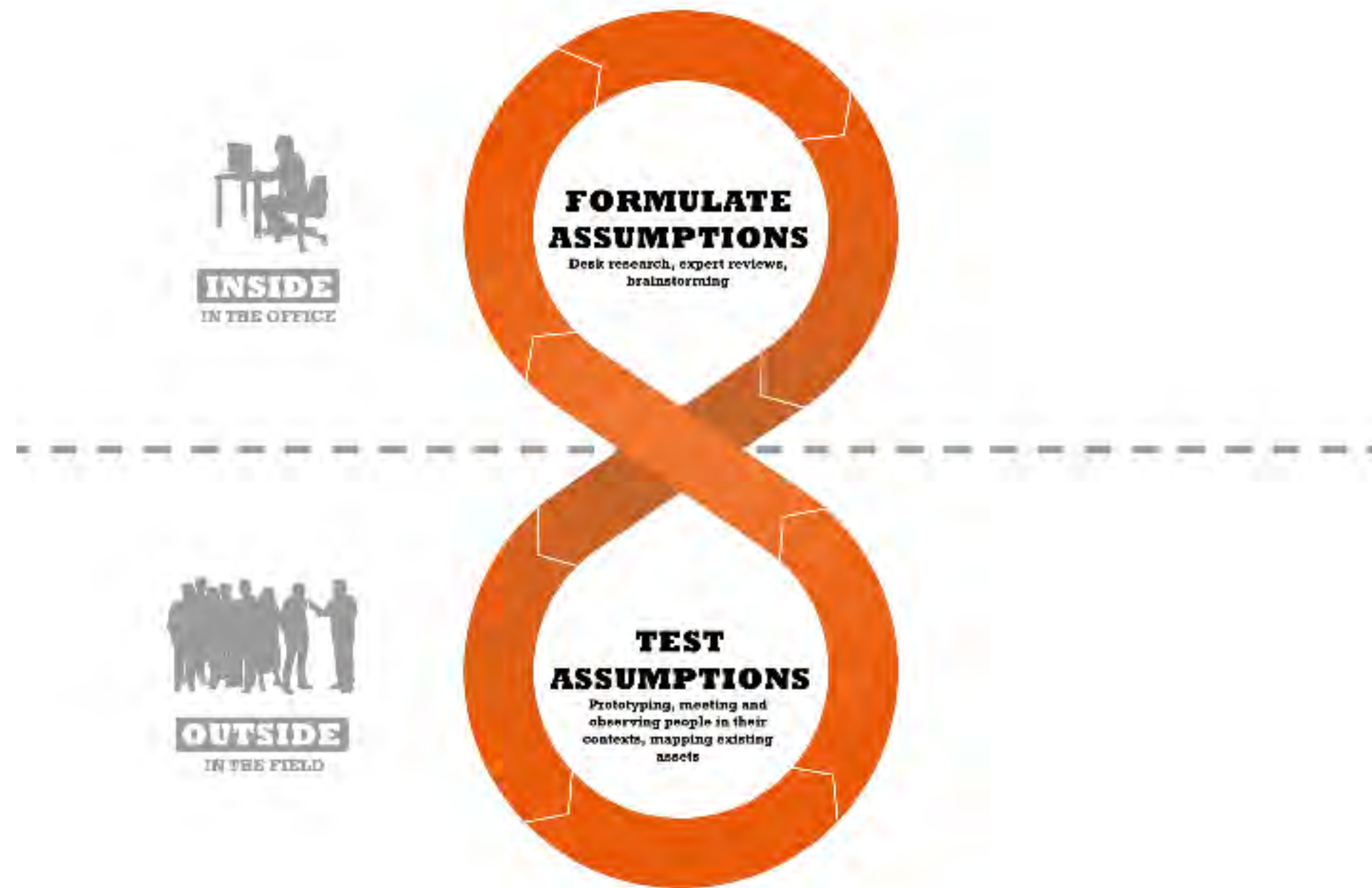
Projects for established organisations

Medicine san frontiers doctors hand over service.

Charlotte Fontaine

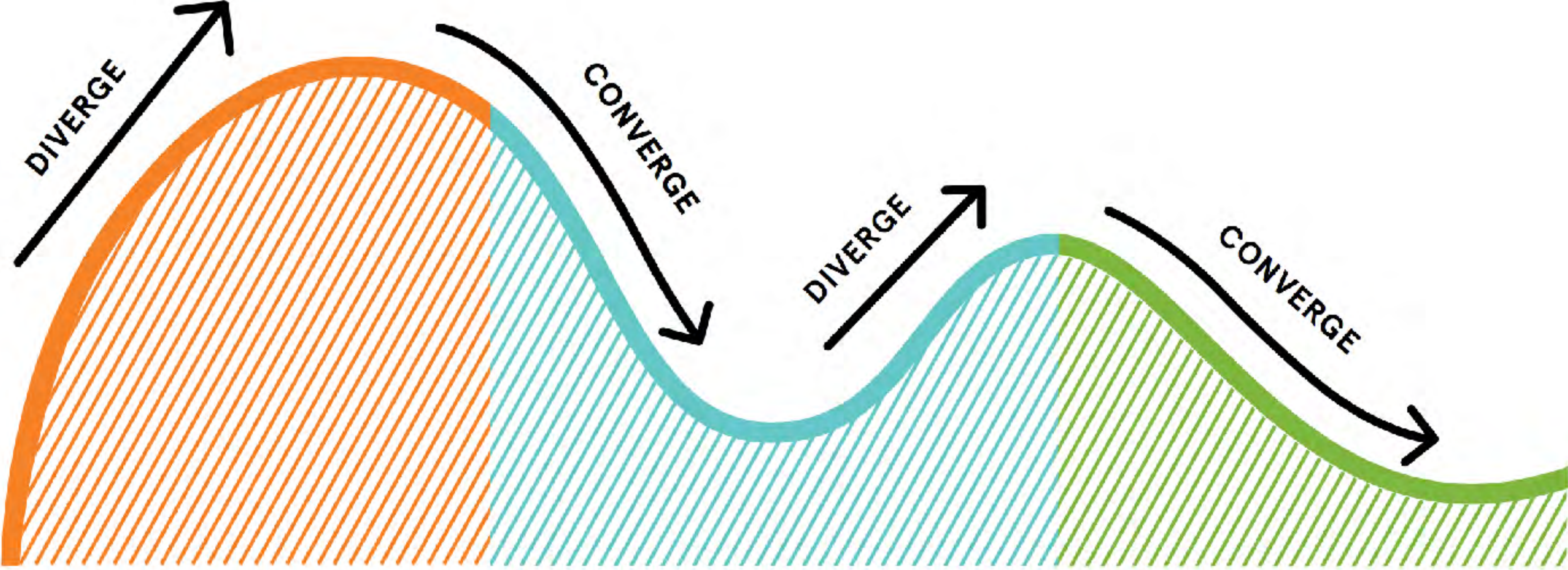
Service Design Methods





(Nesta, 2015)

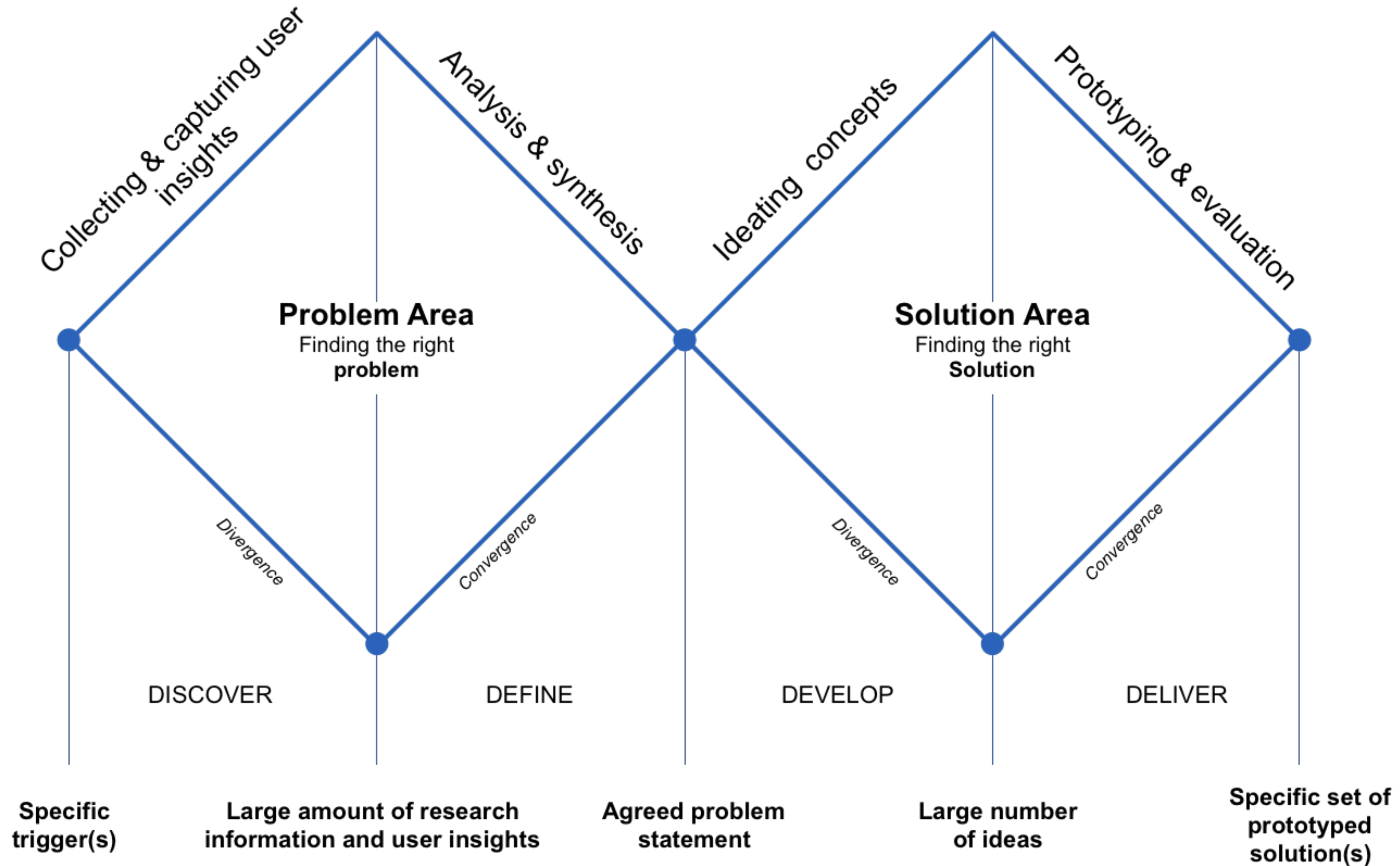
Combining different ways of thinking



(Ideo, 2015)

