

enso
step into knowledge.

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Course

Innovation Studio
Higher Education in Uncertain Times - 2037

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Bold team

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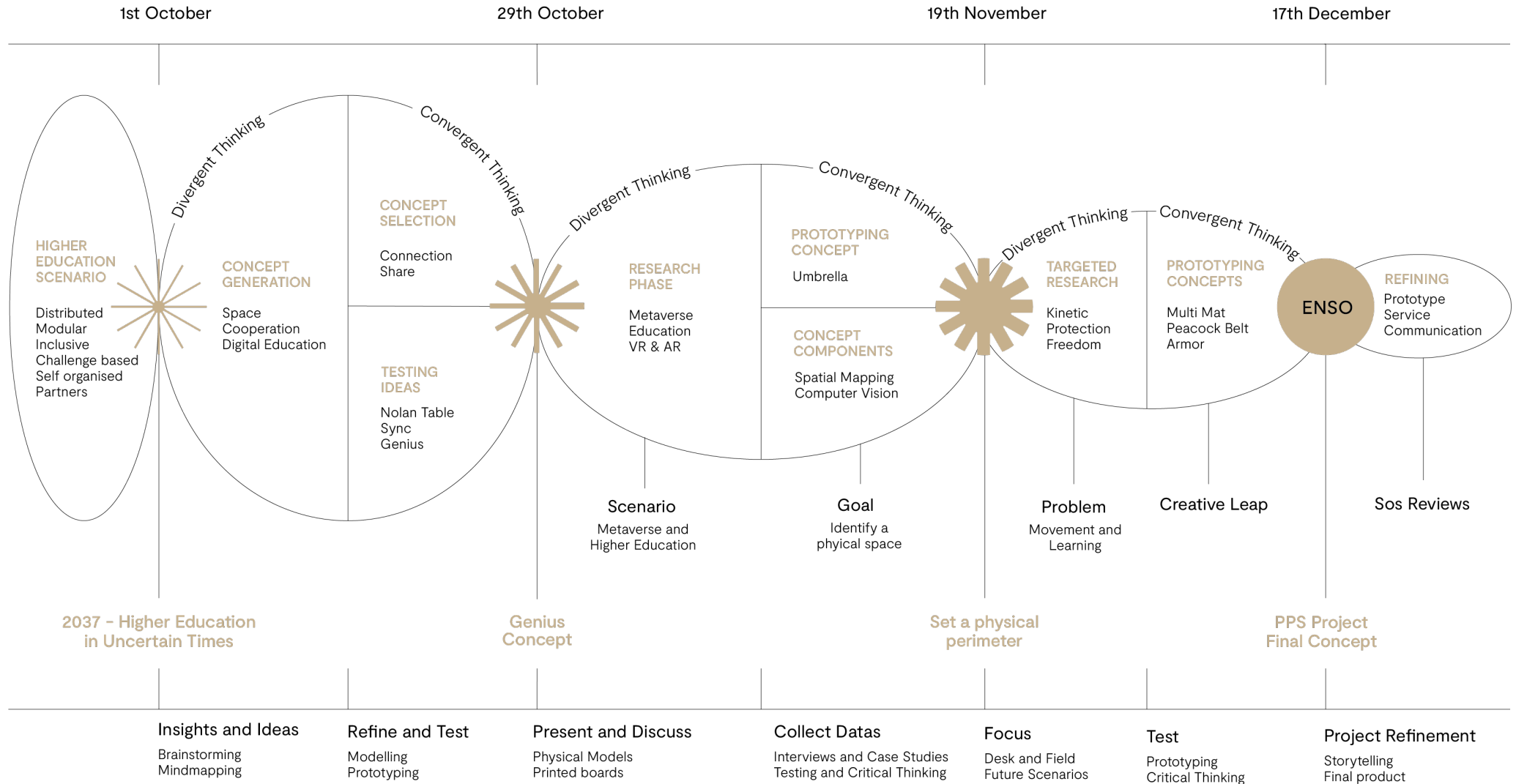
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Methodology

01





Scenario

02

Opportunity Area

The design has directly followed the **evolution of the human-computer relationship**. We saw a clear shift as digital technology came to include a wide range of experiences, making computers an intrinsic part of our world. The Metaverse, in turn, describes the next stage of this evolutionary journey: **computers as portals to whole new worlds**.

