

WOJTEK TOMASZEWSKI

DESIGN STRATEGY

2023

This is a selection of work showing different stages of product or venture development. Please feel free to request additional details on the projects via email: hello@wojtektoaszewski.com

EXPERIENCE

Yamaha Corporation
Senior Industrial Designer
May 2018 – Oct 2021
Hamamatsu, Japan

Design Consulting
Product Design, Graphic Design,
Visualisations
Apr 2016 – May 2018
Warsaw & Cracow, Poland

Kolektyv
Co-Founder & Designer
Apr 2016 – Sep 2017
Warsaw, Poland

Tylko
Industrial Designer
Jan 2015 – Mar 2016
Warsaw, Poland

Pracownia Jasiewicz
Product Designer
Feb 2013 – Dec 2014
Warsaw, Poland

EDUCATION

Politecnico di Milano
Strategic Design
Master’s Degree
Nov 2021 – Feb 2023 (thesis)
Milan, Italy

Academy of Fine Arts
Product Design & Visual Communication
Bachelor’s Degree
Oct 2010 – Jun 2014
Warsaw, Poland

Antwerp Management School
Business Design Seminar
Certificate ID →
2022

The Interaction Design Foundation

Psychology of Interaction Design
Certificate ID →
2021

User Research
Certificate ID →
2020

Human-Computer Interaction
Certificate ID →
2020

CONTACT

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YAMAHA
NEW GENERATION OF YAMAHA'S
BEST SELLING DIGITAL PIANOS

2019 – 2021

Responsibilities
Research
Industrial Design
Creative Direction



INTRODUCTION

DESCRIPTION

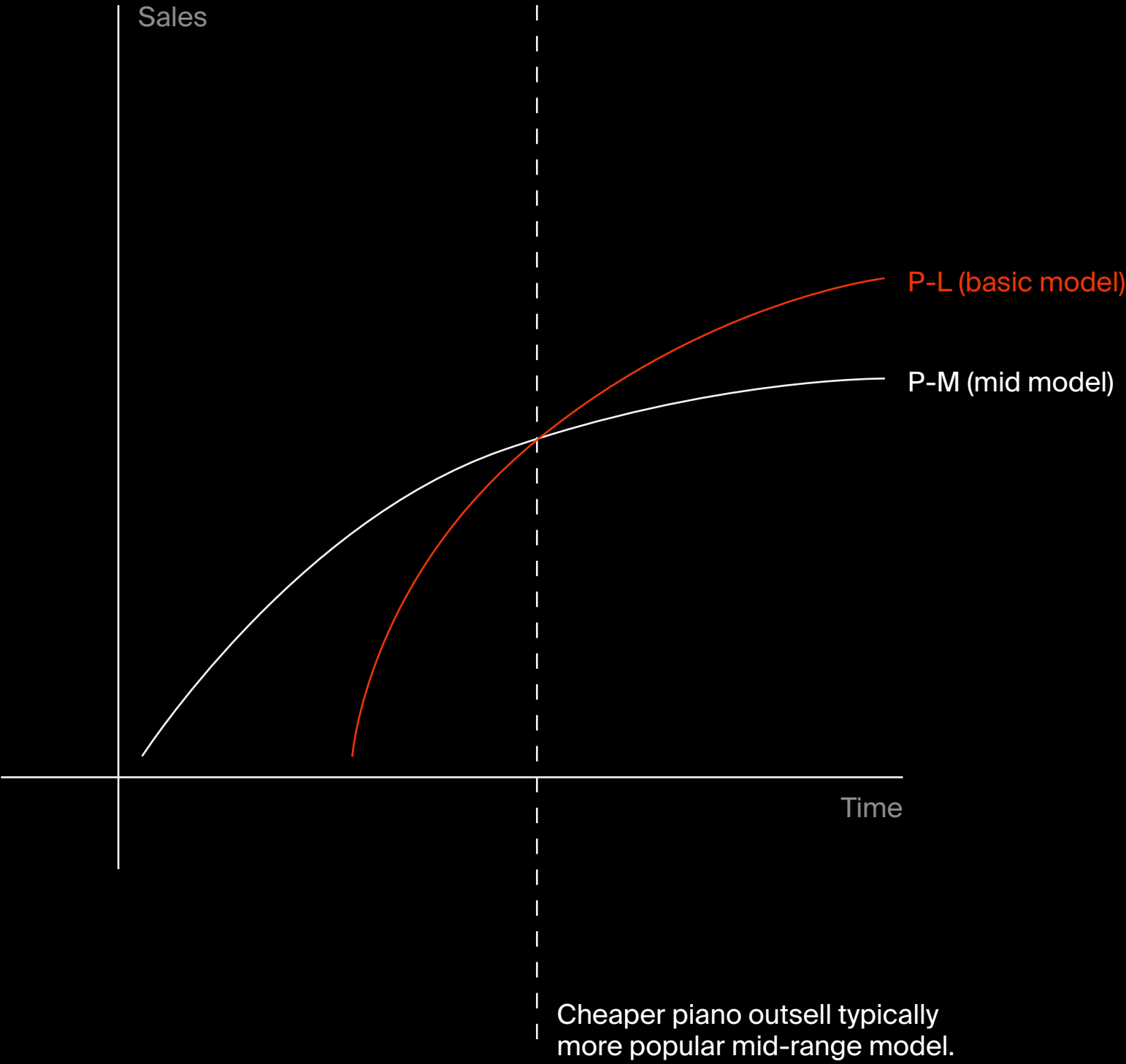
The current digital piano market is filled with strongly stylised and feature-packed products that don't reflect where they are used the most—our homes.

In response, Yamaha set to look out for a new design language for their best-selling digital piano line.

My role was focusing on facilitating design thinking in the team. Starting from strategy and working together during the development with the design leader role for the project.

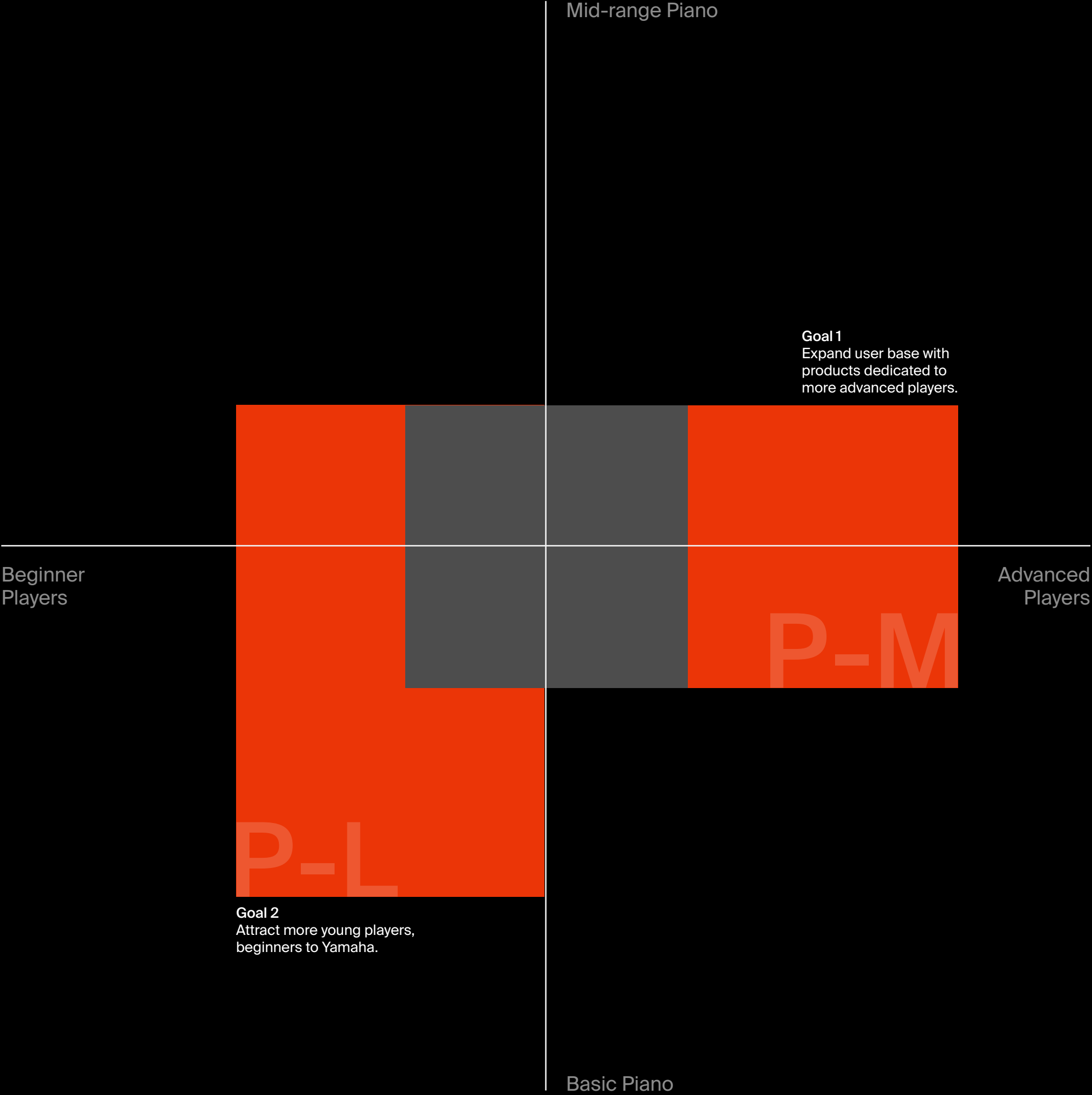
CHALLENGE

The current mid-range model wasn't selling like intended and needed a replacement due to the situation where the basic (P-L) model started cannibalising our more expensive version.