The double diamond

*Adapted from Warwick Business School and the Design Council

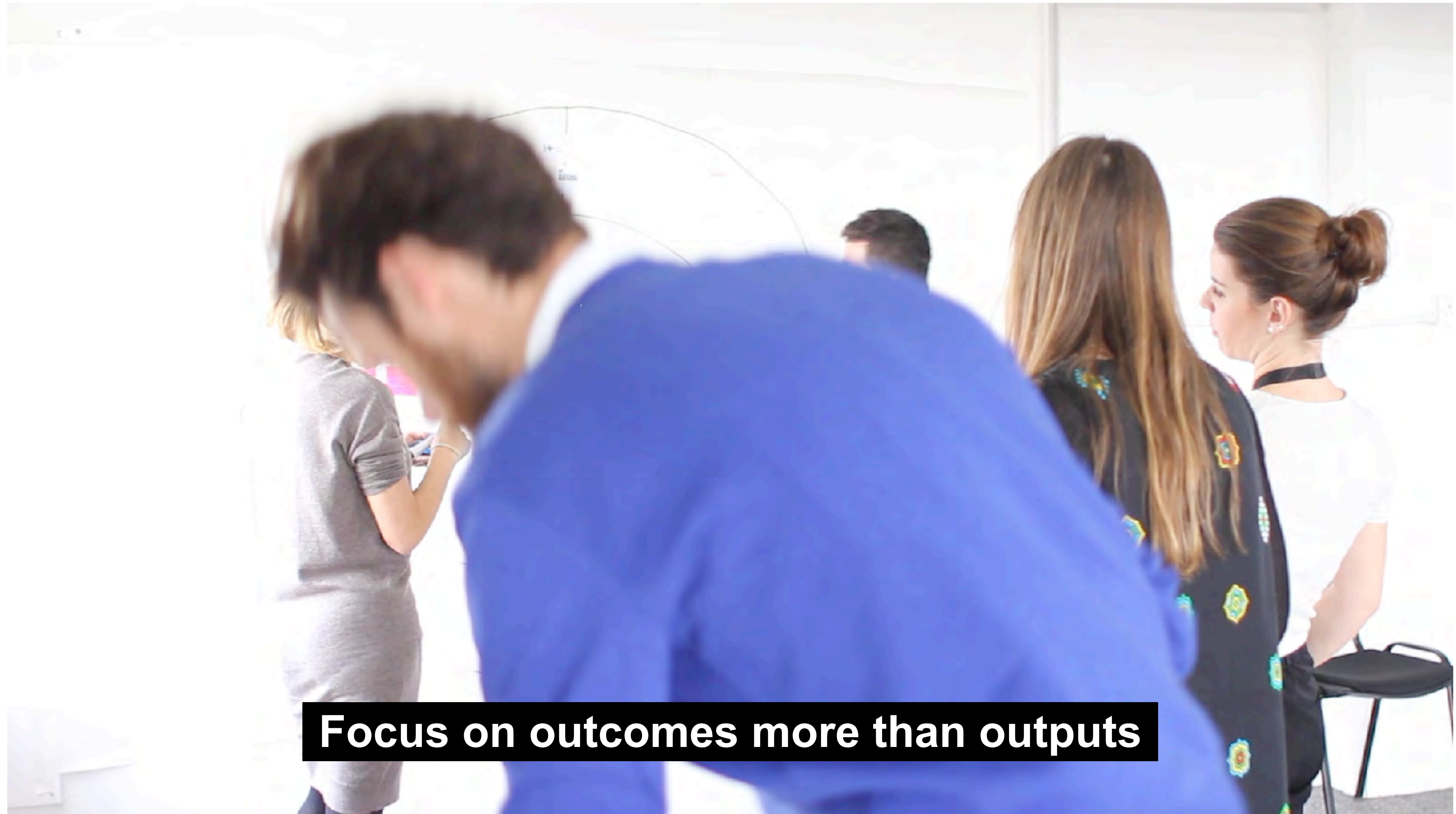


Discover

What is the problem?