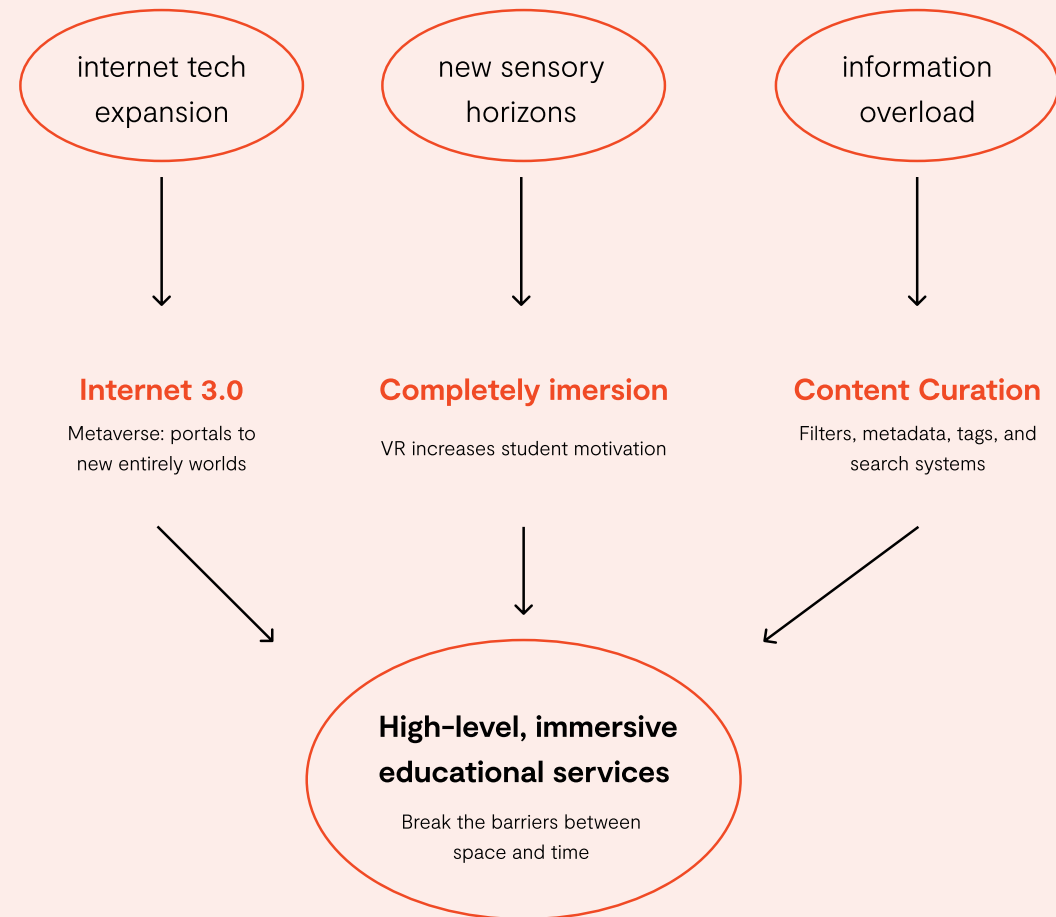
It will force a new design approach. Instead of focusing on the user, it will orient us **around the person** occupying this virtual world. In the Metaverse, the design will be **completely immersive**.

The design of the future will not be concerned so much with how quickly someone reaches their goal - but rather whether the user is **engaged enough to complete the whole process in the best way possible**. With this growth in immersion and amount of content due to **information overload**, filters, metadata, tags, and search systems may be the most critical infrastructure technology for years to come.

When it comes to education, many educators hope that virtual world technologies will enable institutions to **provide top-notch service and instruction to students**, no matter where they live. More and more educational centres worldwide have begun to introduce powerful new technology-based tools that help meet the needs of the diverse student population. Standalone VR is undoubtedly the future of VR in education due to its **untethered nature, immersive capabilities, a wide range of applications, and relatively low price**.