RESEARCH
TARGET

Yamaha’s main goal with the new project is to expand the user base towards more advanced musicians with the new P-M (mid-range) model and to catch more players at the beginning of their musical journey with the P-L, a basic piano version.



RESEARCH USER RESEARCH

We recruited six musicians with different levels of experience to join a combination of Usability Testing, Shadowing and Interviews to uncover their insights about Yamaha digital pianos and competitors' offerings.



RESEARCH INTERVIEW QUOTES

Affinity Mapping

We collected quotes and insights from the interviews and clustered them to have a clearer picture when identifying opportunities.

Design

I hate bells and whistles on keyboards, just want the basics and still have the highest quality.

I love that the options are limited. Eliminates the fuss and distractions that come with other keyboards.

I also much love the UI, it only has 3 buttons, 10 tones, a metronome, reverb and a 2 person mode.

Sound

The sound is accurate and clear. Feels like a real piano.

The sound is great and the volume gets pretty loud at least in my opinion.

The built-in speakers were something I didn't know what I wanted until I started looking. I thought I would be disappointed with the relatively low power of the amplifiers included in the P-125, but this thing sounds great in the room!

App

If you use it with the iOS app, (not available on Android) it becomes awesome.

I plug it into my computer, iPhone and iPad to expand the sound libraries. I absolutely love it.

One of my favourite features that are not necessarily part of the keyboard but is free to use is the Yamaha Smart Pianist app that you can put on your iPhone or iPad. Crazy good app and a lot of fun to record with.

SYNTHESIS
PERSONAS



Mari
39, project manager

Quote

“Even if I don’t practice enough, I would like to have a nice-looking furniture piece at home.”

About

Mari is a project manager in tech. industry. She appreciates art and design. Recently she spontaneously decided to start piano lessons. Mari is busy so she bought her piano online after checking a few reviews before. She wanted good sound and an easy setup Another non-negotiable was good looks, she wanted a piano that matches her apartment.

Motivations

- She likes classical music and wants to learn how to play the piano.
- Relax after work while doing her new hobby.

Core needs

- Aesthetic instrument to match her apartment interior design.
- Understandable user interface and easy to set up instrument.

RESEARCH TREND ANALYSIS



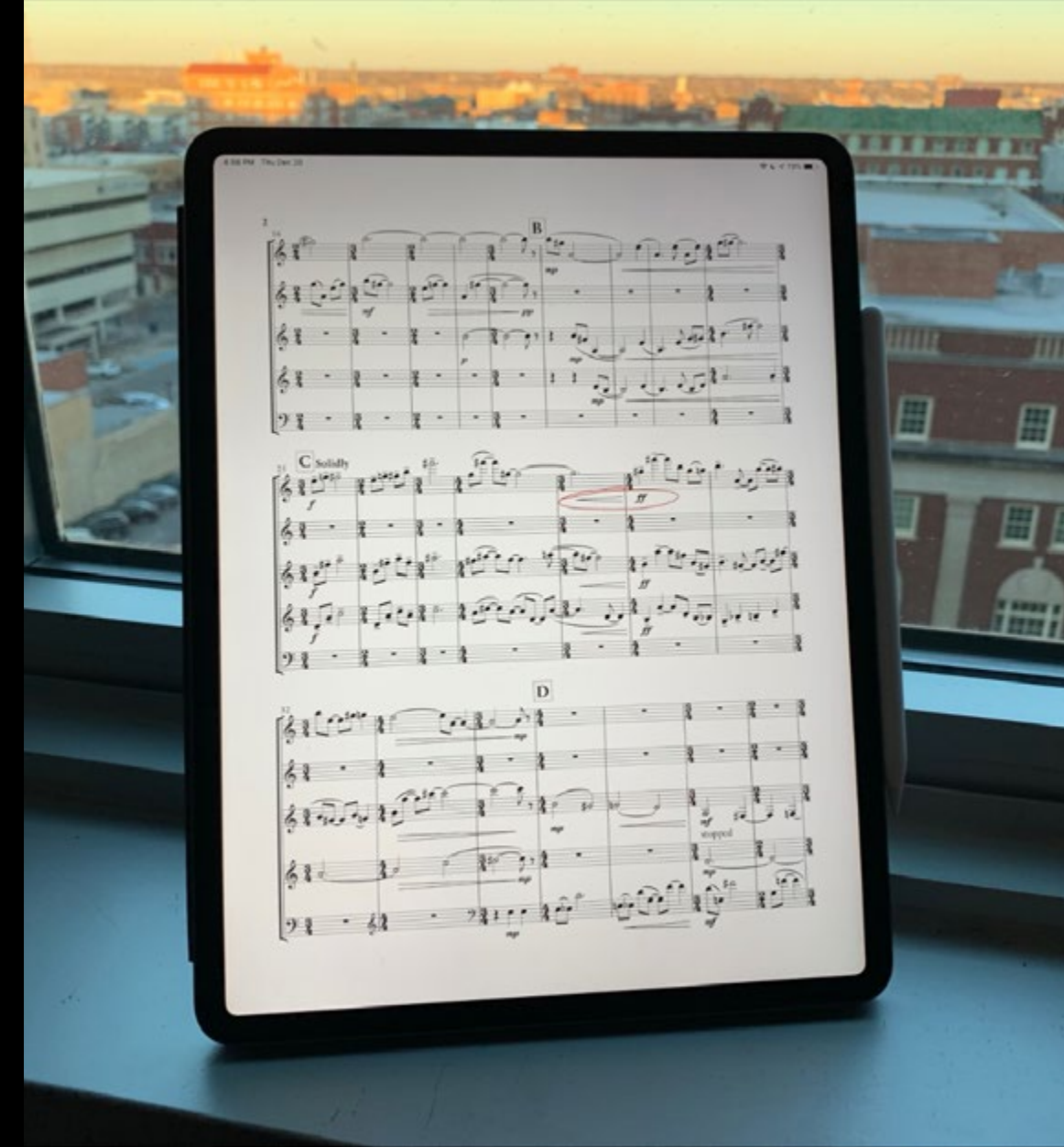
Soft tech.

With expanding IoT sector we can see more designs that try to blend into household environments. This aesthetic can be translated into bigger objects that traditionally were supposed to be the centre of a room.



Shift to online.

E-commerce, e-learning, digital services, etc. We looked at this aspect before the pandemic. And this shift was only accelerated by Covid-19 lockdowns.



Digital scoreboards.

Musicians more often reach for iPads and other tablets to read notes. Some digital pianos can be connected to apps to enrich pianos' functionalities.

Example: <https://forscore.co>



Shrinking living space.

Globally, rising housing costs are driving people to live in a smaller apartments where every square meter counts. Smaller pianos are welcomed.

SYNTHESIS
OPPORTUNITIES

Design

Simplified

Simple and honest design makes a product easy to use and more friendly. A product shouldn't be burdened with non-essentials.

Unobtrusive

A piano should have a neutral design to avoid taking over attention. A restrained design will make it a good fit for all environments.

User Experience

Clear Interface

Reorganise the interface for better usability and reduce the number of complicated operations.

Smaller piano for smaller spaces

Shrink the piano footprint to make it easier to set up on a desk, table or dedicated stand.

Playability

New Piano Action

With new piano action, we have a great opportunity to further improve the authentic feeling of Yamaha's piano.

Textured Keys

Textured keys are a current recent trend in digital piano design and people seem to like it.

SYNTHESIS
CONCEPT DEFINITION – KEYWORDS

SIMPLIFIED, AUTHENTIC, COSY,
UNOBTRUSIVE, UNDERSTANDABLE,
WELCOMING, PORTABLE, HOMELY
FEELING, APPROACHABLE, REAL



SYNTHESIS
CONCEPT PILLARS

DESIGN

- Welcoming.
- Like a real piano.
- Intuitive functionality.