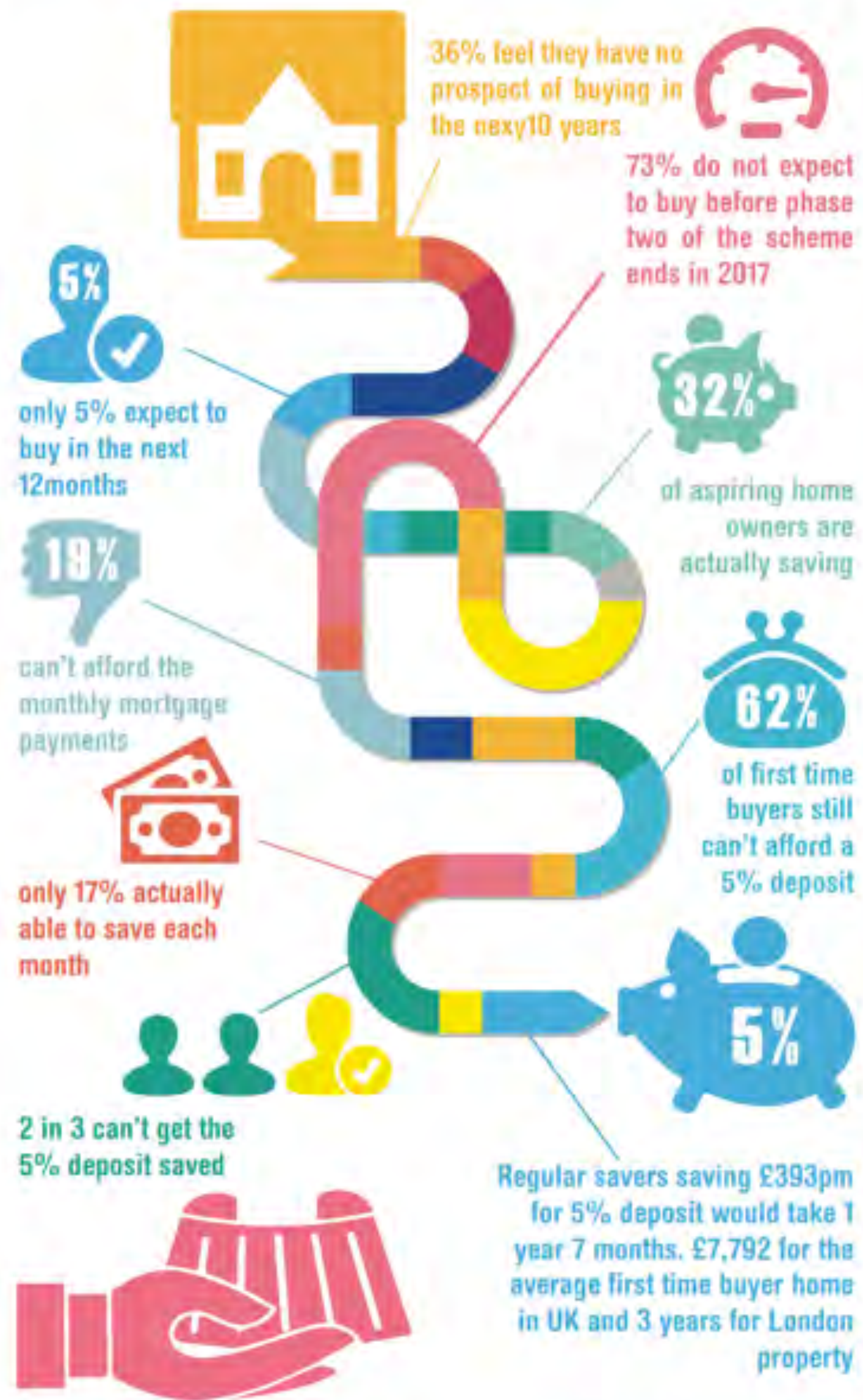


Work with the strategy team setting up goals



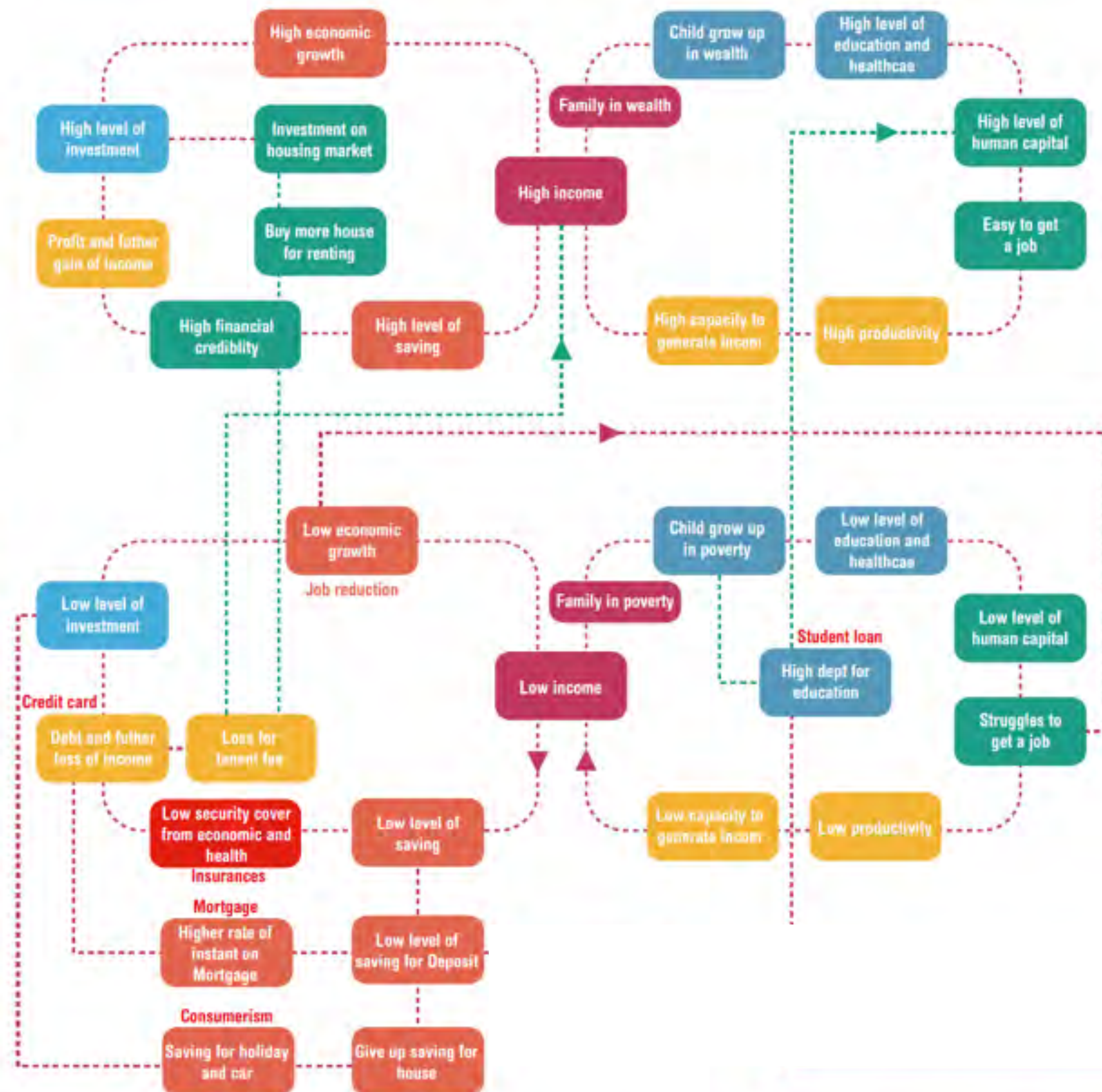
Focus on outcomes more than outputs

First time buyers struggling to save deposits



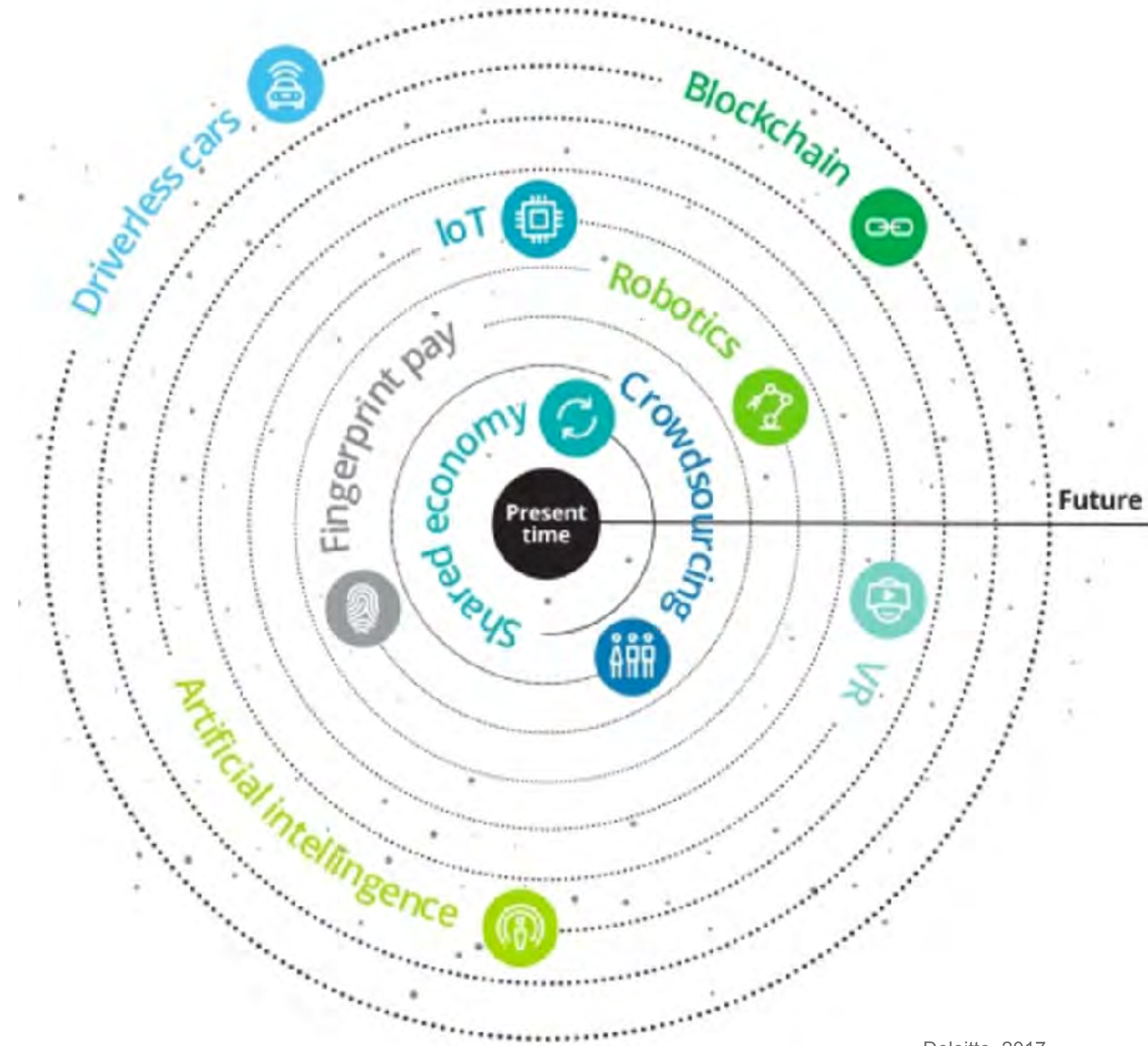
2014. www.propertywire.com

Economic growth and personal development



Understand the emerging technology landscape

**If Technology is
the answer, what
is the question?**
Cedric Price 1966



Deloitte 2017

Signal exploration: speculative futures



Machine Learning
Blockchain
Connected Home
IoT
Mobile
Virtual Personal Assistants
AR / VR
Autonomous Vehicles
Drones
3D Printing
Natural Language Processing
Self Quantification
Robots
Chat Bots
Wearables
Exoskeletons
Computer Vision

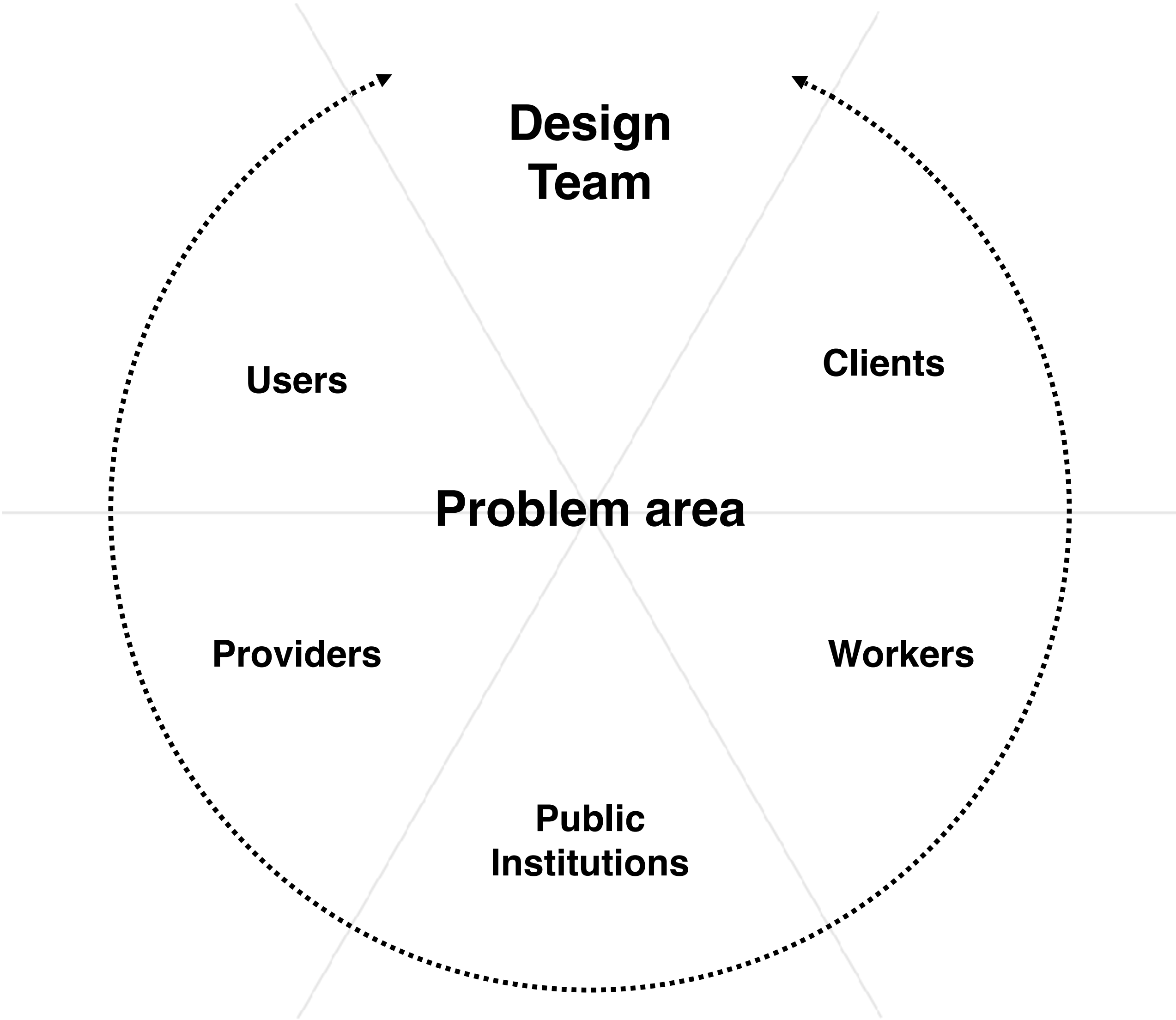
Privacy
Security
Climate Change
Pollution
Traffic
Populism
Propaganda
Fake News
Inequity
Universal Basic Income
Disruption / Glitches
Synthetic Biology
Clean Energy
Space
Infrastructure
Urbanism

Governance
Education
Transportation
Personalized Medicine
Cognitive Behavioral Therapy
Tele-medicine
Personal Genomics
Epigenetics
Gene Therapy
Obesity
Epidemics
Privatization
Predictive Analytics
Food / Water / Shelter
End of Death

Discover Who is involved?



Understand stakeholders



Considering multiple stakeholders as agents of change



Citizens



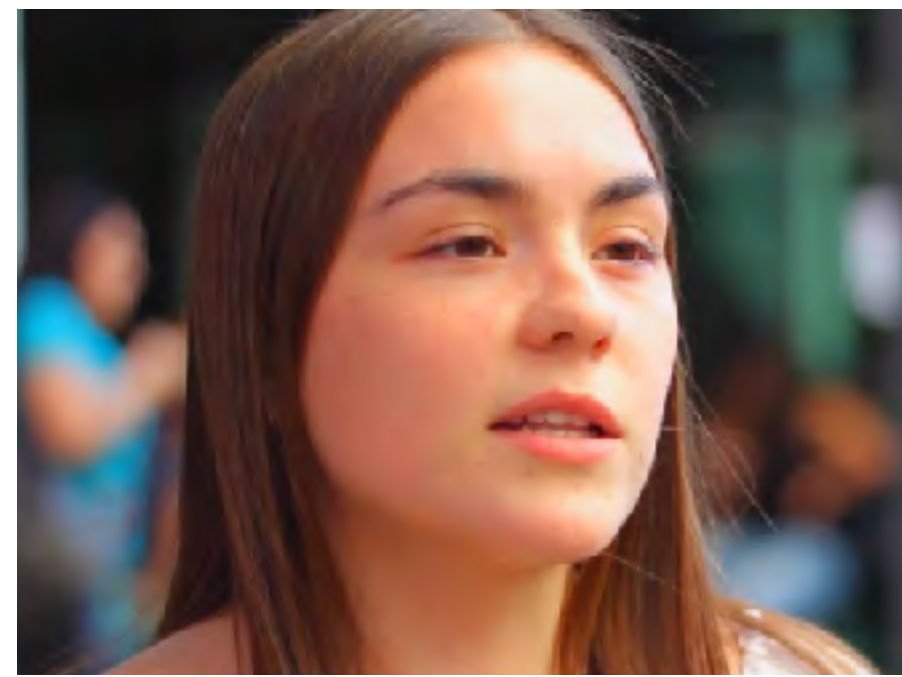
Civil servants



Leaders

Co-creating with people in different levels of the organisations

Understanding people in their context



Designing for real people

Understanding people in their context



Using empathic methods

Personas – Mindset scenarios

EXTREME PERSONAS - MY HAPPINESS IS DEPENDENT ON...



MY IDENTITY | IDENTITY FLUIDITY

Sam

Gender: Non-binary
Age: 25
Location: Berlin
Occupation: Student / Nightclub bar worker / mechanic etc
Key attributes: Fluid, open-minded, multiple identities

Multiple identities: different identity in different contexts

Sam has been largely independent since they were 16 years old. They have now found a supportive and caring community among fellow LGBT+ people but they have to schedule and rotate time with friends from different parts of their life. They work as a mechanic with their Uncle, they have football friends, work friends from the nightclub where they work, Uni friends where they study Physics, and Church friends. In each environment they like to represent slightly differently.

Sam's happiness is about being free to embody different sides of themselves and whatever they'd like to be. Happiness comes from simple things like a well timed cup of tea - it is a spectrum of different momentary states. While a lot of their happiness comes from being able to have the experiences they want, they still take value from purpose, like the role they take from being a part of a community at church or working with their uncle.

Sam's goals are:

- Access diverse and challenging experiences
- Be understood by herself and by others
- Create control, purpose, and independence in their life
- Build new connections and relationships



MY IDENTITY | GROUP BELONGING

Lanzo

Gender: Male
Age: 44
Location: Islington, London
Occupation: Uber driver
Key attributes: Football fan, devoted, anti-stress

Identity is about relating group or tribe

As a Caribbean immigrant in London, Lanzo found his love of football helped him fit in and supporting Manchester United connected him to a lot of the people he used to work with. Constantly on the road as an Uber driver, he prefers to listen to football matches and music rather than news, and most loves on sunny days when he's driving around listening to and chatting about music. He has yet to attend a live game, but he has never missed a match VR catch up with his friends, even if he has to reschedule family events.