Virtual reality will be the protagonist of an enormous development that will allow us to discover **new sensory horizons**, enabling as little as possible to be lost when interaction moves from the real to the virtual world. The opportunity to **break the barriers between space and time** gives us the freedom to develop projects that involve touch, taste, smell, and stimulating sensations.

Since a deep, **immersive flow results in better and faster results**, we want to focus our product first on the user's well-being. Our main goal is to make people comfortable and confident to fully immerse themselves in this universe. However, the transition to this world has to be **gradual, fluid, and natural** so that the body can manage a new reality never before known.



But First...

The metaverse promises to improve many areas of our daily lives. However, with the emergence of any innovation, especially those directly affecting human behaviour, **some concerns cannot be ignored.**

High-end computers, game consoles, and VR headsets that support detailed virtual environments can be expensive. People with mobility issues or slow Internet connections may find moving an avatar in a real-time 3D world inconvenient. It can further widen the gulf of social inequality, creating a **division between those who can and those who cannot connect.**

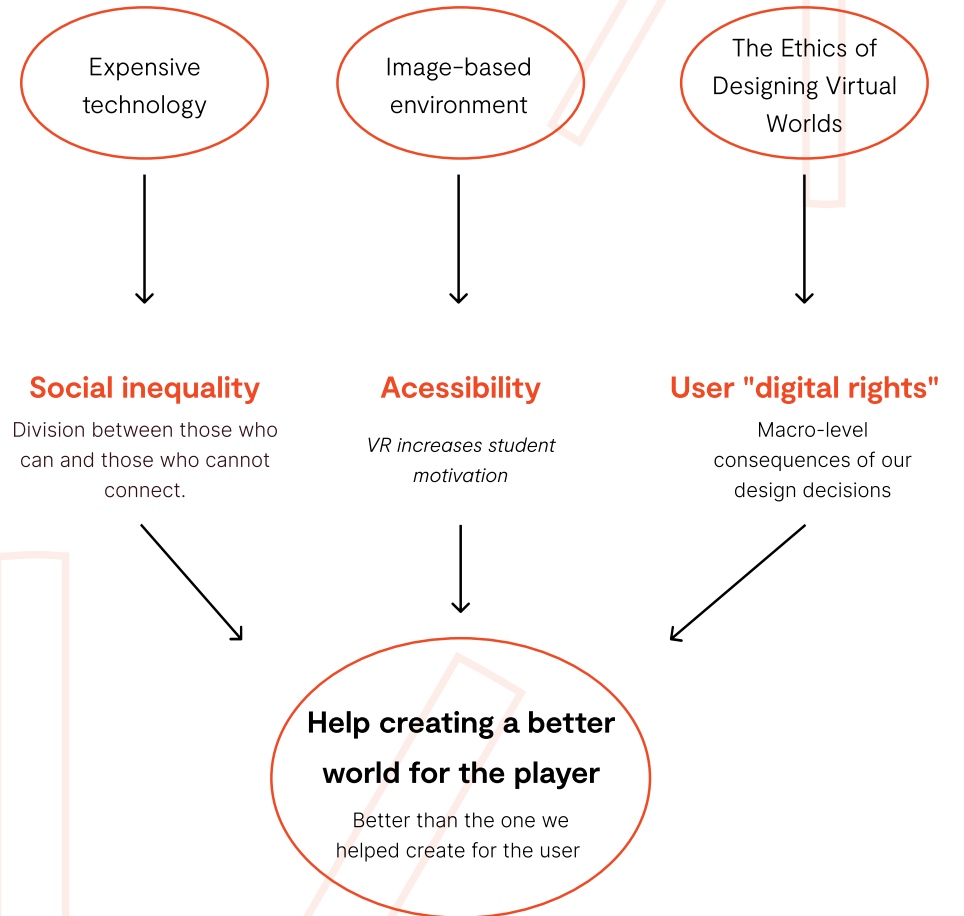
In addition, people with low or no vision can use screen readers to access text on web pages, but navigating in an image-based environment may be more difficult. **Accessibility experts** can help mitigate these problems, but there is still a long way to go before they are solved.