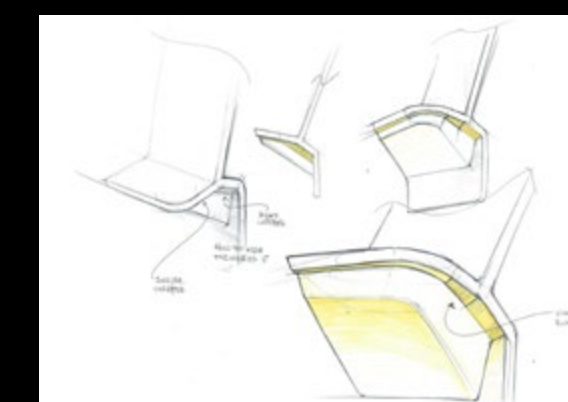
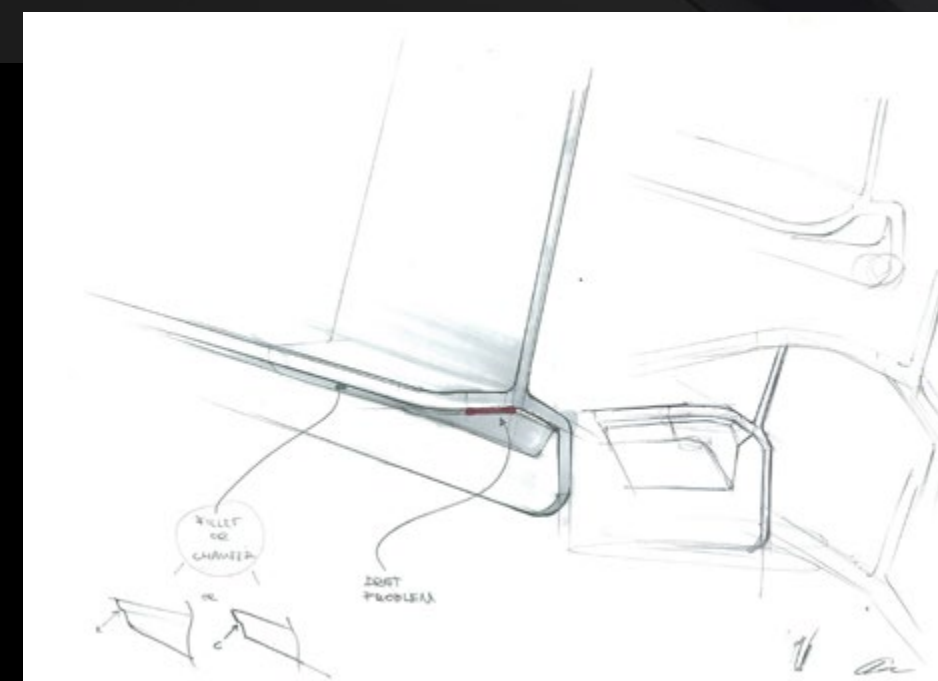
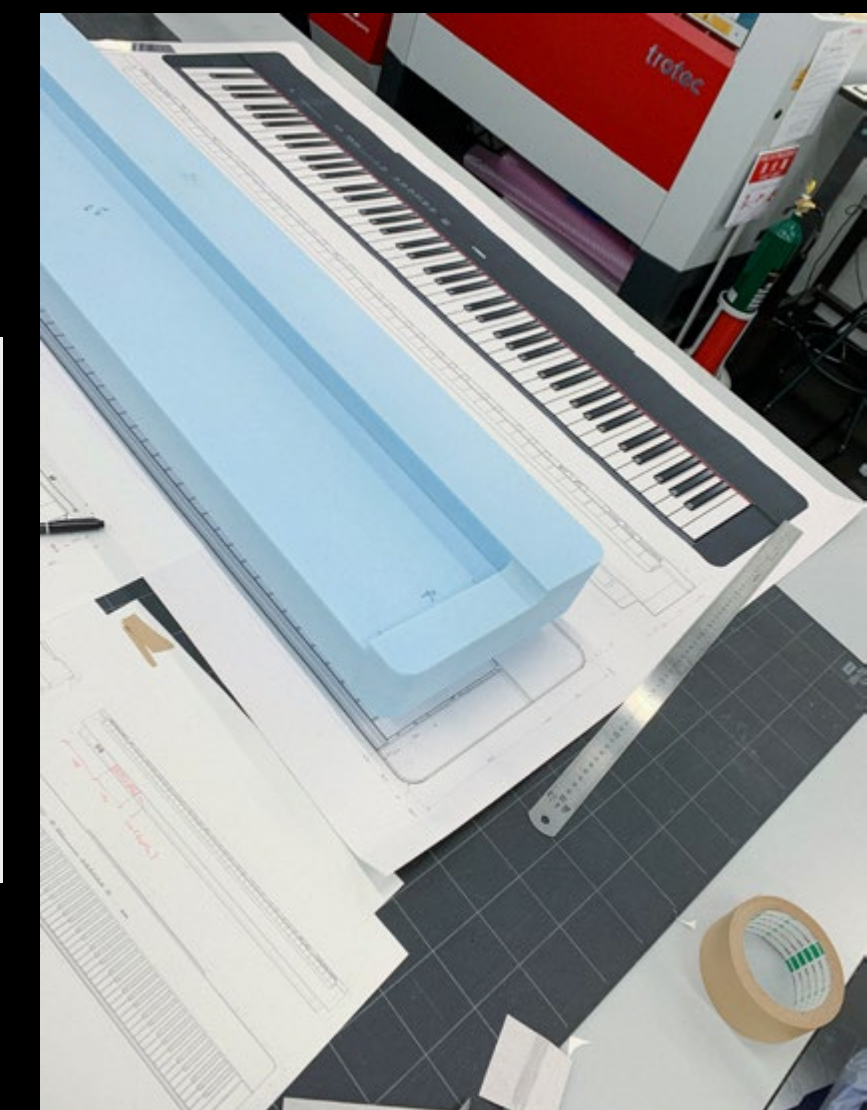
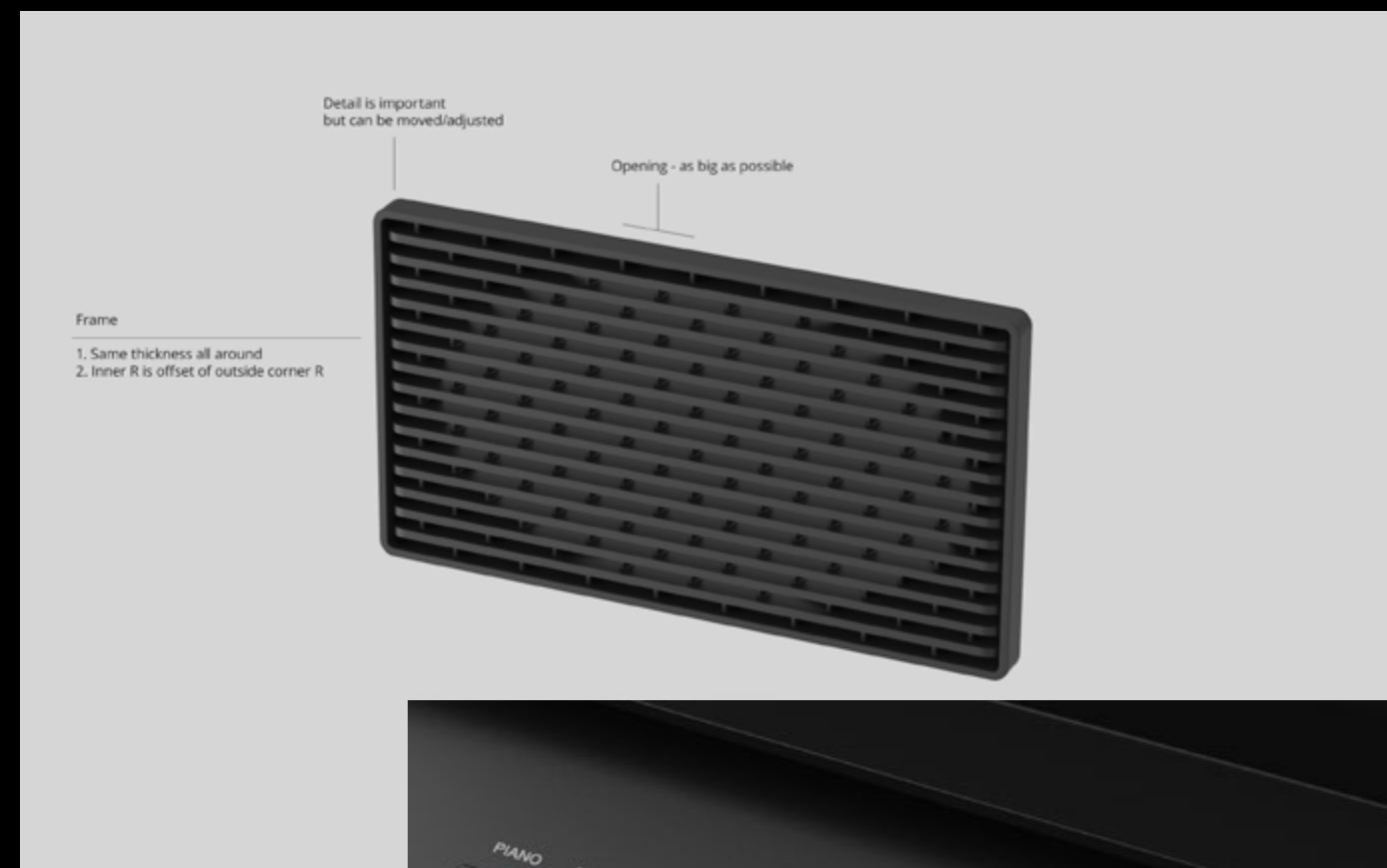
USER
EXPERIENCE
VALUES

- Simple.
- Easy to set-up.
- Portable.

CORE VALUES

- Inclusive. For all musicians regardless of their skill.
“Make Waves”
- Authentic. Conveing thrustworthiness of Yamaha brand.

DESIGN IDEATION & DEVELOPMENT



DESIGN
CMF STRATEGY
(COLOUR, MATERIAL, FINISH)

3x New

New design.
New factory.
New CMF strategy.



Both pianos are being produced in a new Yamaha factory and needed careful consideration and multiple samples to select the right colour combinations and texture finishing.

VALIDATION

Compared to the previous models, new pianos are significantly smaller. A smaller footprint means Yamaha can reduce the plastic needed for injection moulding and save on transportation costs in the long term by packing more pianos on the pallet.

30% smaller



Prototype testing and assesment

Due to pandemic restrictions, we had to improvise with testing so we sent prototypes to our stakeholders in different regions where they collected insights about the new model. The piano was well received by all parties involved and enthusiastically accepted by the top management at Yamaha headquarters.



THE OUTCOME

SUCCESSFUL DESIGN

Pianos were well received on the final Stakeholder presentation. A smaller footprint helps Yamaha save on material costs and transportation.

NEW CMF* FOR THE WHOLE DIGITAL PIANO SEGMENT

The team worked tirelessly to refine colours, materials and finishes in the new model due to new production facility.