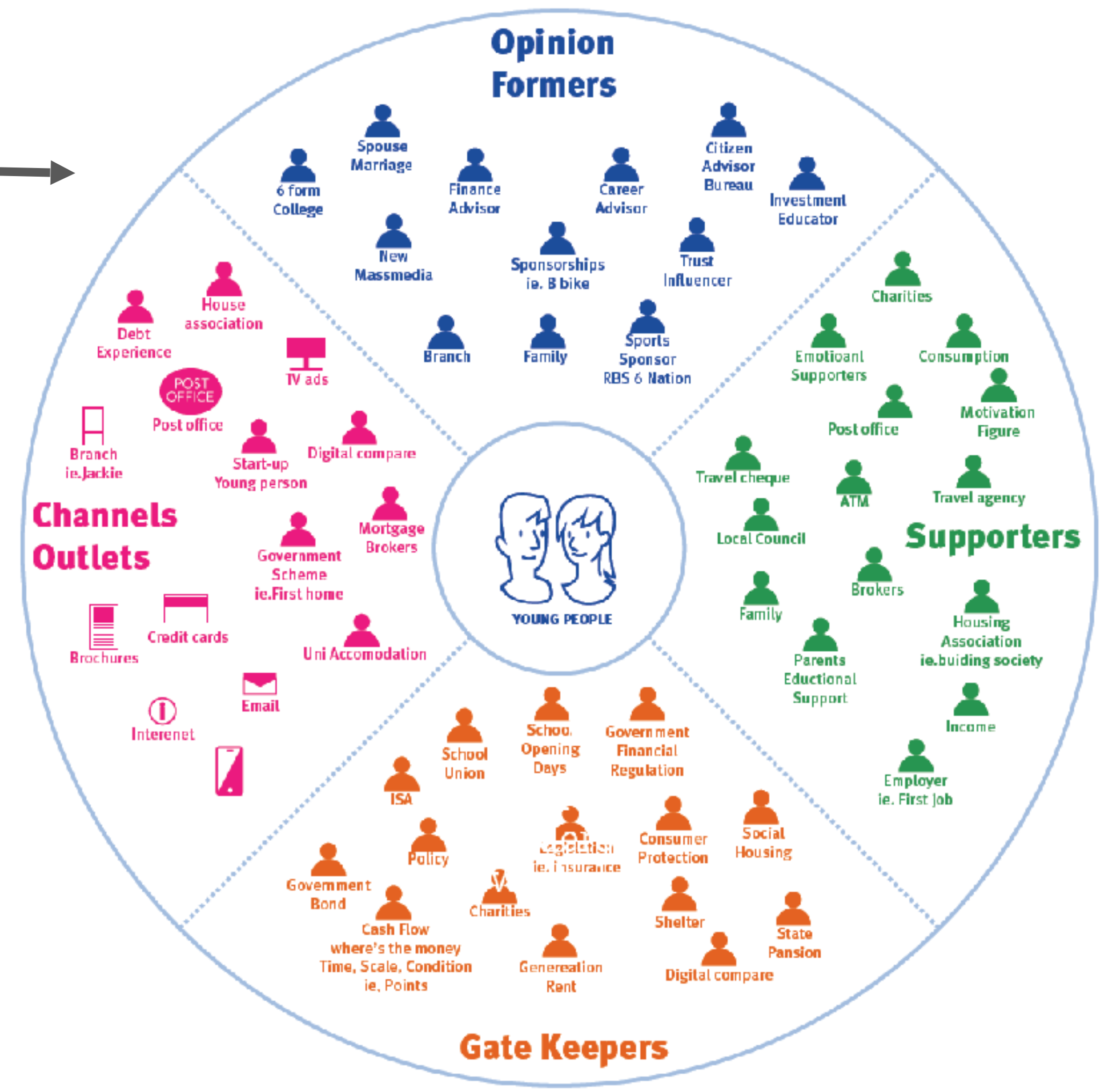
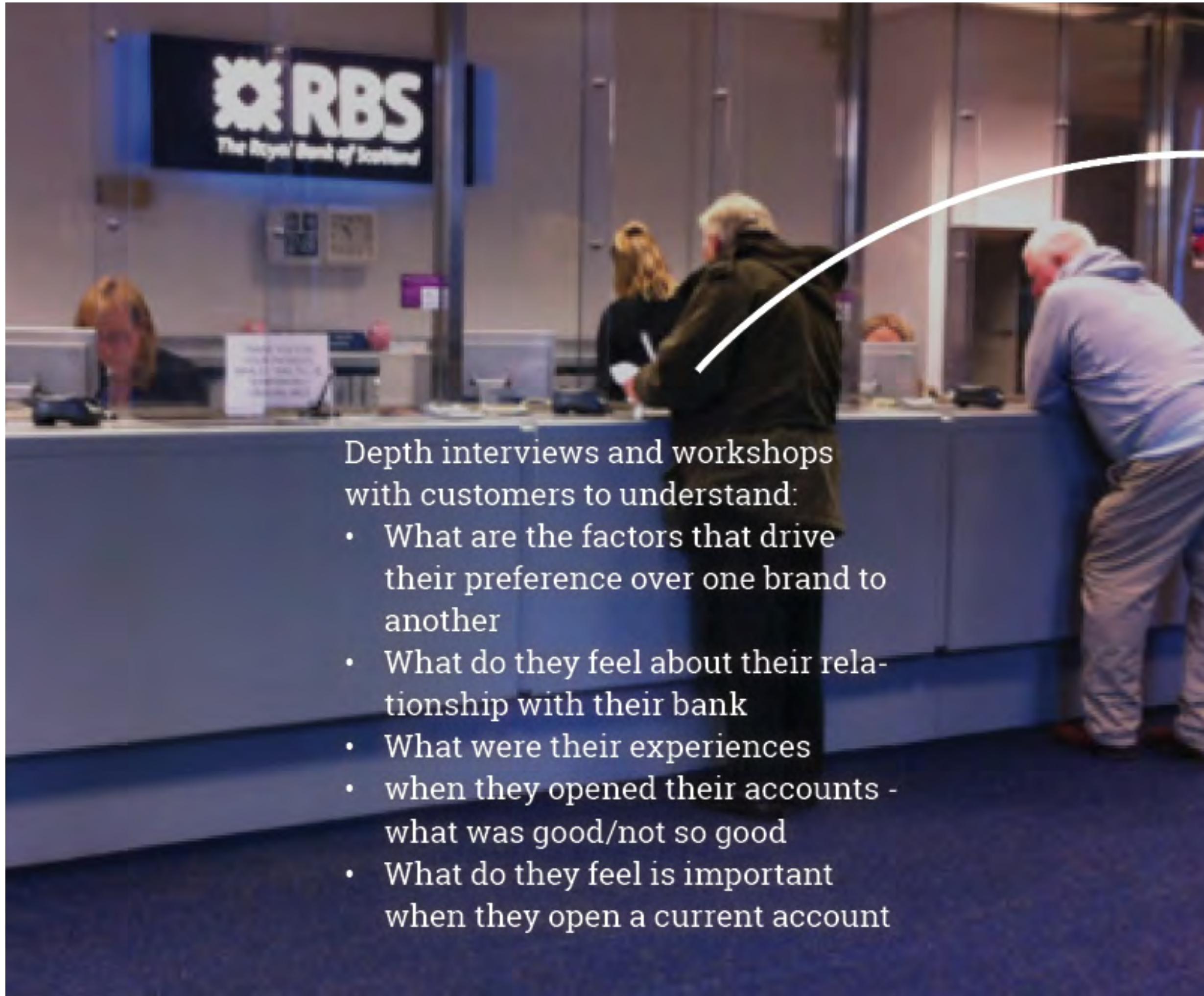
Lanzo is happiest when his team wins, and inversely he is most depressed when they lose. After a loss, he isolates himself from everyone, including his kids. In the rest of his life, he prefers to avoid negativity and not worry about the future. He figures that "things are gonna happen the way they're gonna happen. Why stress?"

Lanzo's goals are:

- Engage more intensely with his football group
- Provide for his family, but not have to work too much
- Not worry about all the drama in the world
- Achieve higher status in the group

"Happiness is being with my people... and when I am watching football."

Personas – Behavioural scenarios



Personas – Behavioural scenarios

Focused on saving



Seeker

He/She often comes from a vulnerable position with little disposable income looking to better her situation.

Takes too much risk



Optimiser

He/She is all about getting the most value from the money they have.

Short term thinking



Peter Pan/Pam

He/She comes from a position of instability hoping they will soon catch their big break.

Buying Experiences



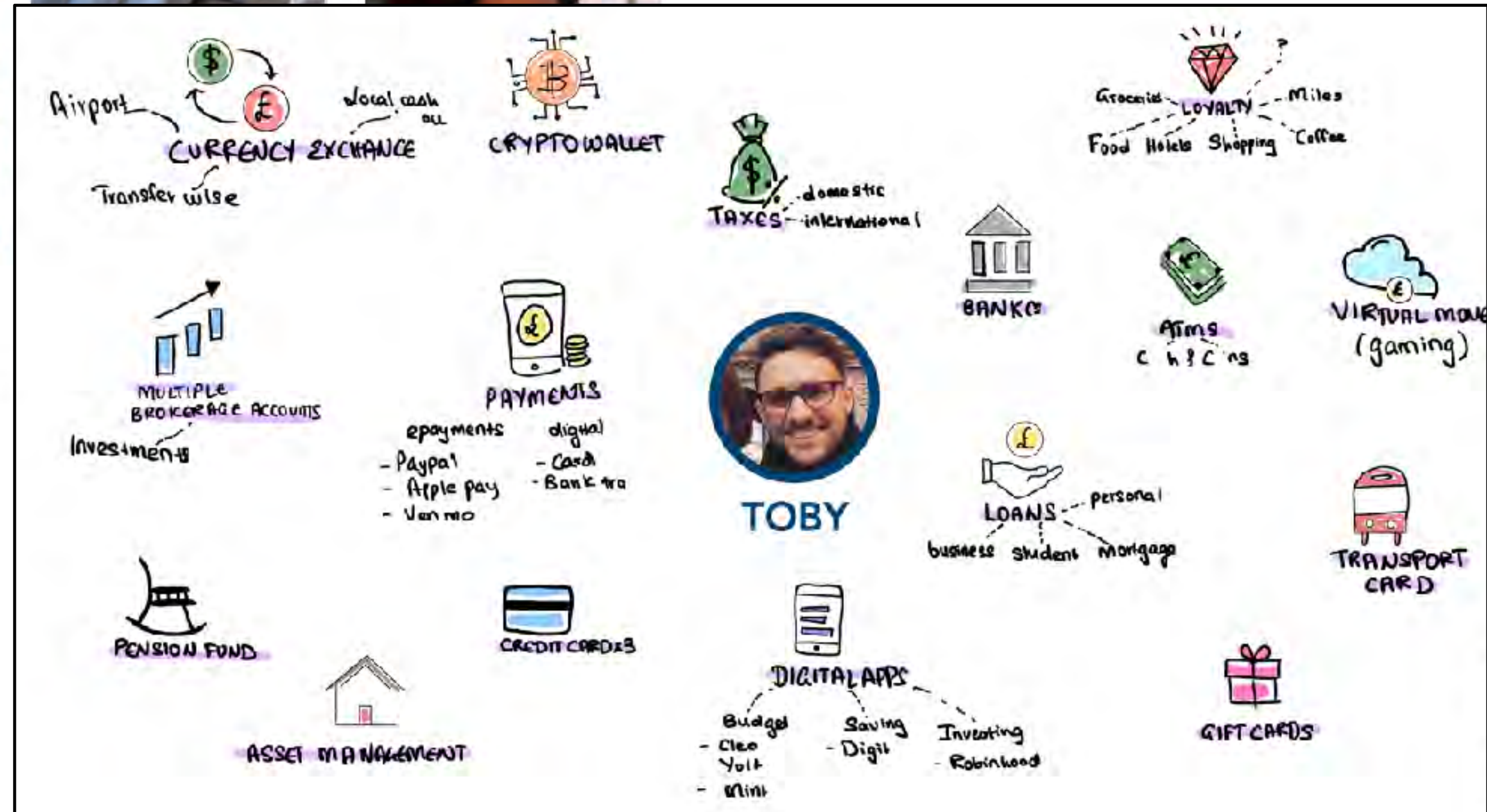
The Activist

He/She is all about social impact. They want to help people and make impactful financial decisions.