In the future, even the **macro-level consequences** of our design decisions will take on a new physicality. While the poor design on something like a social media platform today may manifest as a drop in engagement, imbalances and inequality in the future may **manifest changes in behaviour.**

With virtual reality headsets and augmented reality glasses, people will be able to socialize, worship, and work in environments where the boundaries between environments and between the Digital and the Physical are permeable. In the metaverse, people will find **meaning and have experiences in conjunction with their offline lives.**

Therein lies the problem. **The rise of the metaverse can open up new vulnerabilities and present new opportunities to exploit them,** not only for capitalism but even for terrorism, as it allows new ways for extremists to exert influence through fear, threat, and coercion. Also, because of the tangible way that unethical design will present itself in this virtual world, we will have to be extra careful to guarantee the **user "digital rights."**

Virtual worlds are independent realities that can transform human beings, as self, community, and even notions of human nature are being remade. The metaverse, therefore, **offers us an opportunity to create a more just society.** And it is up to us, the designers of this new world, to decide whether or not to take this chance.



How Will Education Look Like In 2037?

Life long learning

From
Students received 4 years of college education, front loaded at the beginning of adulthood.



To
Students received a lifetime of learning opportunities.



Higher education needs to prepare for new models, driven by changes to jobs, new skills and unsustainable student debt.

Not all up front

From
Structured 4 year courses of study advanced students by seat hours on a quarterly rhythm.



To
Three phases of varied lengths provided personalized, adaptive, calibrated learning.



Flipped

From
Knowledge within a particular discipline was the criteria for graduation skills were secondary.



To
Stanford flipped the axes so that skills development became the foundations.



Missions not Majors

From
Students declared Majors and focused their studies around set requirements.



To
Students declared Missions and coupled their disciplinary pursuit with the purpose that fueled it.



The Future of Skills, NESTA, Oxford School and Pearson, Data Vizualisation by Dr. Cath Sleeman, 2016

Scenario

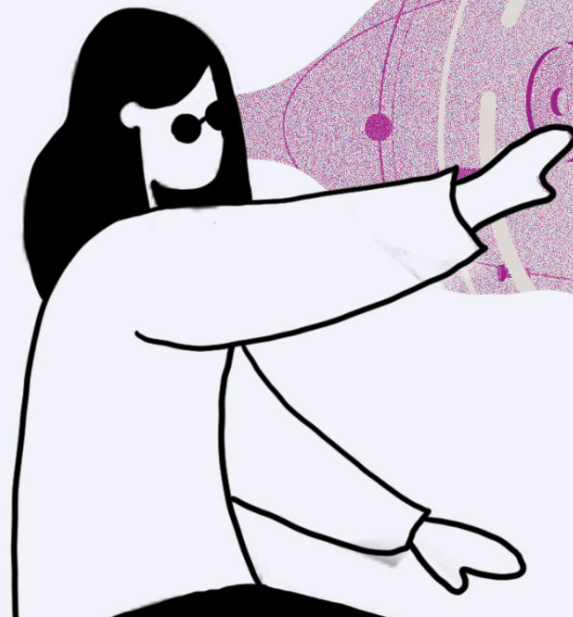
Hi, my name is Julia. Nice to meet you!

The year is 2037. I don't know precisely when the **virtual meta world** expansion started, but about 5 years ago, a 3D world wide web was launched, and with that, augmented social reality started to spread. I remember the news when they first talked about it, and all the problems pointed out. We believed it would be an opportunity to travel without moving, learn some things and play realistic video games. But here we are, **living in an entirely fictional reality.** The jobs, the schools, the relationships exist in this world called the "**metaverse**".

There are some advantages, I admit. I have some possibilities that my mother or even my older sister didn't have. Just yesterday, I attended a class in Denmark with a famous product designer, and I could spend hours replicating his steps until I could create the perfect prototype. **Time in college is now relative.** If you are a fast learner, you can reduce it by up to 2 years. Also, the **college became more accessible** because they didn't have to deal with that much physical infrastructure.