INTESA SANPAOLO
BETTER FINANCIAL EDUCATION
FOR YOUNG ITALIANS

2022 | 3 WEEKS WORKSHOP

Scope of work
Venture Design
Service-System Design
Behavioural Research
Market Research

INTESA  SANPAOLO



INTRODUCTION

BRIEF

How could the evolution of the Intesa Sanpaolo services create new service scenarios to make the provision of financial education available to customers and prospects more effective, engaging and integrated into the bank's ecosystem?

CORE VALUES

Prosperity

People who are financially aware and able to make better financial decisions are happier people. They are also better citizens because they can also contribute to the prosperity of the society in which they live.

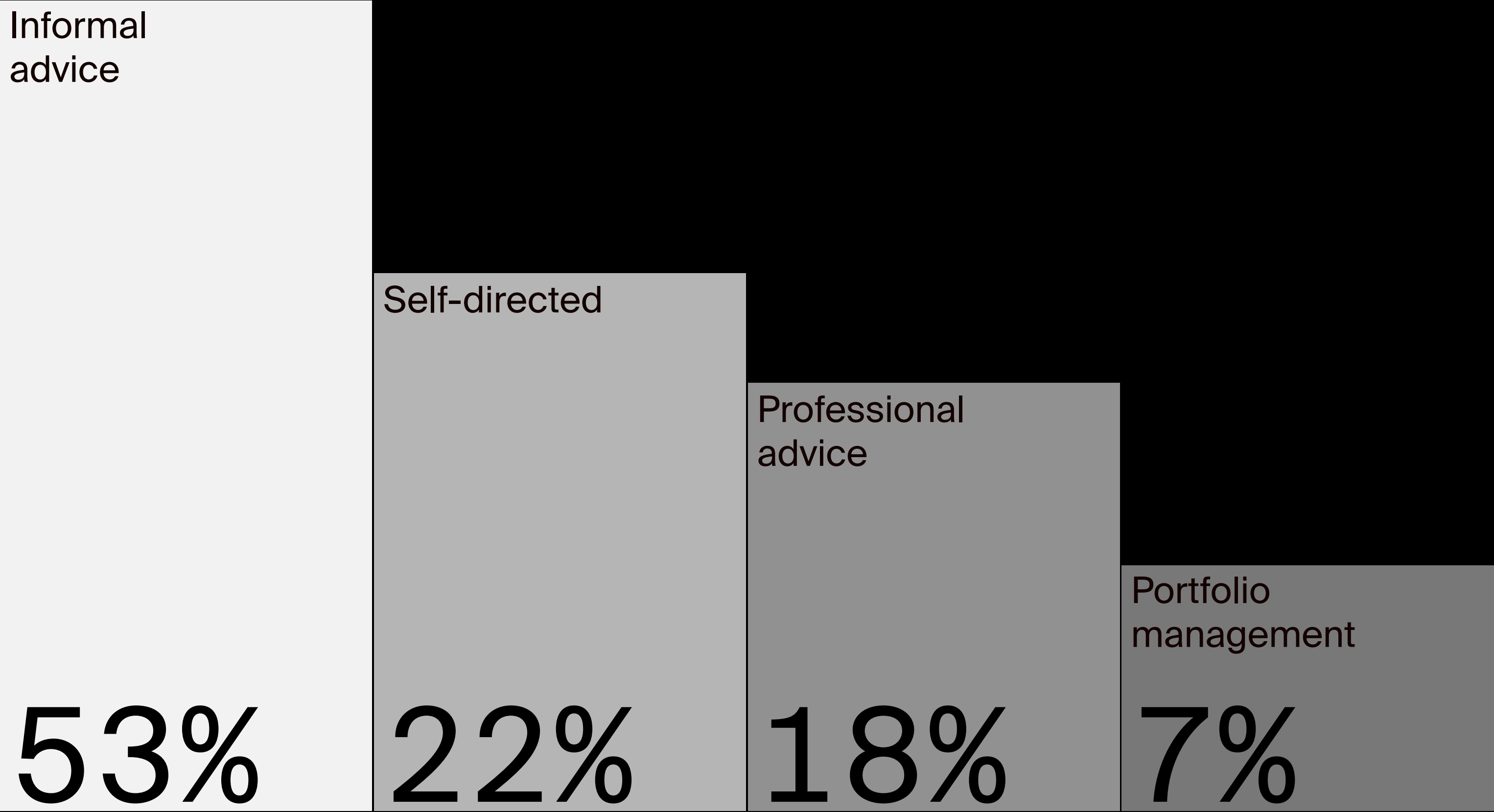
Social Responsibility

Everyone is personally responsible for their financial education. But it is also the bank's social responsibility to educate customers and help them reach their life goals through better money management.

Relationship with the bank

Investing in financial education means supporting people in reaching their life goals and it means nurturing the relationship with banking institutions at every point of their journey.

How Italians make their financial
investment decisions?



RESEARCH INTERVIEW INSIGHTS

We conducted 12 interviews with young Italian adults mainly from the GenZ cohort and Millenials.

We can see an eagerness to take responsibility for the finances but the task seems complex and it's being postponed. We can also observe a lack of trust in banking institutions.

Selected Quotes:



"I want to do it right or not at all, that's why I postpone thinking about my finances."

Basem, 27



"I am afraid that all of this takes to much skills and knowledge and time that I just don't have."

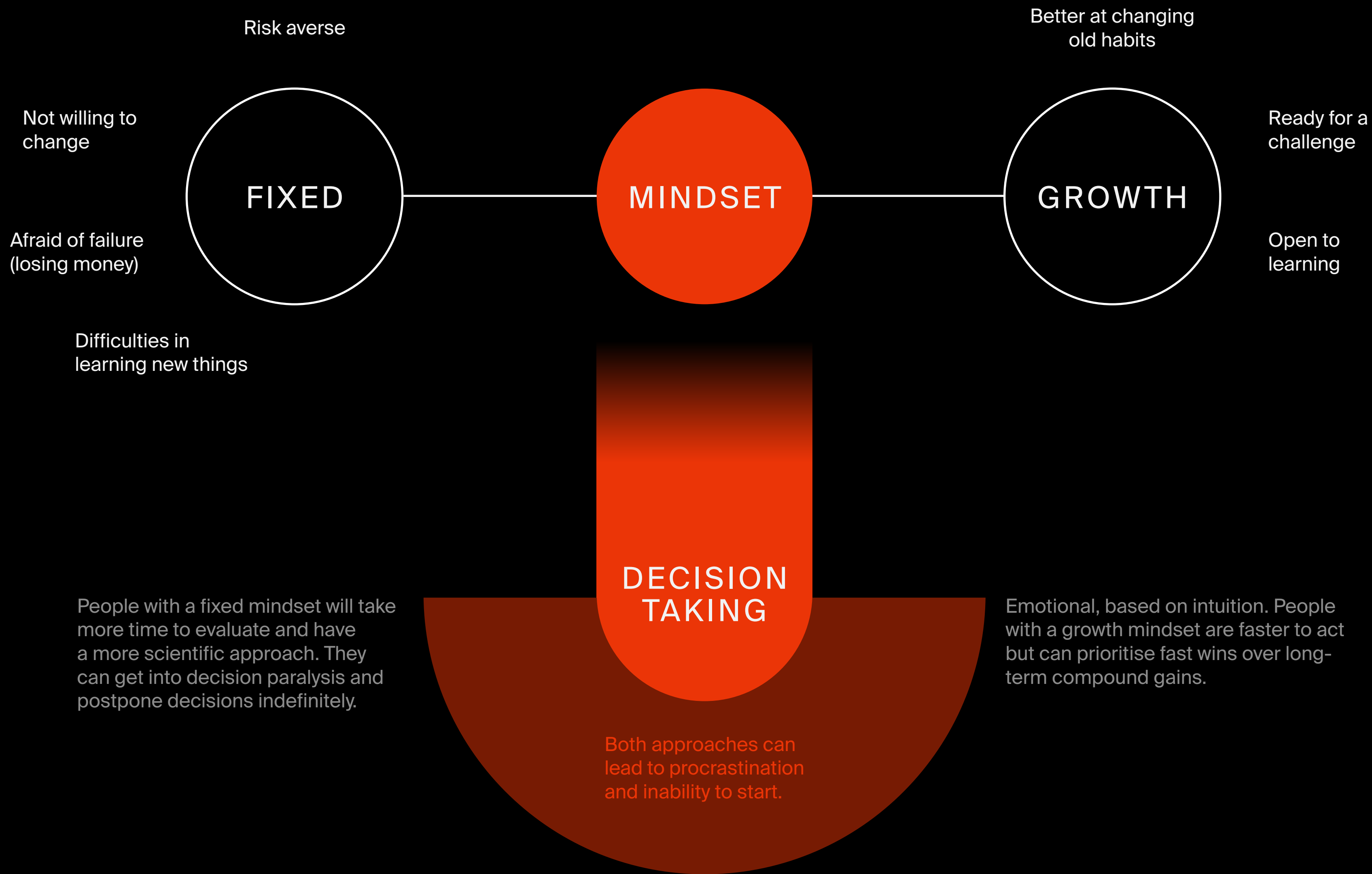
Camila, 25



"I don't trust Italian Banks... what ever you give them you get less back."

Ricardo, 24

RESEARCH
MINDSET



MOTIVATION

Procrastination.

Instant reward vs. building with time.

What's the goal?

Hard to start.

Needs an effort and habit building.

"In Italy we don't talk about money."

COMPLEXITY

Lack of knowledge.

Don't know where to start.

Legal aspects.

TIME & EFFORT

Hard to do.