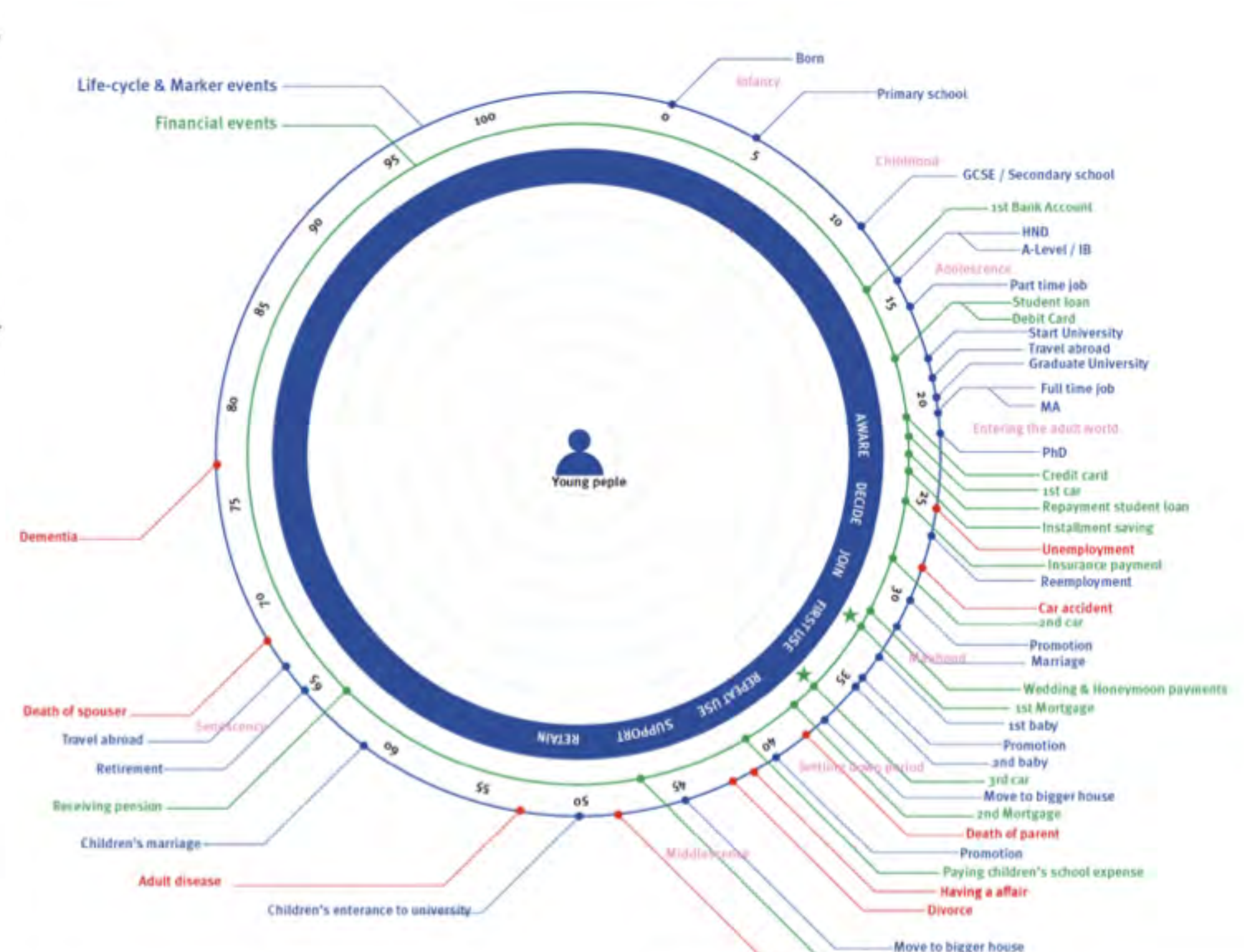
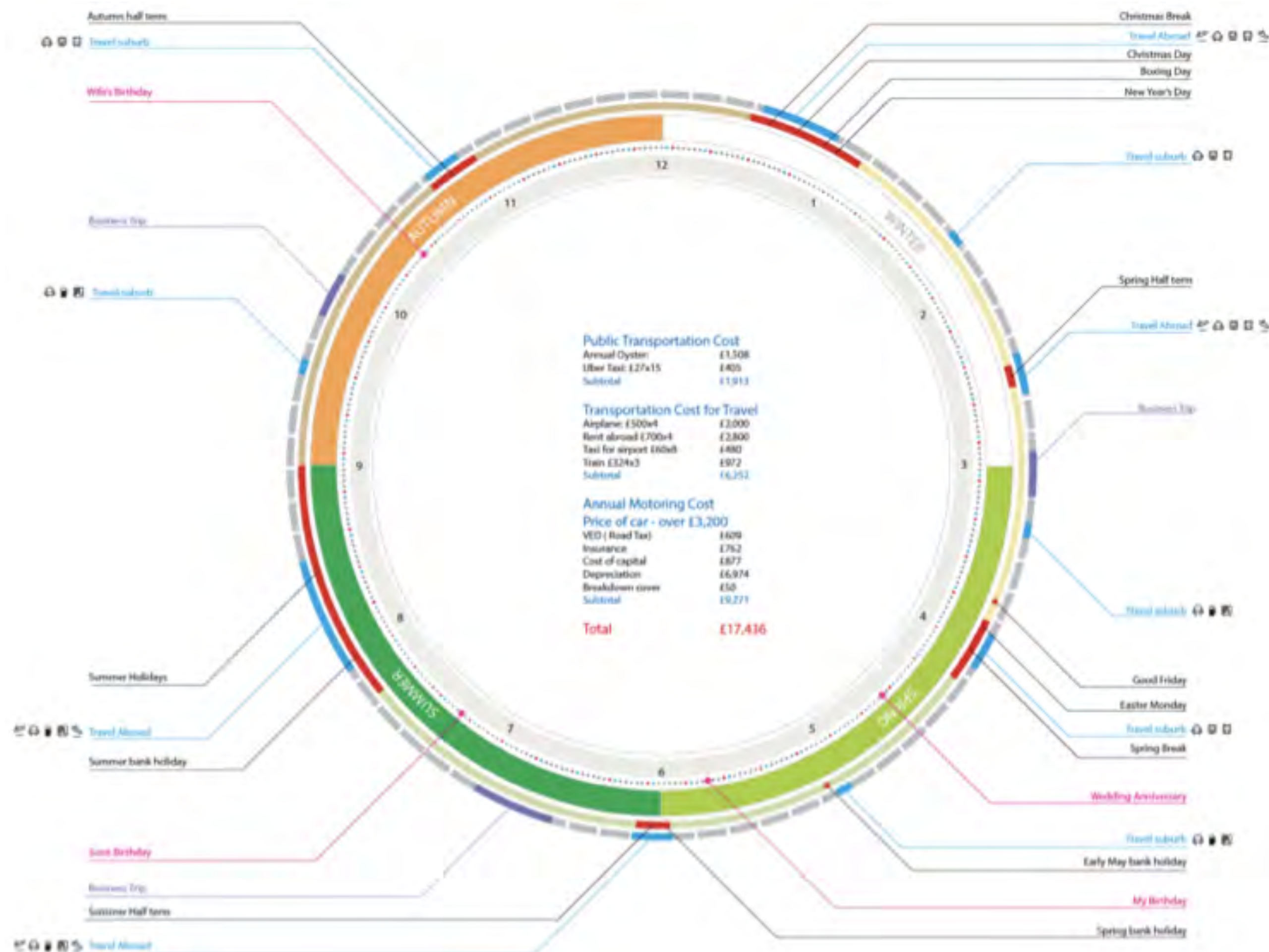
Too risk averse



Likely to be in debt



Customer Journeys - lifecycles



Customer Journeys - opportunities

Julia, 34
 Mother of 8 year-old son
 & housewife

"I like going to the market, because there I can talk to the producers."

	BEFORE				DURING						AFTER						
Stages	Aware	Plan Food	Consider Store	Depart	Enter Store	Browse	Select	Wait	Check Out	Depart	Arrive	Stock	Prepare	Cook	Eat	Trash & Recycle	
Doing	Sees lacking ingredients for meals. Big Sunday shopping at the market	Thinks about diversity, shortlist on iPhone.	Organic & healthy: market or Waitrose.	Goes with her boy, takes the list.	Grabs the basket and takes out the list, looks after her boy.	Follows the list. At the market, talks to producers. Watches her son.	Checks and ticks the list, compare products.	Distracts her boy.	Pays by card. No self-checkout. Involves her boy.	Carries the bags and her boy helps her.	Put the bags in the kitchen and takes care of the boy.	Sorts everything, boy helps her a bit.	Chops, boils etc.	Tries if it's good.	Ask for son's and husband's opinion. Talk, laugh, family time	Recycles carefully.	
Emotional Journey	"I like planning but it usually takes a lot of time and sometimes I forget things."		"I think eating healthy is very important."			"At the market I always like talking to producers and people, it's really nice and you learn a lot sometimes. In stores it's never so exciting"			"Finally, we leave!"				"I like when we eat all together. It's our family time. And when what I cook tastes good, it's ever better!"				
Opportunities	Help her plan the shopping and meals by showing what she already has in the kitchen and suggesting recipes matching her and her family's tastes and needs.					The store could be a place where people can share and socialize with others.		Children are demanding a lot of attention, parents could get help in watching their children so their shopping can be more effective.				Involve her son in the preparing and cooking.					

Define

Create a new problem statement with
design goals



“People don’t want
quarter inch drills.
They want quarter
inch holes”

Theodore Levitt



- **Gather insights and frame the problem:** what are we trying to achieve, and why, and for whom?
- What are the **key drivers** on which success will depend?
- Translate **key insights into objectives**, and objectives into high level design specification that sets the parameters for success

Key insights turned into actionable design requirements

In the eyes of customers, banks are not seen as trustworthy and helpful partners.

There are more attractive options like investors and crowdfunding

Banks are perceived as inaccessible and their process is not transparent.

Banks do not know their customers and their values and needs. Businesses don't get any additional value from banks, they want someone who is interested and supports them in doing well.

The service is a trusted, proactive partner in its customers' lives.

The service makes interaction, communication and processes simple and transparent.

The service is anticipative of its customers' needs.

The service leverages its network to help its customers realise their full potential.

The Business Routine

Monday Routine:

- 6:00 a.m. Wakes up, prepares and heads out to her store
- 7:00 a.m. Receives her flower delivery and arranges the store
- 7:45 a.m. Staff meeting with Eric to prepare the week**
- 8:00 a.m. Serves customers in store, phone orders, emails, prepares orders
- 1 p.m. 1h Lunch break
- 2:00 a.m. Serves customers
- 5:30 p.m. **Closes the store** and cleans it
- 6:30 p.m. Goes to HSBC to deposit the cash**

Tuesday Routine:

- 6:00 a.m. Wakes up, prepares & heads out to her store
- 7:00 a.m. Receives her flower delivery & arranges the store while giving advice to Eric
- 8:00 a.m. Works from the studio on wedding, funeral & other event planning
- 1 p.m. 1h Lunch break
- 2:00 p.m. Works from the studio
- 5:30 p.m. Eric **closes** and cleans the store
- 6:30 p.m. Eric deposits the cash**

The mission statement

RBS wants to add value to their business banking services and aims to become a proactive partner in a lifelong relationship with their current and future customers.