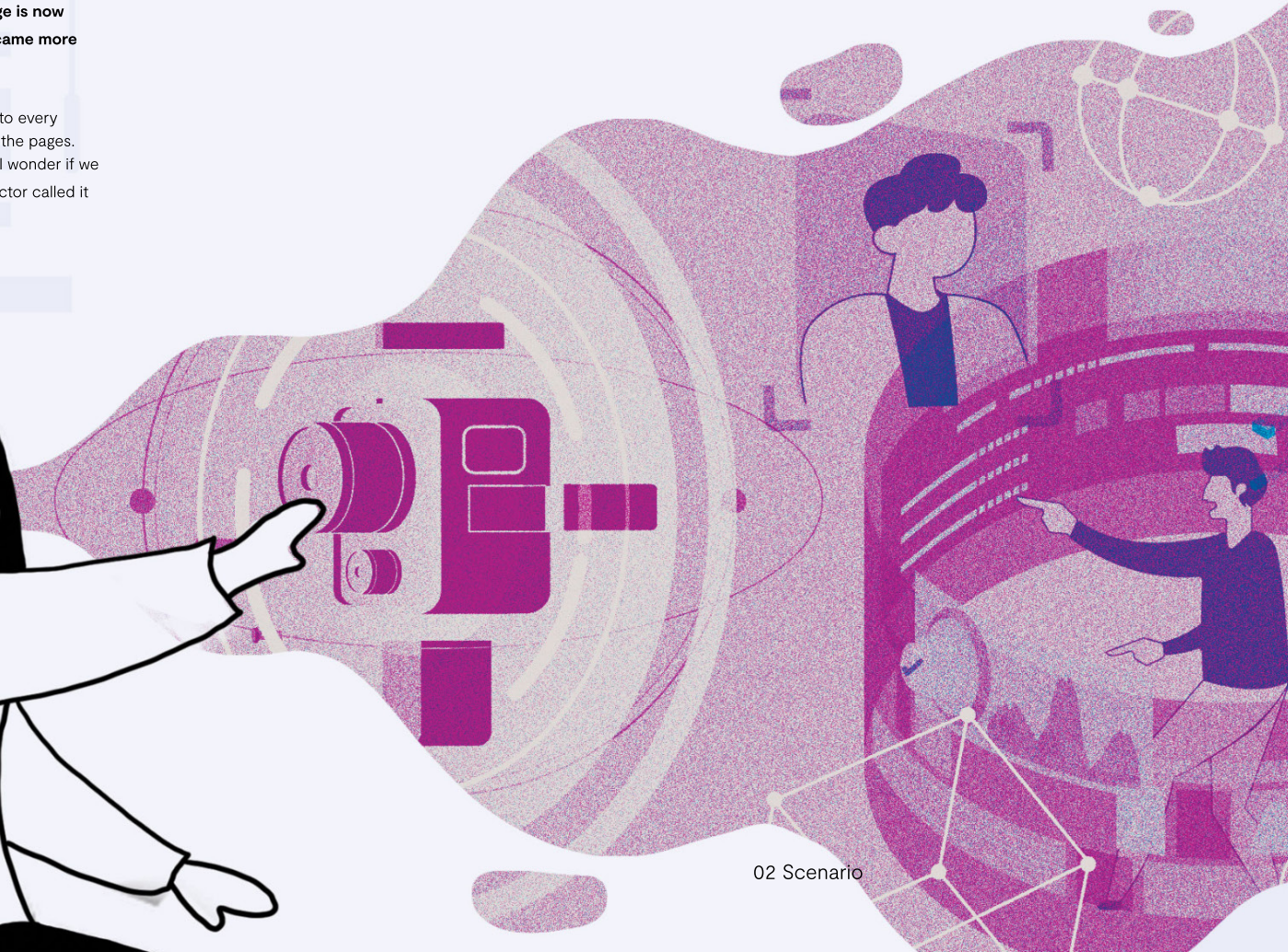
For example, one of my favourite meta parts is browsing the **global library.** I have access to every academic library in the world, but I miss the feeling of holding a book and flicking through the pages. Some practical sensations we were used to, like the smells and the city's noise, are gone. I wonder if we are **losing our senses over time.** Sometimes I suddenly feel them out of nowhere, the doctor called it the "ghost effect".