Other things are more important. (YOLO)

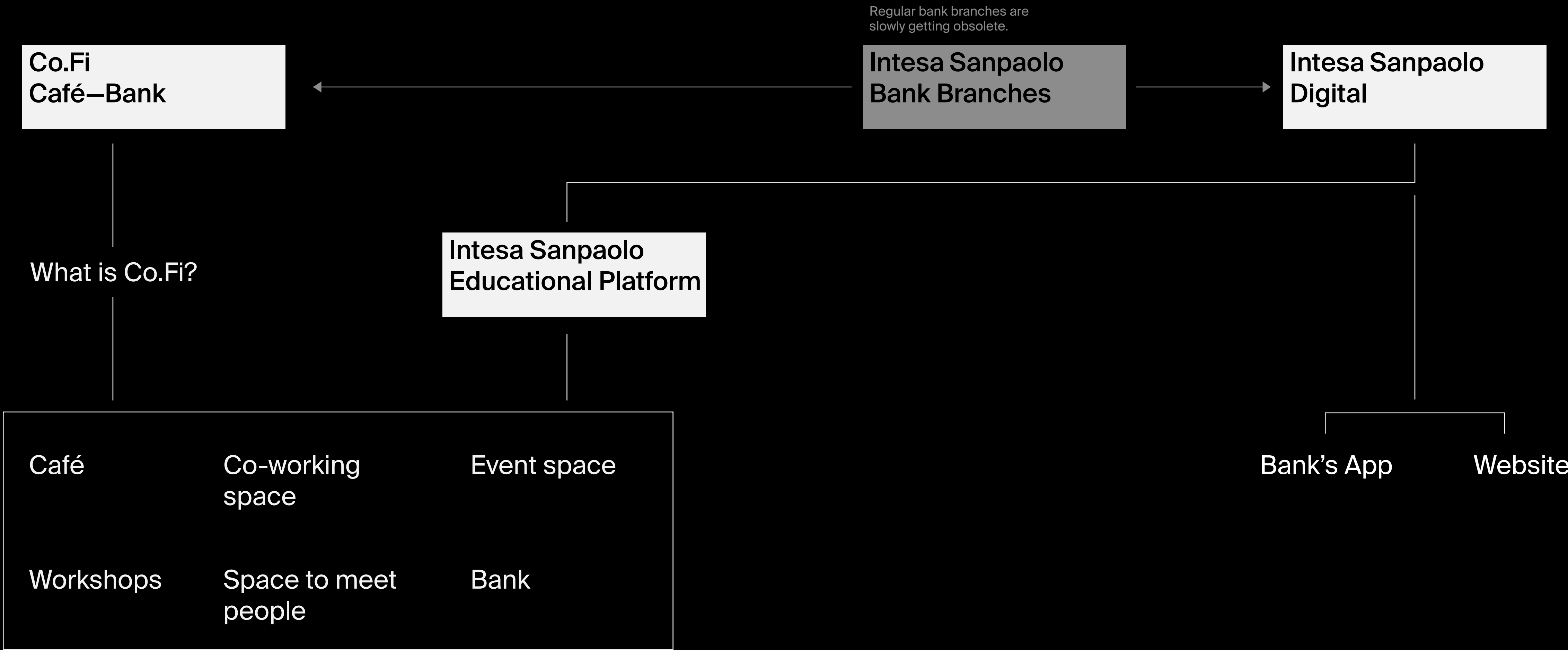
SYNTHESIS
HOW MIGHT WE...?

How might we create a new touchpoint in the Intesa Sanpaolo ecosystem, that's close to our target demographic and helps them start their money management journey through life?

DEFINE
BUSINESS MODEL CANVAS

<div>Key Partners</div> <div><div>→ Intesa Sanpaolo</div><div>→ Intesa employees</div><div>→ Bar/Café employees</div><div>→ Coaches/Advisors</div><div>→ Speakers</div><div>→ Food and beverage suppliers</div><div>→ Event organizers</div></div> <div></div>	<div>Key Activities</div> <div><div>→ Events / speeches</div><div>→ Talking about finance / giving advice</div><div>→ Advisors for bank clients</div><div>→ Café</div><div>→ Marketing</div></div> <div></div>	<div>Value Propositions</div> <div><div>→ Creating an open space where you can talk about money</div><div>→ Workshops / masterclasses</div><div>→ Provide Education</div><div>→ Education on personal finance in an easy / convenient way</div><div>→ Breaking the taboo</div></div> <div></div>	<div>Customer Relationships</div> <div><div>→ Build a relationship / community feeling</div><div>→ Build trust, feeling of safe and open space</div><div>→ Intesa customers have extra benefits</div></div> <div></div>	<div>Customer Segments</div> <div><div>→ People with some interest / intention to gain more knowledge and then start planning their finances</div><div>→ Intesa customer & non-customers</div><div>→ Young graduates</div><div>→ Students</div><div>→ Remote workers</div><div>→ Someone looking for a workspace</div><div>→ Café clients</div></div> <div></div>
<div>Cost Structure</div> <div><div>→ Employee salaries<ul style="list-style-type: none">- Bar management- Bar staff- Planning team- Financial advisors</div><div>→ Rent</div><div>→ Location + maintenace</div><div>→ Cost for food & beverages</div><div>→ Paid TED talks, speakers, events</div><div>→ Marketing costs</div><div></div><div>+ on start</div><div>→ Remodeling and furniture costs</div></div>	<div>Key Resources</div> <div><div>→ Location (Intesa branches)</div><div>→ Employees / advisors</div><div>→ Money / capital</div><div>→ Marketing</div><div>→ Financial education resources</div></div> <div></div>		<div>Channels</div> <div><div>→ Through Intesa communication</div><div>→ Education Plattform</div><div>→ Social Media<ul style="list-style-type: none">- LinkedIn campaigns- Instagram of the café- Social media channels of Intesa</div><div>→ YouTube videos of presentations and talks</div><div>→ Influencer partnerships</div></div>	<div>Revenue Streams</div> <div><div>→ Income from café</div><div>→ Indirect from more financial stable and savvy customers (interest on loans, fees for investments for bank)</div><div>→ Paid content / events</div><div>→ Renting space for events</div><div>→ Subscription model for premium features (in app)</div></div>

DEFINE
SYSTEM MAP



CONCEPT

TURNING BANK BRANCHES INTO SOCIAL HUBS

Co.Fi

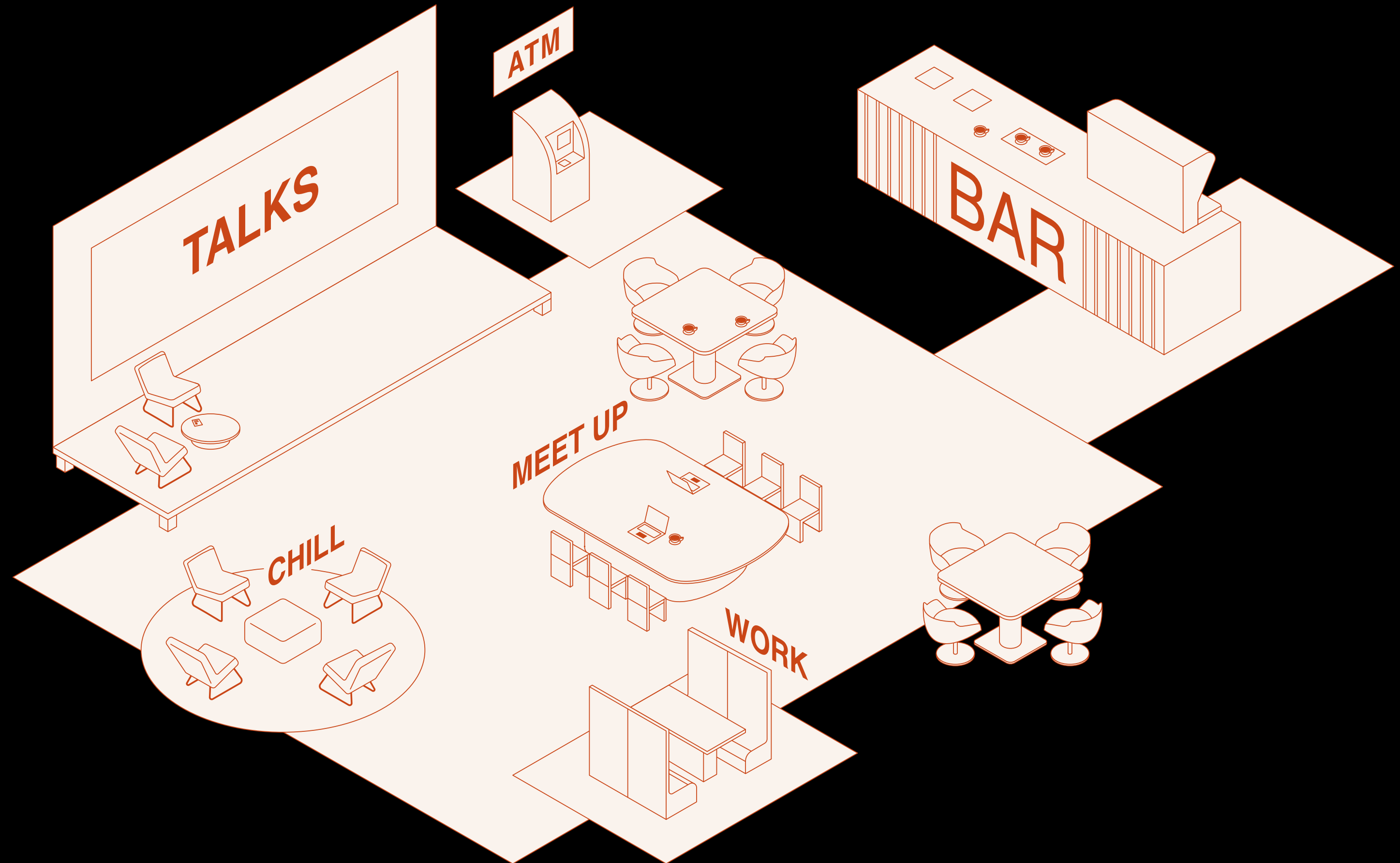
Co.Fi is a new take on the bank branch. An informal cafe, co-working tables and event space create a new type of place for people's self-improvement in many dimensions.