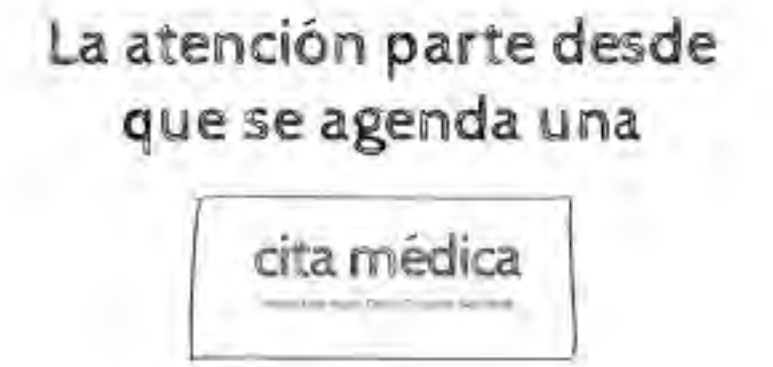
How might we help RBS provide a banking solution that fits into their customer's lifestyle and caters to their specific needs, by using its existing assets and forming new partnerships, so as to help not only RBS to grow its own business but to support growth in the UK economy?

Develop
Ideate and tell a story

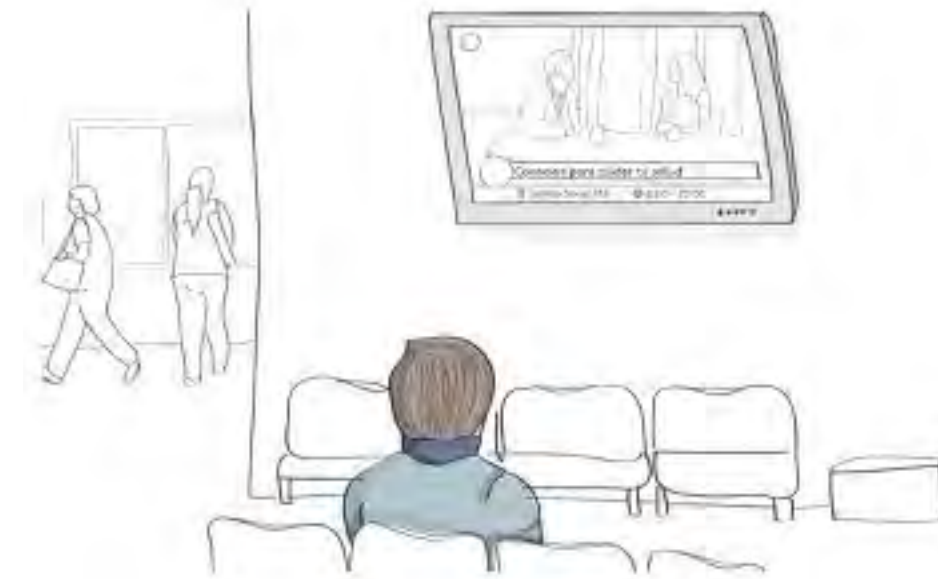




Designing in the context of human stories



www.tusaludrecoleta.cl



Visual methods and prototyping

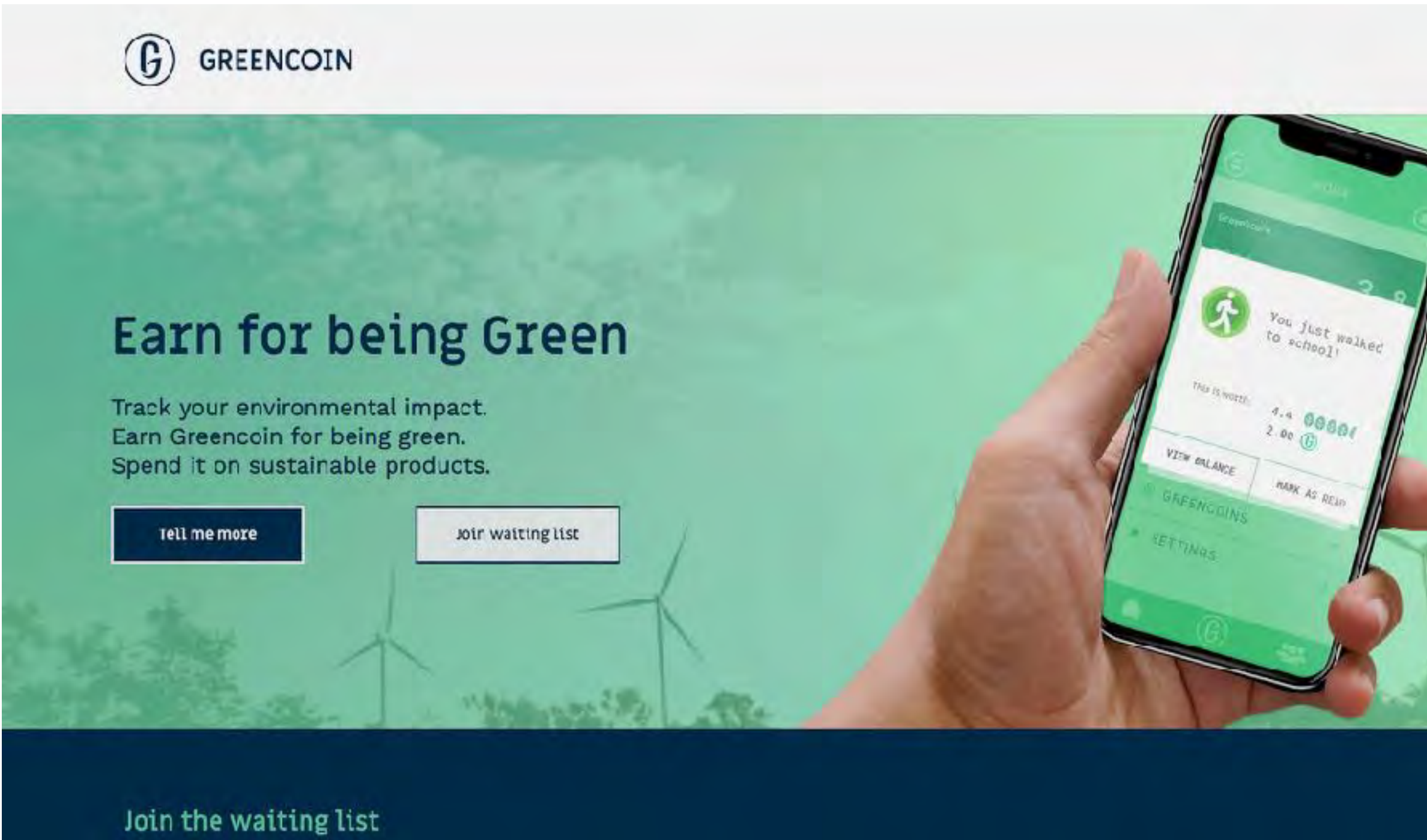


What is the problem (or need) we are trying to solve?

Who are the people involved

What does the current journey look like?

What could the future journey look like



GREENCOIN

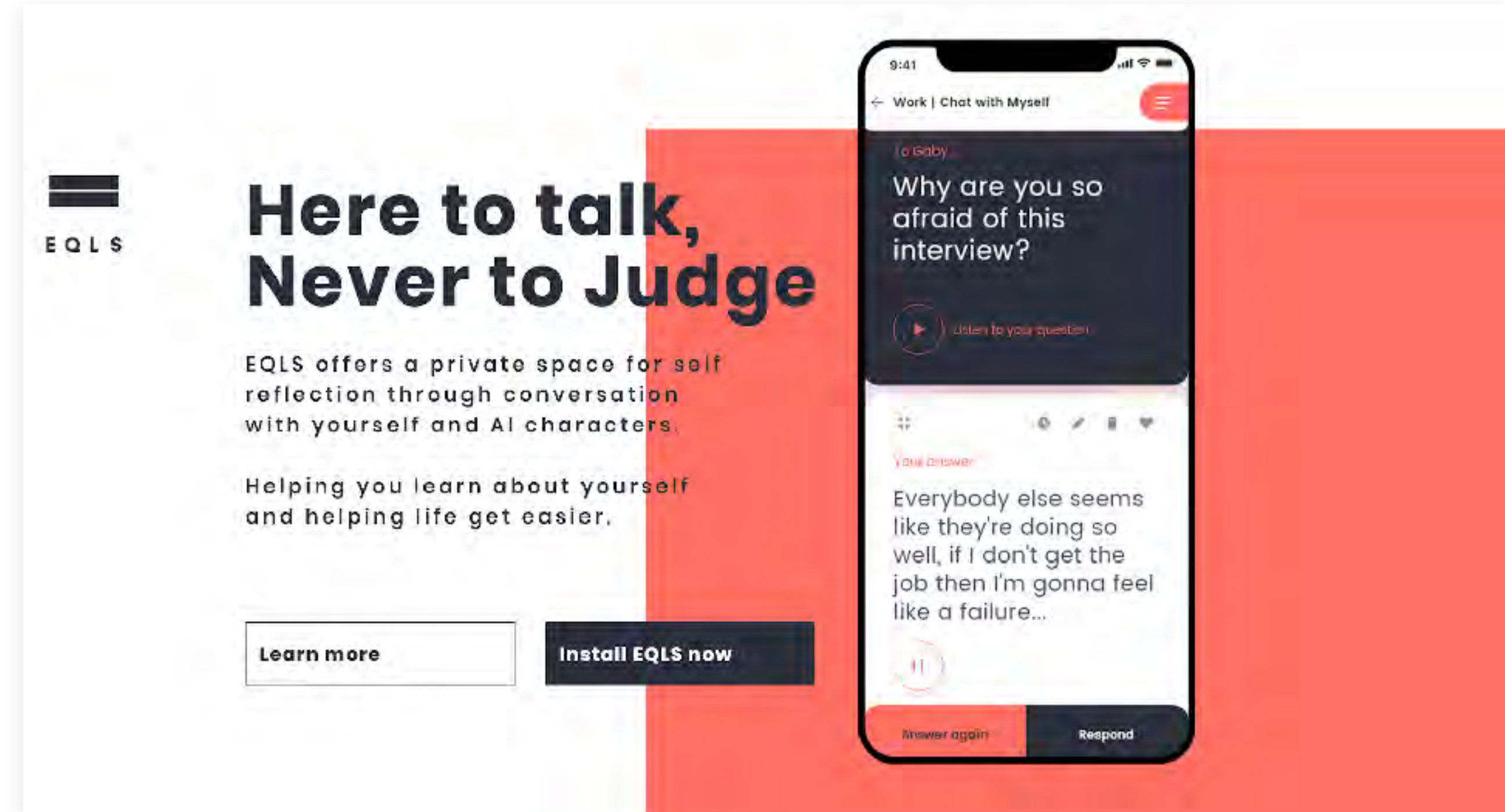
Earn for being Green

Track your environmental impact.
Earn Greencoin for being green.
Spend it on sustainable products.

[tell me more](#) [Join waiting list](#)

Join the waiting list

The image shows a hand holding a smartphone displaying the Greencoin app interface. The app screen shows a notification: "You just walked to school!" followed by "This is worth: 4.4 Greencoin" and "2.00". Below this, there are buttons for "VIEW BALANCE" and "MARK AS DONE". At the bottom of the app screen, there are sections for "GREENCOINS" and "RETTINGS". The background of the landing page features a green field with wind turbines under a clear sky.



Here to talk, Never to Judge

EQLS offers a private space for self reflection through conversation with yourself and AI characters.

Helping you learn about yourself and helping life get easier.

[Learn more](#) [Install EQLS now](#)

The image shows a hand holding a smartphone displaying the EQLS app interface. The app screen shows a chat conversation with an AI character named "Gaby". The chat text reads: "Why are you so afraid of this interview?" followed by a play button icon and "Listen to your question". Below this, there is a section for "Your answer" with the text: "Everybody else seems like they're doing so well, if I don't get the job then I'm gonna feel like a failure...". At the bottom of the chat, there are buttons for "Answer again" and "Respond". The background of the landing page is a gradient of white and red.