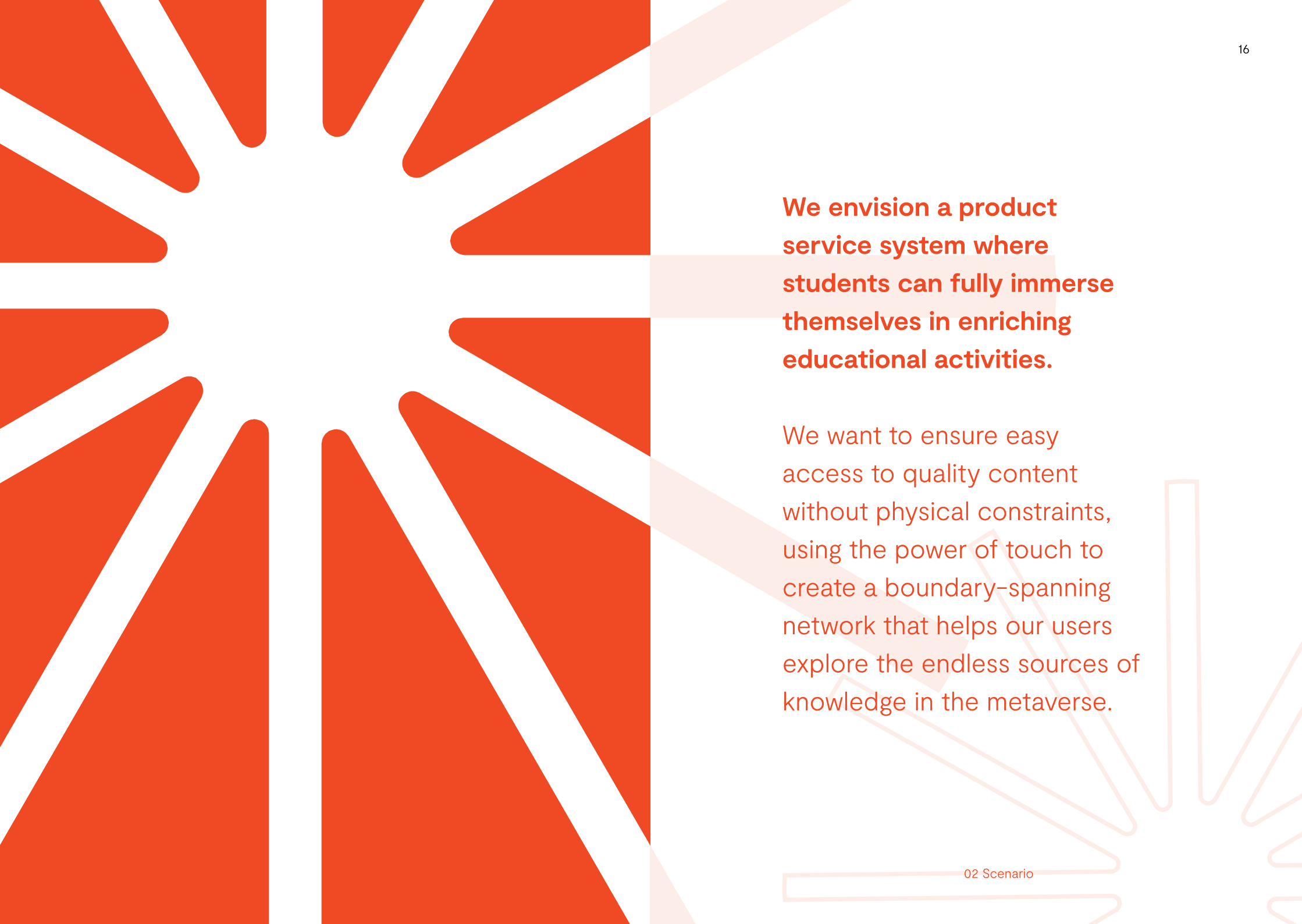
Some studies say we are improving our vision, while others say **VR contact lenses** damage our eyes. It seems to be the kind of research we won't know for sure for a few years. Maybe I can buy some **NFT research** on this or search for it in the library. But well, these things are constantly changing, I remember when they said meta-reality would not be accessible, and here we are with **on the planet.** Tech companies have invested heavily in this, as much as a **nuclear power.** People say it is the future of energy, but let's see.