Educational Events

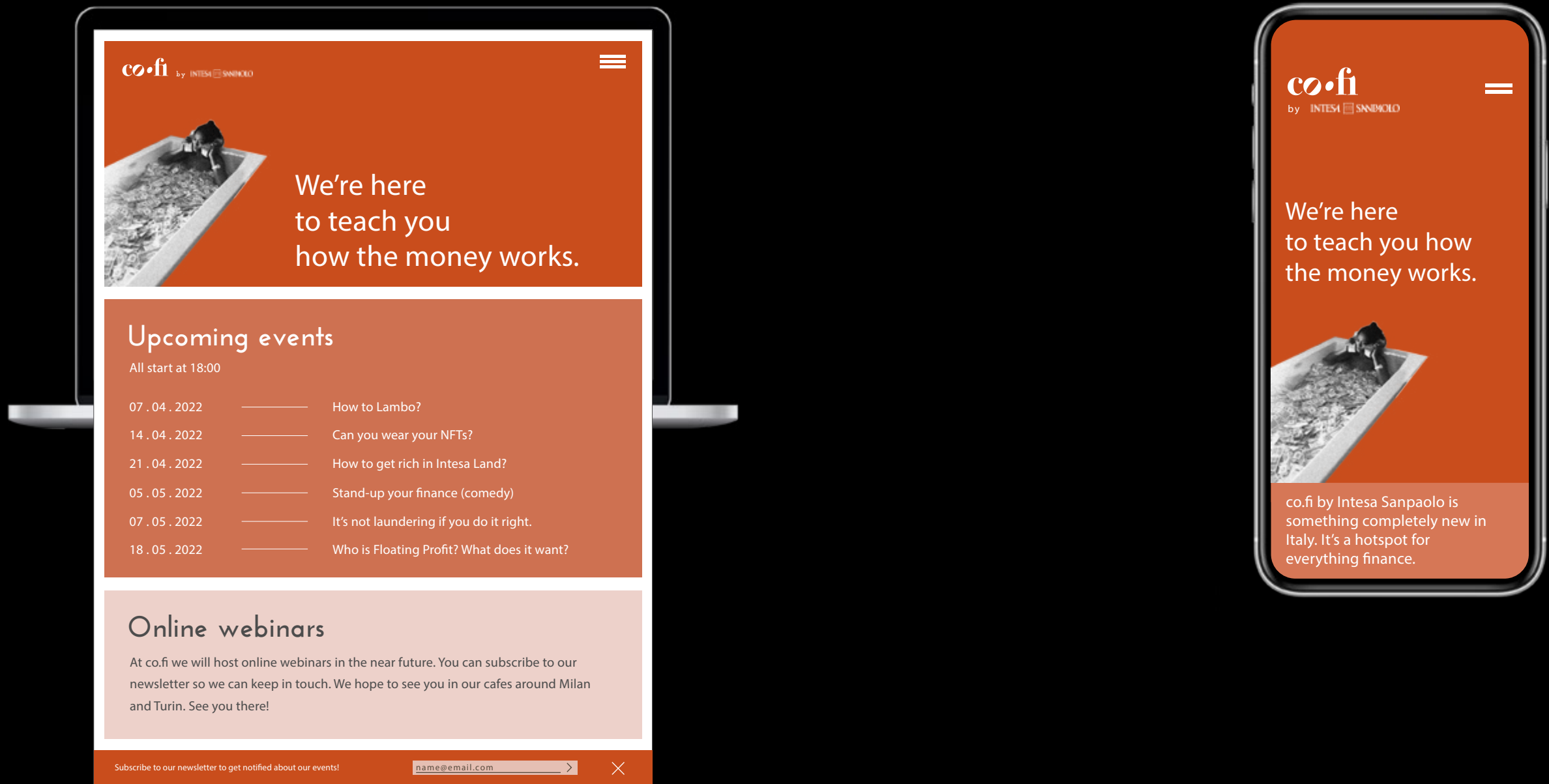
At Co.Fi clients can participate in events focused on financial education. Attendees can join panels, learn from experts and participate in workshops on themes ranging from crypto to commodity investing or real estate.

Masterclass

Co.Fi is part of a system where in-person hosted panels are recorded for online users. This online database is expanded by special Masterclasses where students can learn some more advanced topics than those covered in Co.Fi events.



CONCEPT
MOCKUPS



A quick mockup of a digital touchpoint of Co.Fi space. It would be a website with recorded events and articles about money management and related subjects, delivered in an approachable way.

VALIDATE
ROADMAP



The ultimate goal:

Forming good financial habits in the long term, so the Italian society will benefit from it the future.

YAMAHA
SOUND FIELD CONTROLLER

2019 – 2020

Scope of work
Research & Design Exploration
Industrial Design
UX Design
Prototyping



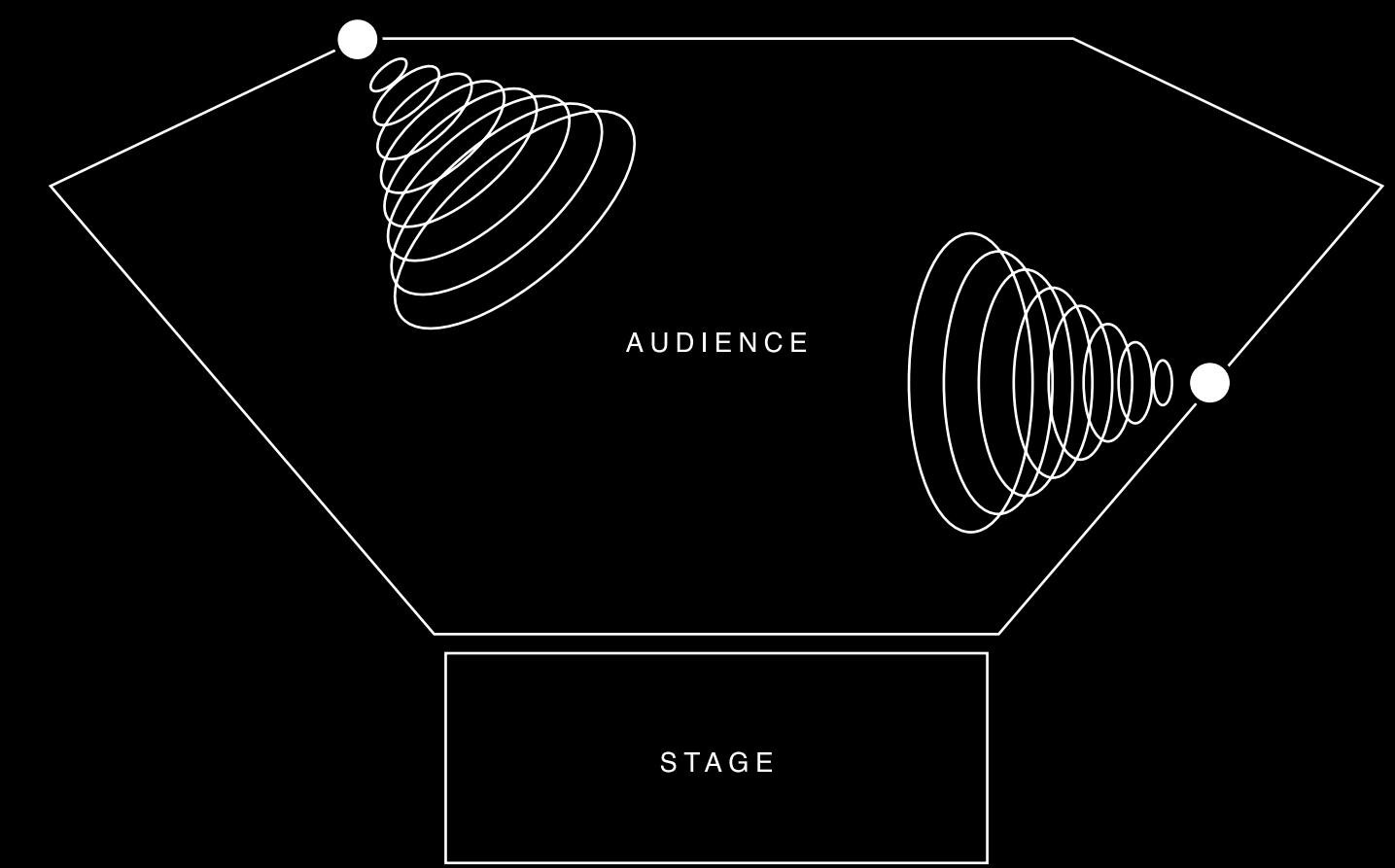
INTRODUCTION BRIEF

In Yamaha's Advanced Design R&D group I worked with software and mechanical engineers on an innovative interface to control sound in 3D space.

The biggest challenge for our team was to make Yamaha Active Field Control (AFC) technology easier to use. We aimed to create an intuitive interface and to bring the technology to more people.