Deliver

Prototype and test



Storyboards - key actions

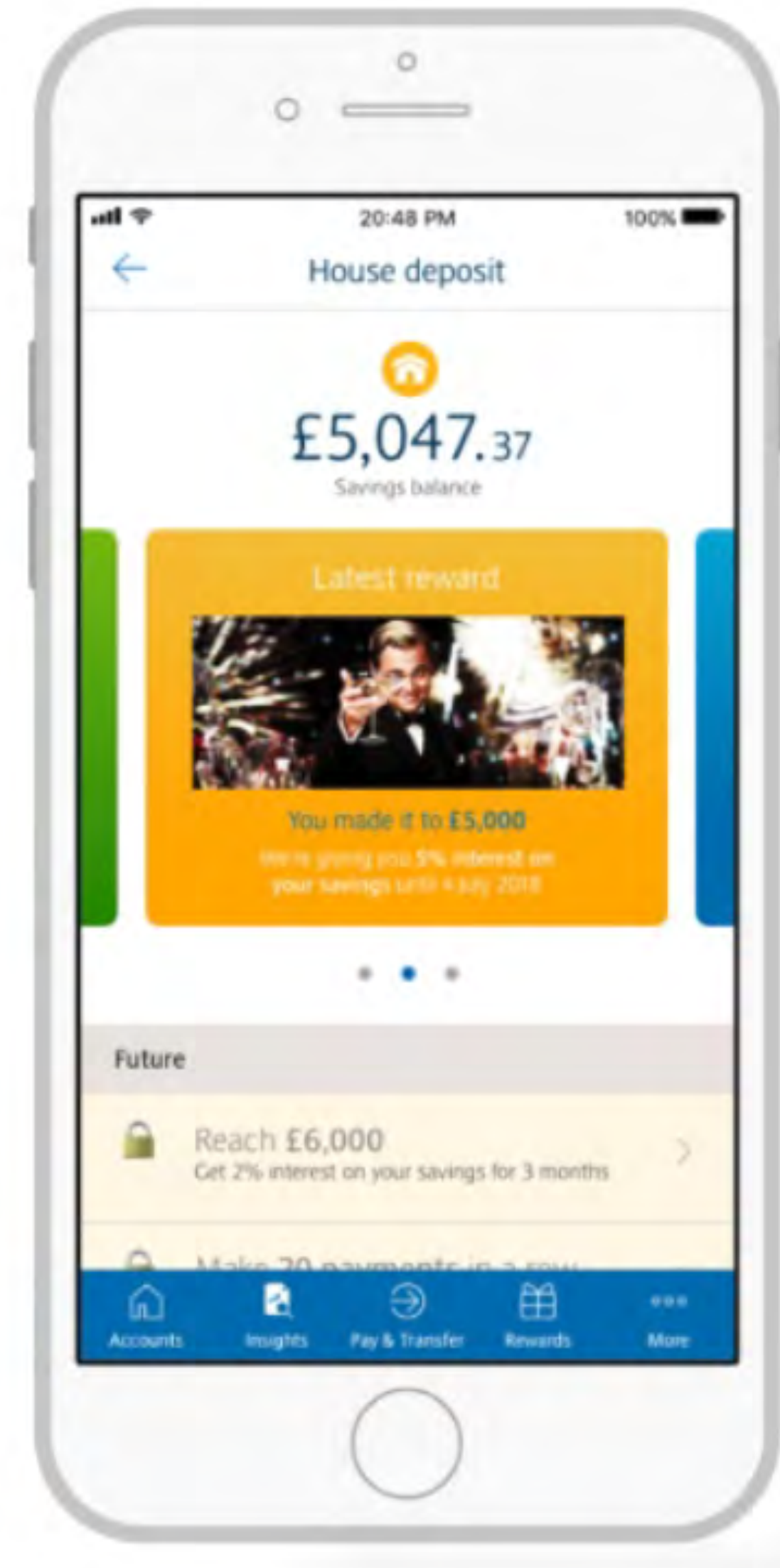
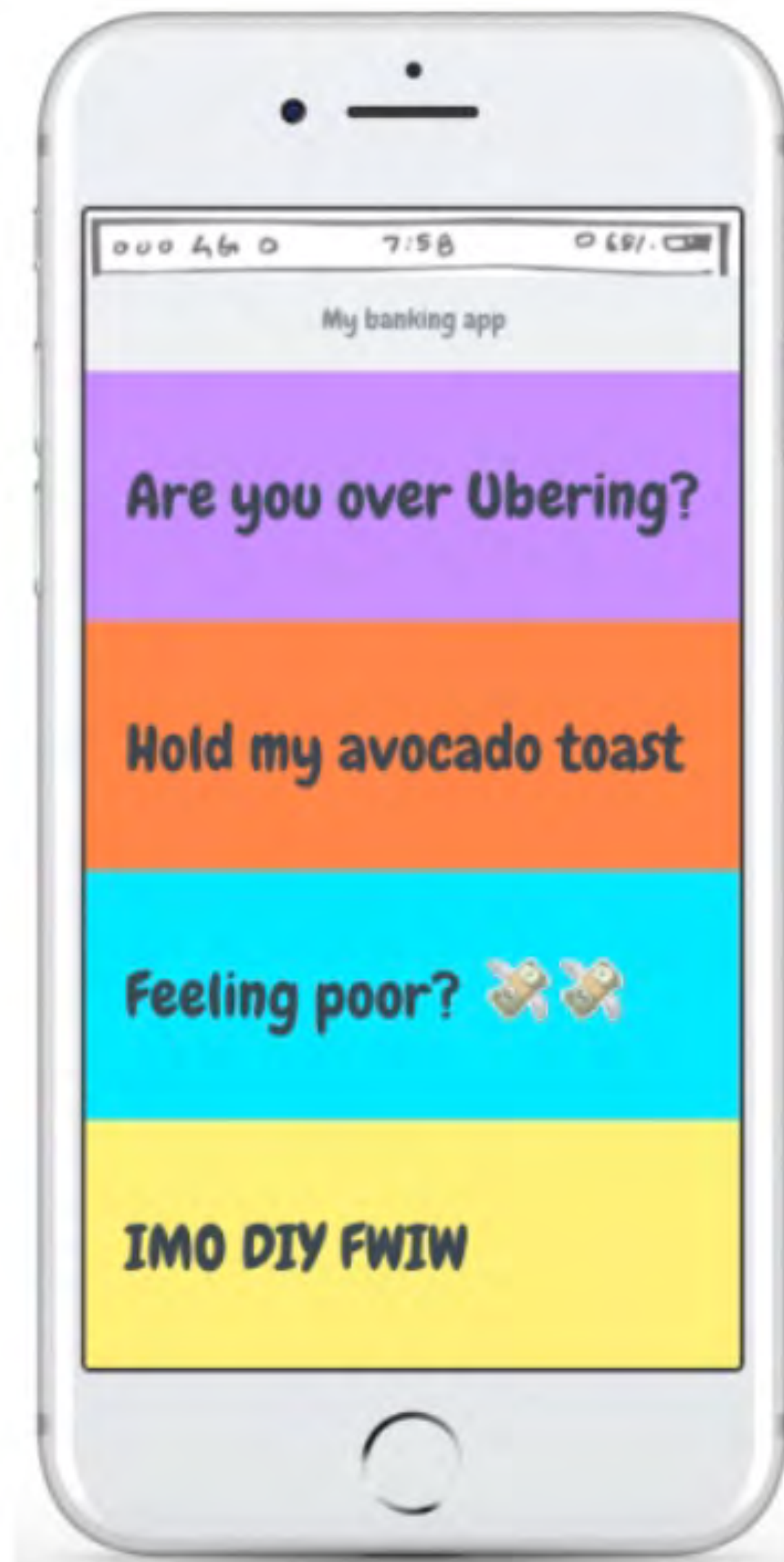
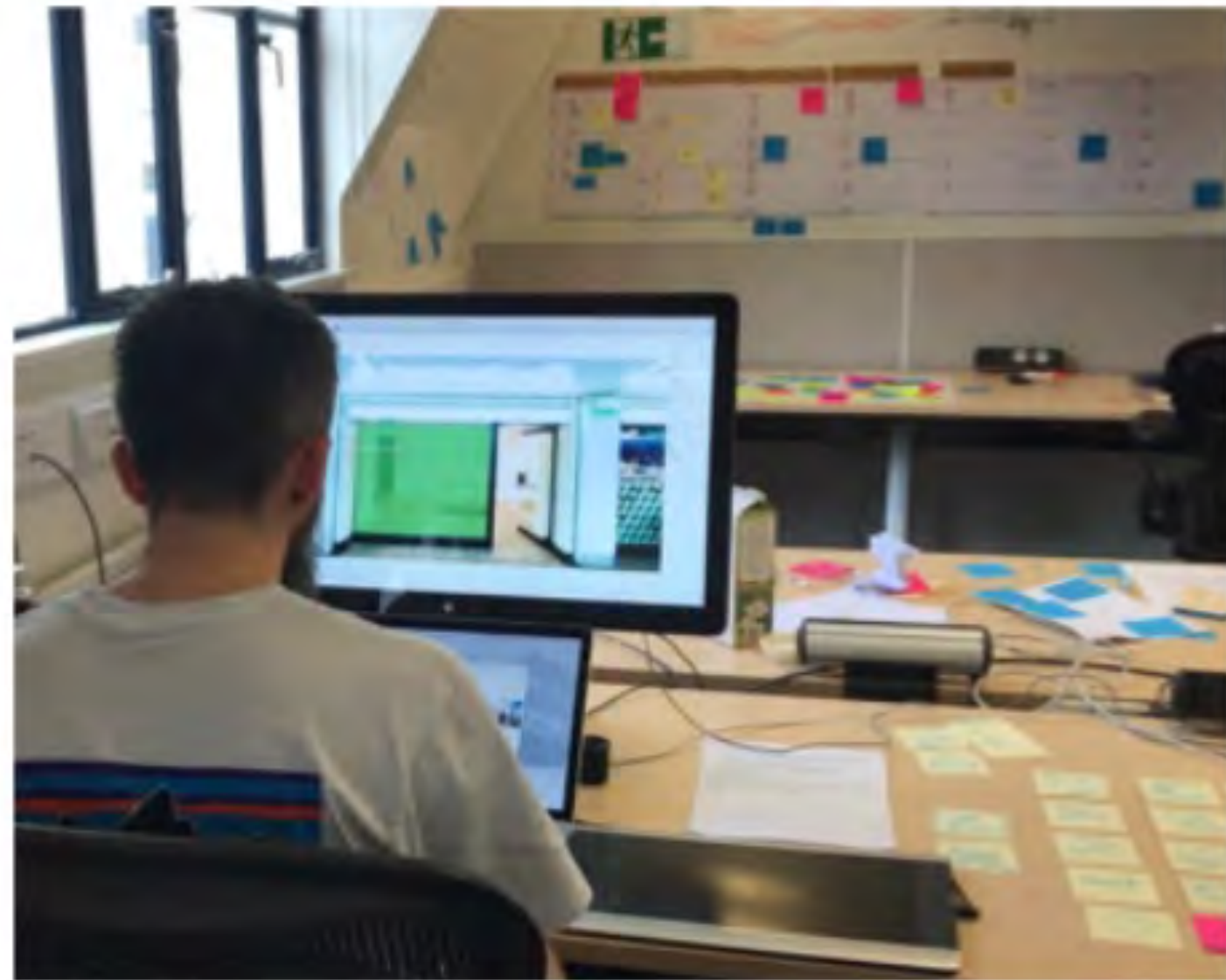