Basically, in classes, we can usually choose between online or offline theoretical courses since most of the **students are from other countries.** The majority of the practical studies happen in the metaverse since the campus has been reduced to **small classrooms and some big coworking spaces.** The classes are smaller, and I'm very close to my classmates. We do everything together, even if we are from entirely different countries and have never seen each other in person.

Well, I have to go now. I'd like to chat more, but the class of **my favourite influencer** starts in 2 minutes, and I still need to pick up my boyfriend in India. He is having a bit of trouble disconnecting from a video game last week... But I'm super excited about this class, and he promised me we would watch it together.



The background features a large, stylized orange sunburst or starburst pattern on the left side, composed of numerous triangles of varying sizes. On the right side, there is a faint, light orange outline of a hand with fingers spread, positioned as if reaching towards the text. The overall color palette is primarily orange and white.

We envision a product service system where students can fully immerse themselves in enriching educational activities.

We want to ensure easy access to quality content without physical constraints, using the power of touch to create a boundary-spanning network that helps our users explore the endless sources of knowledge in the metaverse.

The image features a solid yellow background. In the lower-left quadrant, a white semi-circle is partially visible, from which several white bars of varying lengths and orientations radiate outwards. Some of these bars are solid white, while others are white outlines. The bars extend towards the top and right edges of the frame. In the upper-right area, the word "Product" is written in a bold, black, sans-serif font. In the bottom-right corner, the number "03" is displayed in a large, bold, black, sans-serif font.

Product

03

How might we harness the human senses to create this safe space for both mind and body?

The answer was simple: **understand how people without sight perceive the physical boundaries of space.**

Inspired by tactile rubber flooring, we created a **circular wood mat** that, through a **three-dimensional pattern**, shows the student that they are leaving a **delimited space**. The produce is a **180 cm diameter** mat made of **plywood** engraved thanks to **CNC machines**.

By moving away from the central flat surface, where the student is supposed to stand still, the pattern improves its scale and provide **increasing analogic feedbacks** to the student about its location across the mat without distracting him from the VR session providing, in this way, a **pleasant and psychological safe experience**.

In addition, the mat also works as a **replacement for remote controls**. Due to the VR glasses' technology, we can **perceive the presence and absence of movement** and replicate the actions into the virtual.



Key Features

- Aesthetically pleasing
- Safe
- Low-Tech
- Sustainable
- Environmentally friendly



Specification

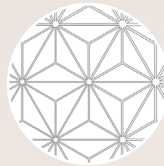


Different stimulation

Three different levels of stimulation are brought to the user through the different sized patterns on the mat, allowing them to move freely while recognizing the space around them.

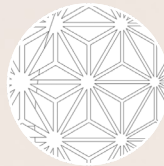
Standing Area - Comfortable

The dense pattern provides the same tactile sensation as standing normally and provides proper static space for the user.