INTRODUCTION TECHNOLOGY



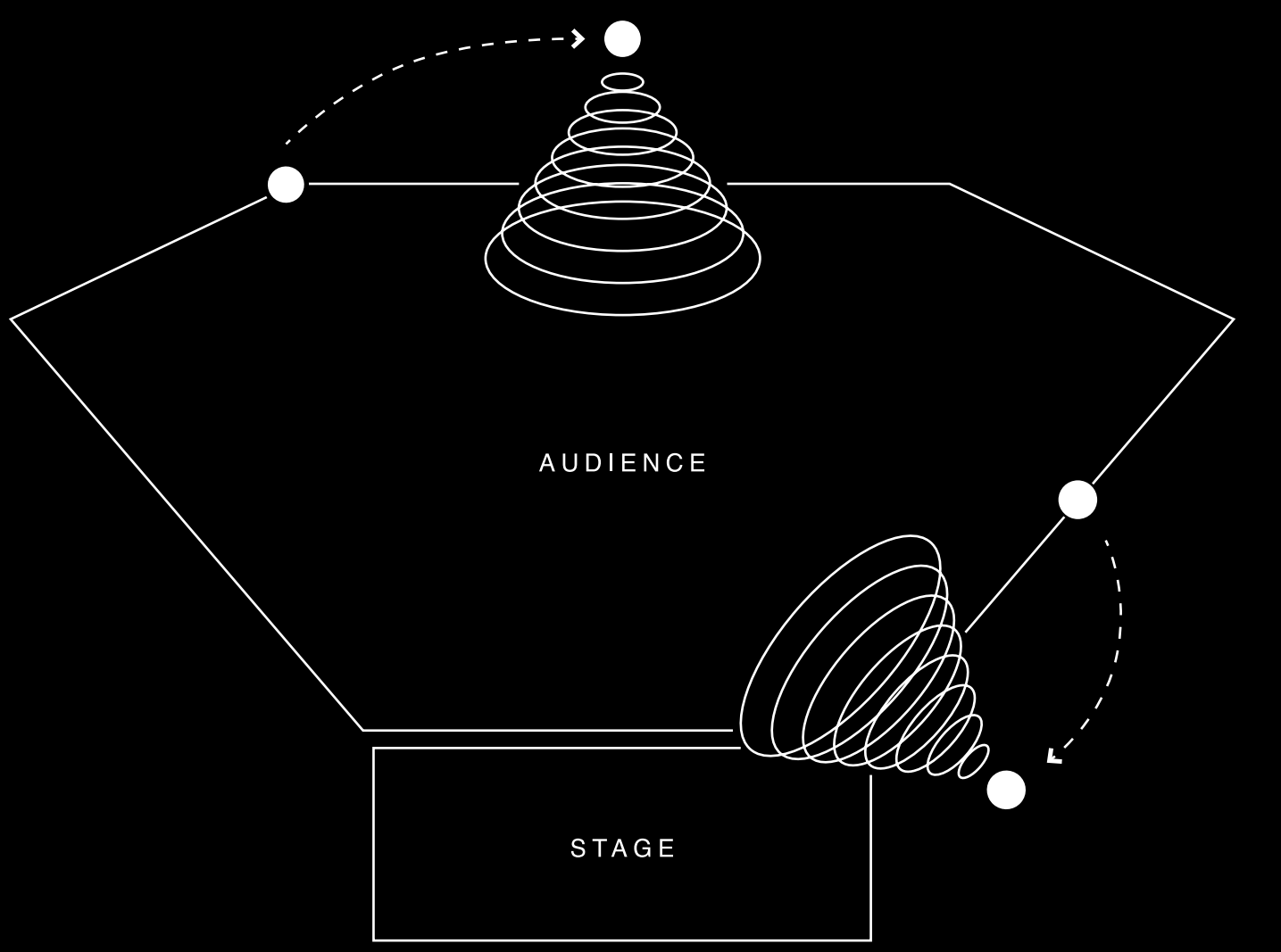
Sound Source Positioning.

With a conventional stereo configuration, the acoustic image will vary according to the listener's position. Immersive systems, on the other hand, allow acoustic images to be placed wherever they are needed to produce the desired effect, and their position remains absolute regardless of listener location.

Immersive Sound System.

Active Field Control (AFC) Image is a Yamaha immersive system that allows users to control the perceived positions of acoustic images within a space.

AFC Image provides broad content creation support for theatre, opera, concert, installation, event and other applications.



Sound Motion.

By precisely varying the output balance from the system's multiple speakers, sound can be moved to match programming and staging needs. Smoothly moving object-based audio in any place including the vertical, provides a level of freedom opening up new possibilities for content delivery and staging.

RESEARCH USERS



for DJs



for clubs



for music producers

Defining Target Group.

The team decided upfront who we are designing for. We settled on DJs, musicians, home studios and smaller venues to become our primary targets.

for performing artists




RESEARCH

USER JOURNEY
TECHNOLOGY
PERSONAS
SETUPS

UI

3. Design Research



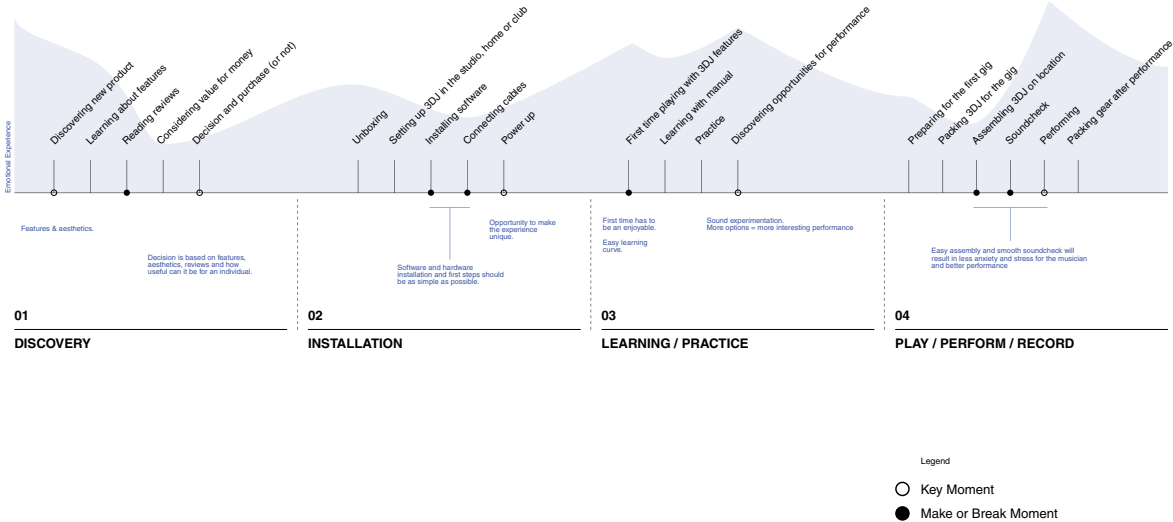
INSIGHT

A few interesting and maybe unusual physical UI solutions

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User journey map


5. Opportunity mapping



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Sound Designers & Producers

2. User

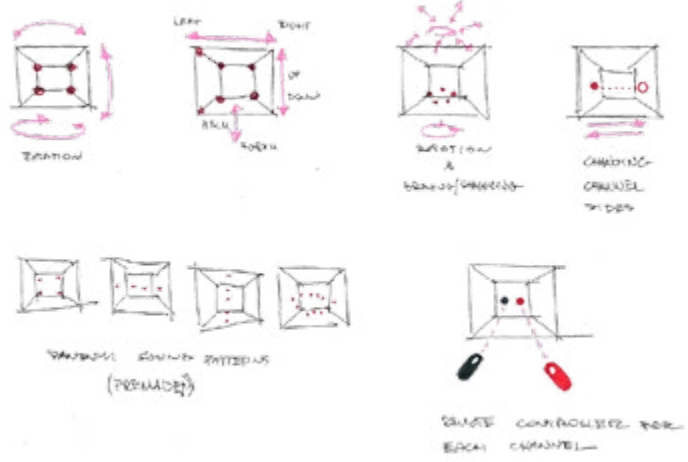


Producers use a lot of different tools for their work and sound processing. They create hit songs, sounds for electronic equipment around us or score film production. Film scoring artists could add extra dimension with 3DJ by emulating the effect of what a viewer can hear in a theater.

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List of function

4. Interface & Functions assessment




Basic functions for 3DJ

- Rotating sound in 3 axis (X, Y, Z)
- Moving sound in 3 axis (X, Y, Z)
- "Remodelling" sound space (resizing, turning, shrinking, expanding)
- Controlling individual channels
- Generating different sound environments by changing sound source position
- Controlling the sound using pointing device (remote)

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Other controllers

3. Design Research



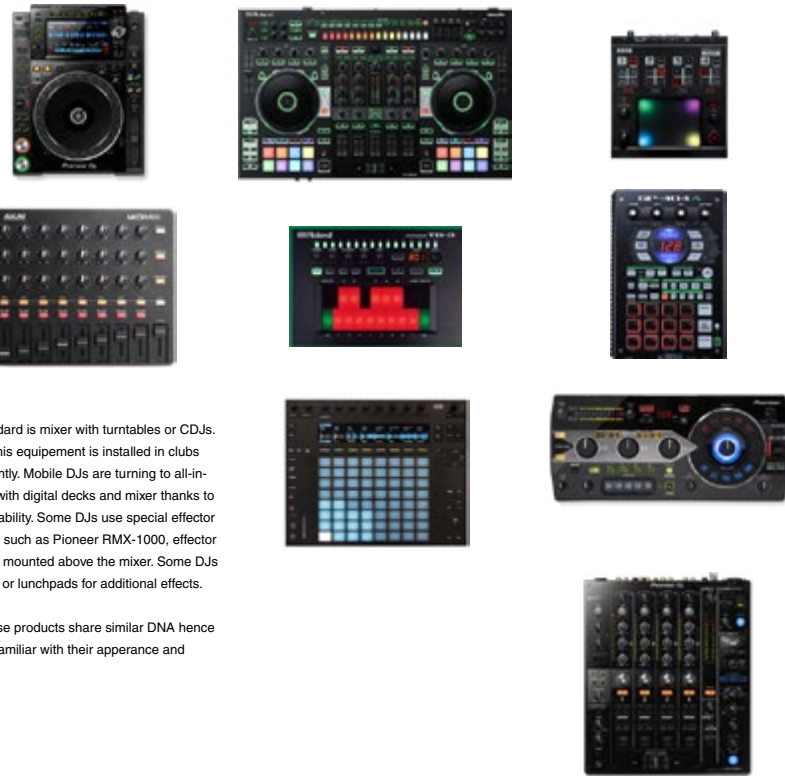
INSIGHT

Video editing consoles are interesting since they use trackballs for colour calibration. Trackball has additional ring around that could act as a 3rd axis in our design.