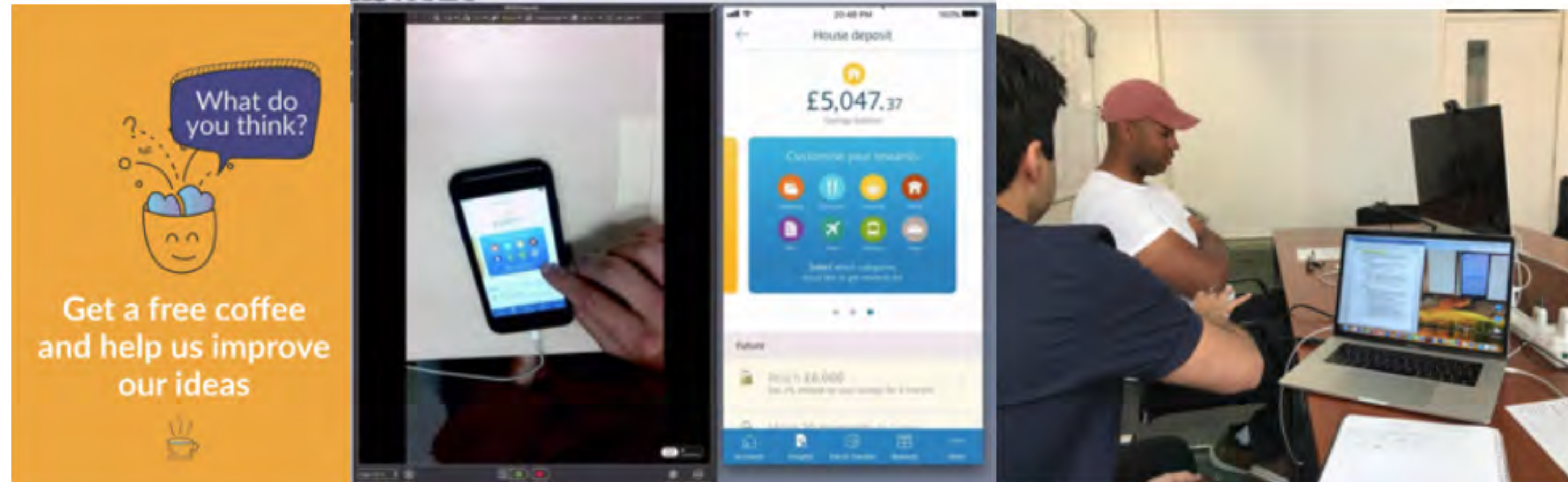
Key touchpoints – blueprints

My wife's anniversary



Key interactions





Helped people get things out of their head or 'off their chest'

It was very helpful. One thing I was told by a gp was to write stuff down to help understand my thoughts / feelings. The app helped me do that - User 2.08

It definitely promotes getting your feelings out and onto paper, rather than in your head. - User 2.02

Like you're speaking with someone else

It makes it seem more as if you are speaking with someone else, and not just back and forth to yourself. - User 1.07

Had a calming effect

I was about to have a panic attack on the bus, Before I have a seizure of some sort, this app really helps to relax - User 1.10

Asking and answering was empowering and effective

what I hadn't realised, is the answer is there and within me, and, and it's within my ability to fix and to sort out - User 2.10



Fully self directed use is intimidating

The blank canvas is an intimidating prospect for some requiring emotional confidence or high degree of self-understanding
The hardest part was actually asking the question. Once the question was there, it was probably a bit easier to write the answer. - 3.07

UI architecture is unfamiliar

I've never really seen anything like that before, so I wasn't like entirely sure what the... what it was requiring of me. It took me a while to figure that out. Um, so at first I was a bit confused - 3.06

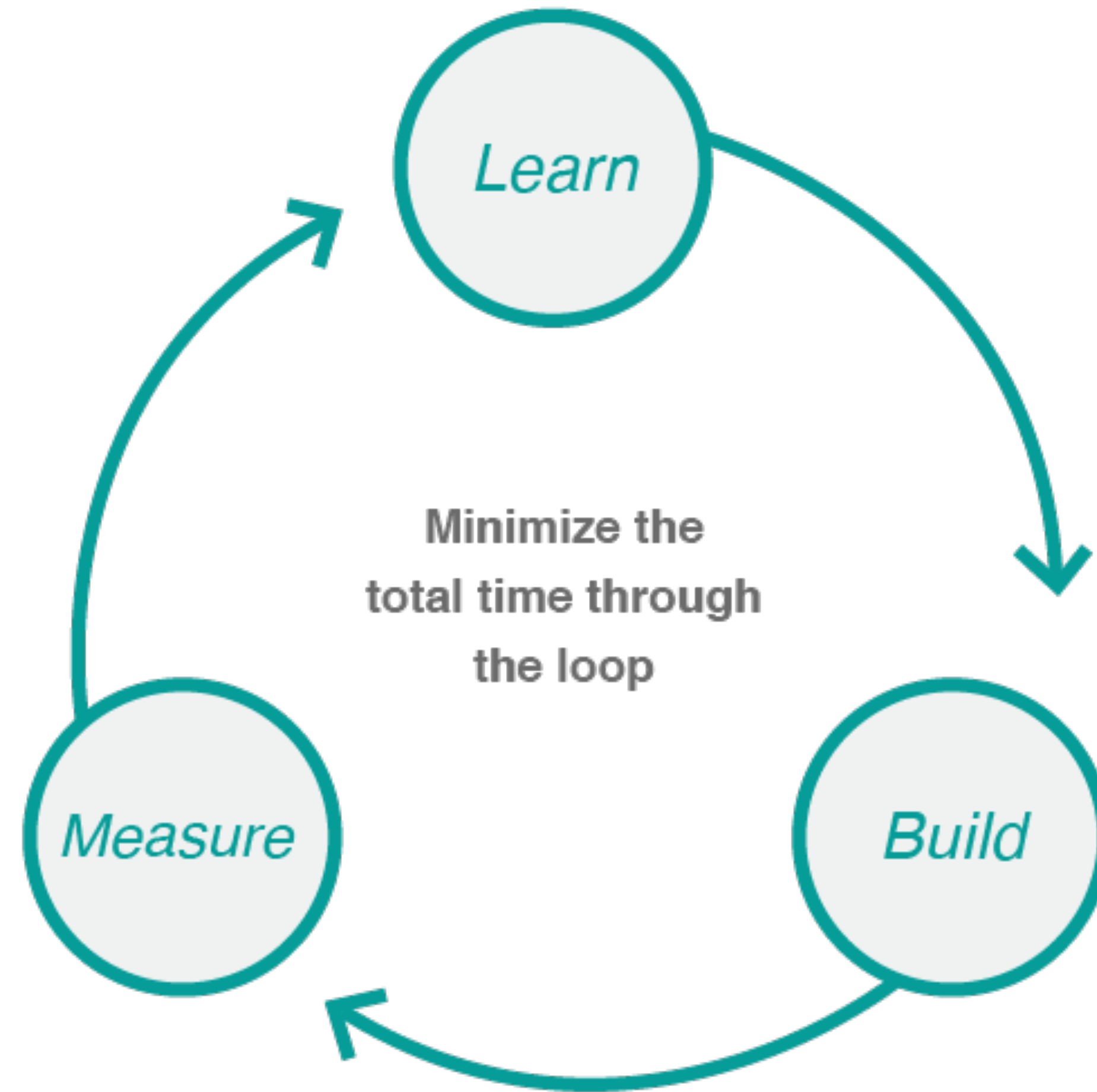
the talking to myself feature felt a little eerie - 3.07

Some don't see the point

I didn't think I needed to. Felt a bit silly using it yesterday - User 2.03

In some cases the method was negative for people

We have a real concern for risk of the app to vulnerable users
It just makes you think that no one's, no one's listening. So, it's not really helping you. I genuinely thought I was talking to myself... when you're talking to someone, you don't want to feel like they're not listening and that's literally what it feels like - User 3.07



(Lean Startup, Ries 2012)

- **Service Design is an end to end systemic response to systemic issues**
- **Deep human and social insights combined with technological and business innovation**
- **Focused creativity that cuts across multiple disciplines**
- **Collaborative, Iterative not linear, and ambitious**
- **Produces new paradigms – questioning received wisdom**



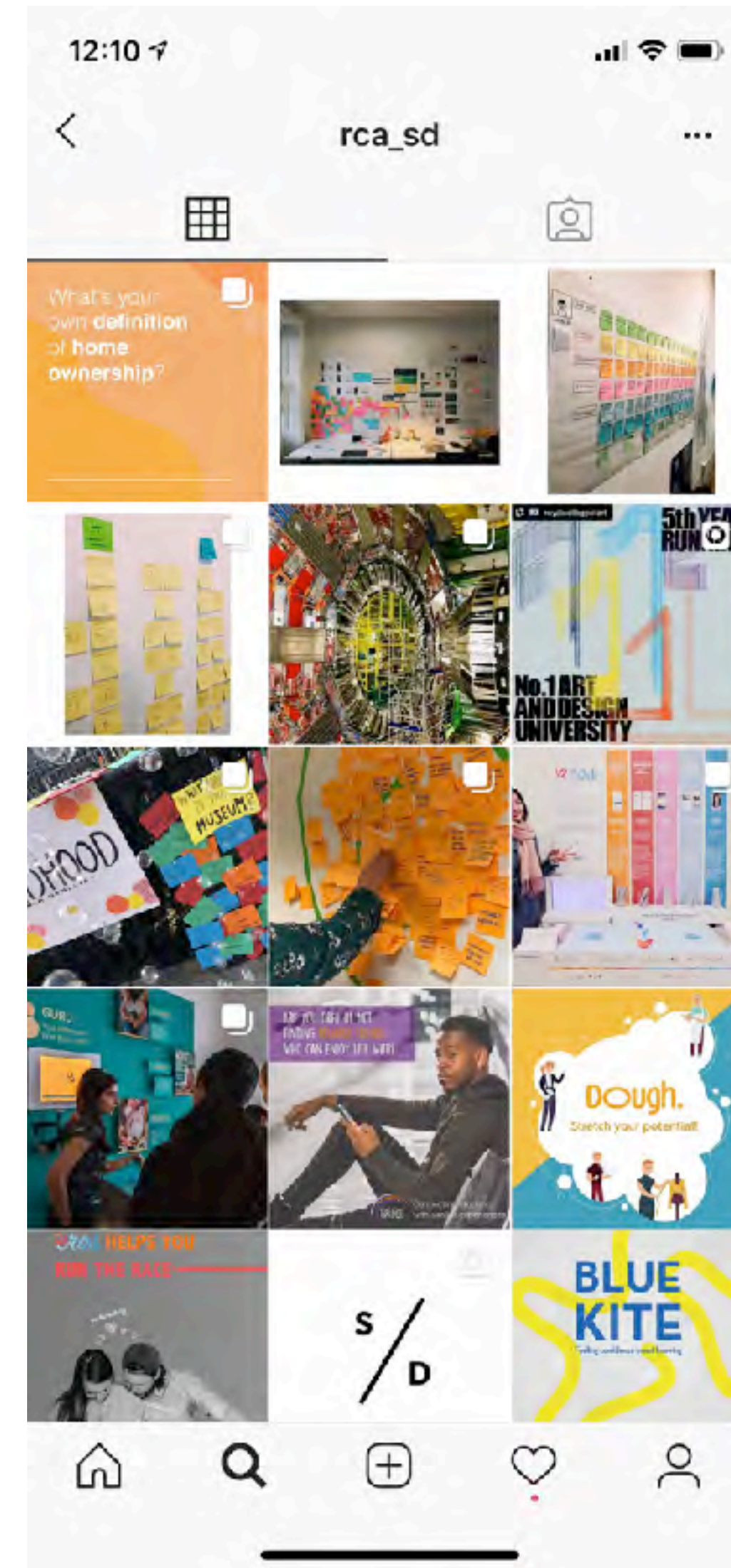
Gracias :)

@nrebollo

nicolas.rebollo@rca.ac.uk

<https://www.linkedin.com/in/nicolasrebollo/>

[nicolasrebollo/](#)



@rca_sd