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DJ products - Summary

3. Design Research



INSIGHT

DJs standard is mixer with turntables or CDJs. Usually this equipment is installed in clubs permanently. Mobile DJs are turning to all-in-one rigs with digital decks and mixer thanks to their portability. Some DJs use special effector hardware such as Pioneer PMA-1000, effector is usually mounted above the mixer. Some DJs use pads or launchpads for additional effects.

All of those products share similar DNA hence DJs are familiar with their appearance and controls.

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Research Direction.

To better understand the task I looked at how potential users would use our design. Researched current DJ products and midi controllers which are a good reference for the project.

Proto-persona

5. Opportunity mapping

FACTS

BEHAVIOURS

PROBLEMS

GOALS

- 24-32 year old
- Interested in electronic music
- Part of the local music scene
- Made music for friends' short film

- Wants to make the performance more unique for the audience
- Wants to stand out from other DJs/musicians
- Wants to perform better and hear music better
- Wants to be better at mastering and manipulating sound for e.g. film scoring
- Wants to be better, more versatile musician

INSIGHT

Proto-persona helps understand our future user- his or hers needs and wants, problems and reasons why our new product will be interesting and worth trying out.

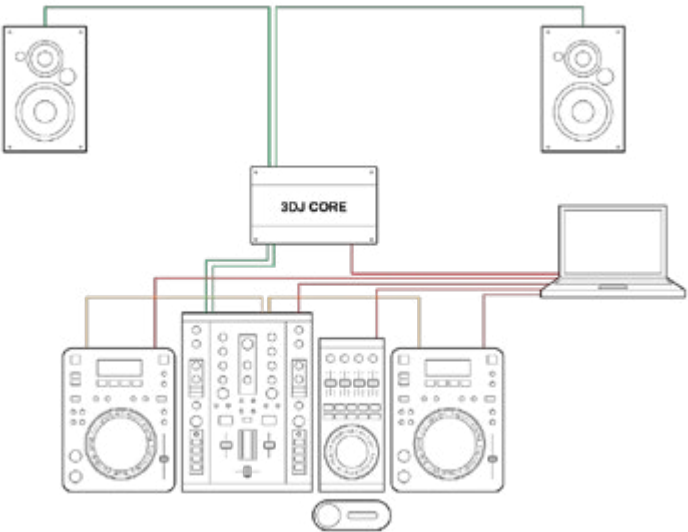
Proto-persona matrix chart is followed by possible speculative user journey.

This hypothetical assessment let us imagine scenarios and define keypoints for design.

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Interface setup

6. Hardware interface architecture



Digital DJ setup

Music is played from the computer through CDJs and mixer, all devices has to be connected to the computer which controls DJ and 3DJ software.

INSIGHT

Too many USB connections.


Colour

- Audio in
- Audio out
- USB in

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Overview

4. Interface & Functions assessment



DJ products are quite complex but they share similar types of controls such as knobs, faders, switches, pads and buttons. Even if they serve different purpose these interfaces are easy to learn due to their similar appearance and common basic functionality.

Our challenge is to teach artists how to work with sound in 3-dimensional space by using new controller - trackball.

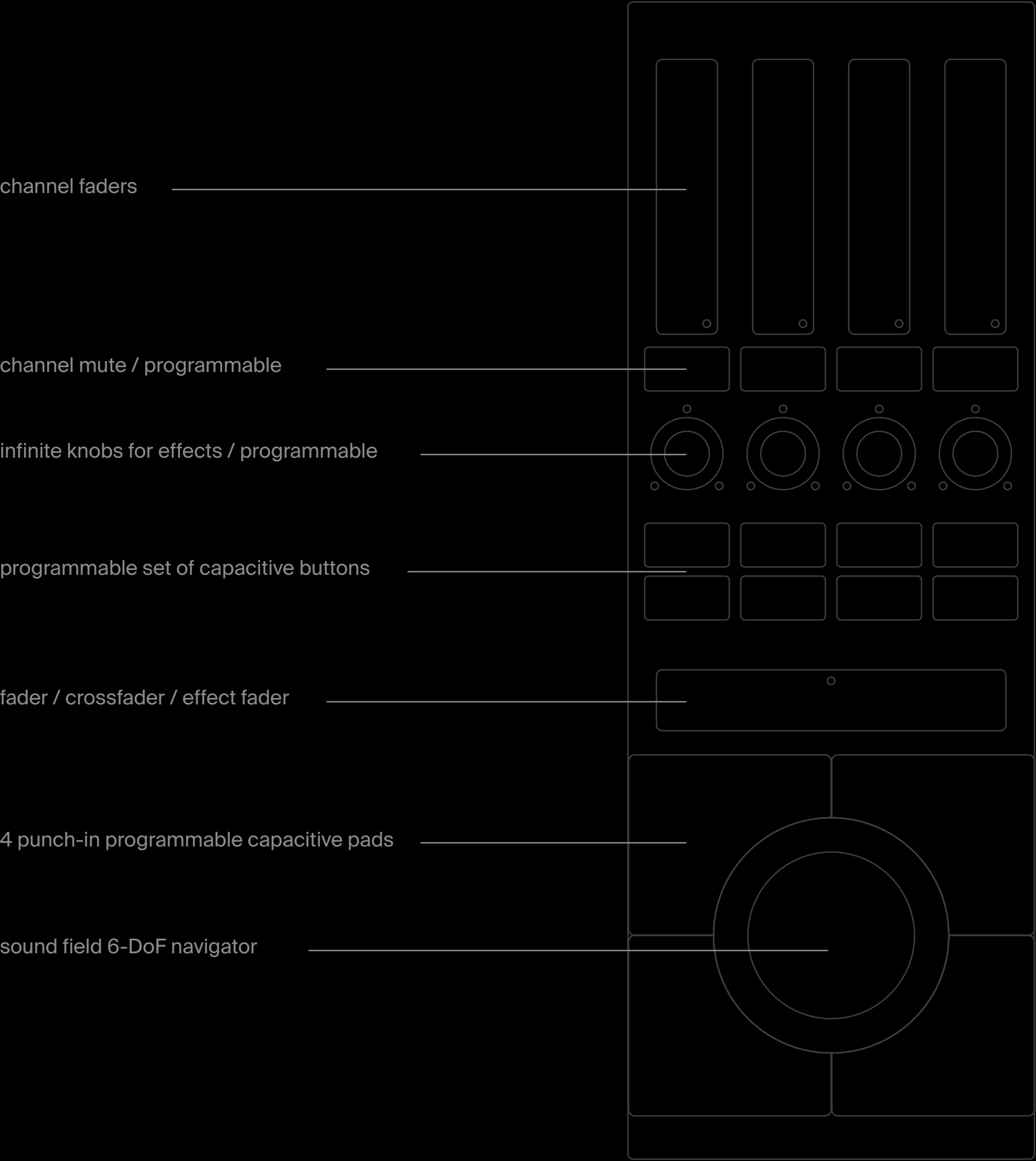
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UX DESIGN

A NEW TYPE OF INTERFACE

We designed a completely new device to control sound in three dimensions. Until now this technology was reserved to sound engineers only using professional-grade sophisticated tools like Yamaha Rivage stage mixers.

We shrunk down the product to a compact package equipping it with customisable buttons that can be programmed via DAW or DJ software. We created the product to resemble some of the other midi devices artists are already using to lower the entry bar.



FUNCTIONAL ZONES

Faders

Control individual channels (4) with software extension to 8 channels total.

Effects & Presets

Function of the rubber pads is assigned in software. They can act as preset switch or effect trigger. Strength of the effect (or preset) is regulated with infinite spinning knob.

Touch Fader

Works with sound field or effects.

Sound Field Control

Most important part of the interface. Rotates, pans, spins etc. the sound. It has to work alone and together with other functions. It is the most used zone that's why it is positioned closest to the artist.

PROTOTYPES

We built fully functioning prototypes and tested them inside the company with Yamaha musicians. Sound Field Controller can be paired with flat midi devices or adjusted to the same height as mixers with a special stand.





THE OUTCOME

PROOF OF CONCEPT	Our team has proven that active sound field technology can be shrunk to a smaller device and used in a new environment enabling artists with a new tool to express their vision.
PATENTED USER INTERFACE DESIGN	The design of our patented UI enables quick adjustments without pre-programming the spectacle. Artists or engineers can manipulate sound space in real time with a 5-axis knob.