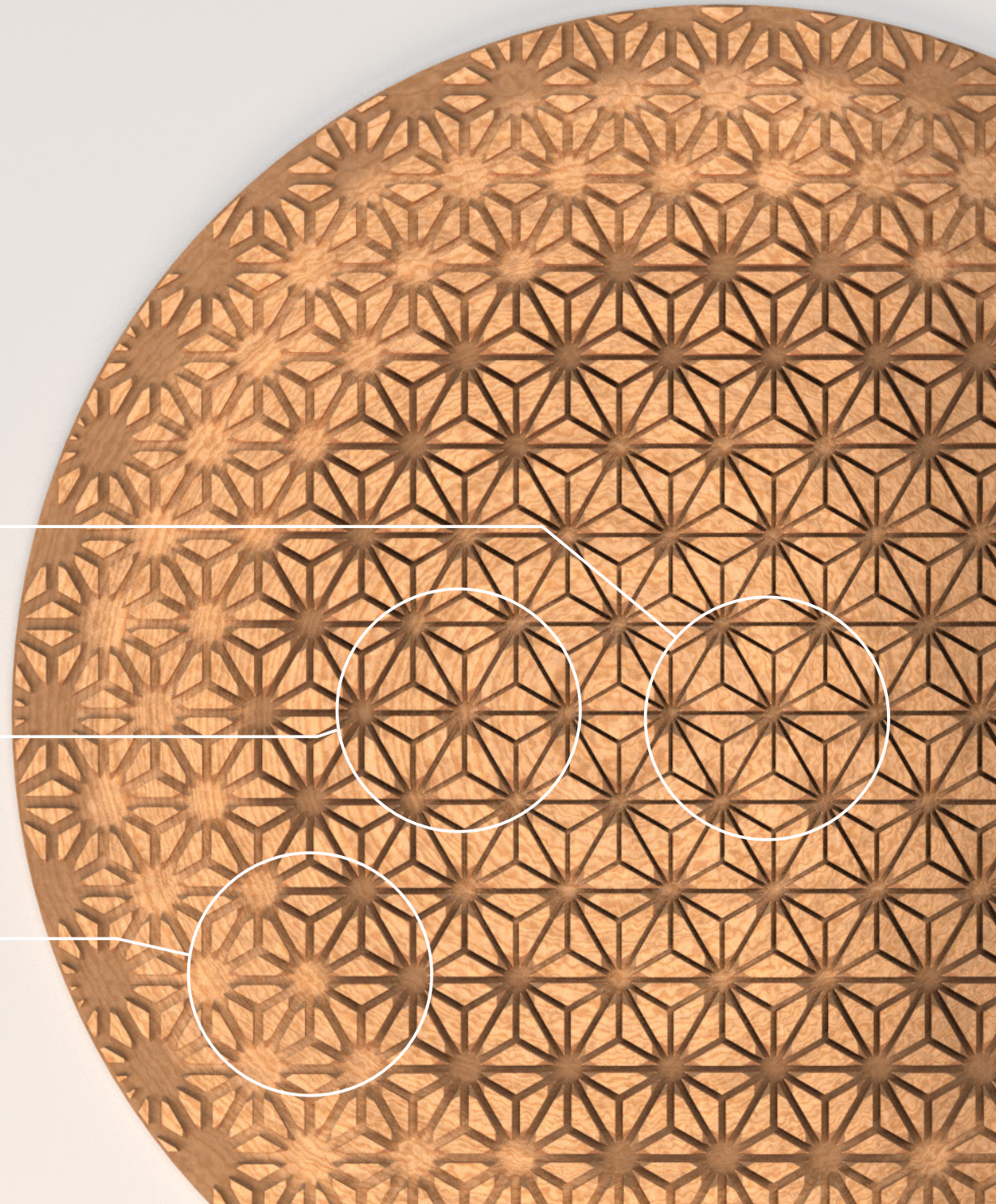
Moving Area - Massage

Users control their behaviour through the feedback of massage sensation when touching the appropriate density of patterns with their feet.



Warning Area - Soreness

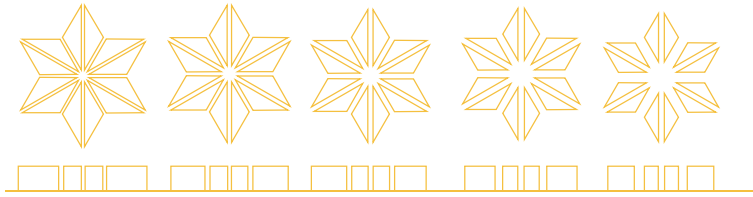
The small area of the pattern can bring an electric sensation of soreness to the user so that the user can be aware of the border at the moment of touch.



Specification

Pattern

According to our test, the split hexagonal star pattern was finally chosen because this pattern could bring the student enough stimulation and massage feeling.

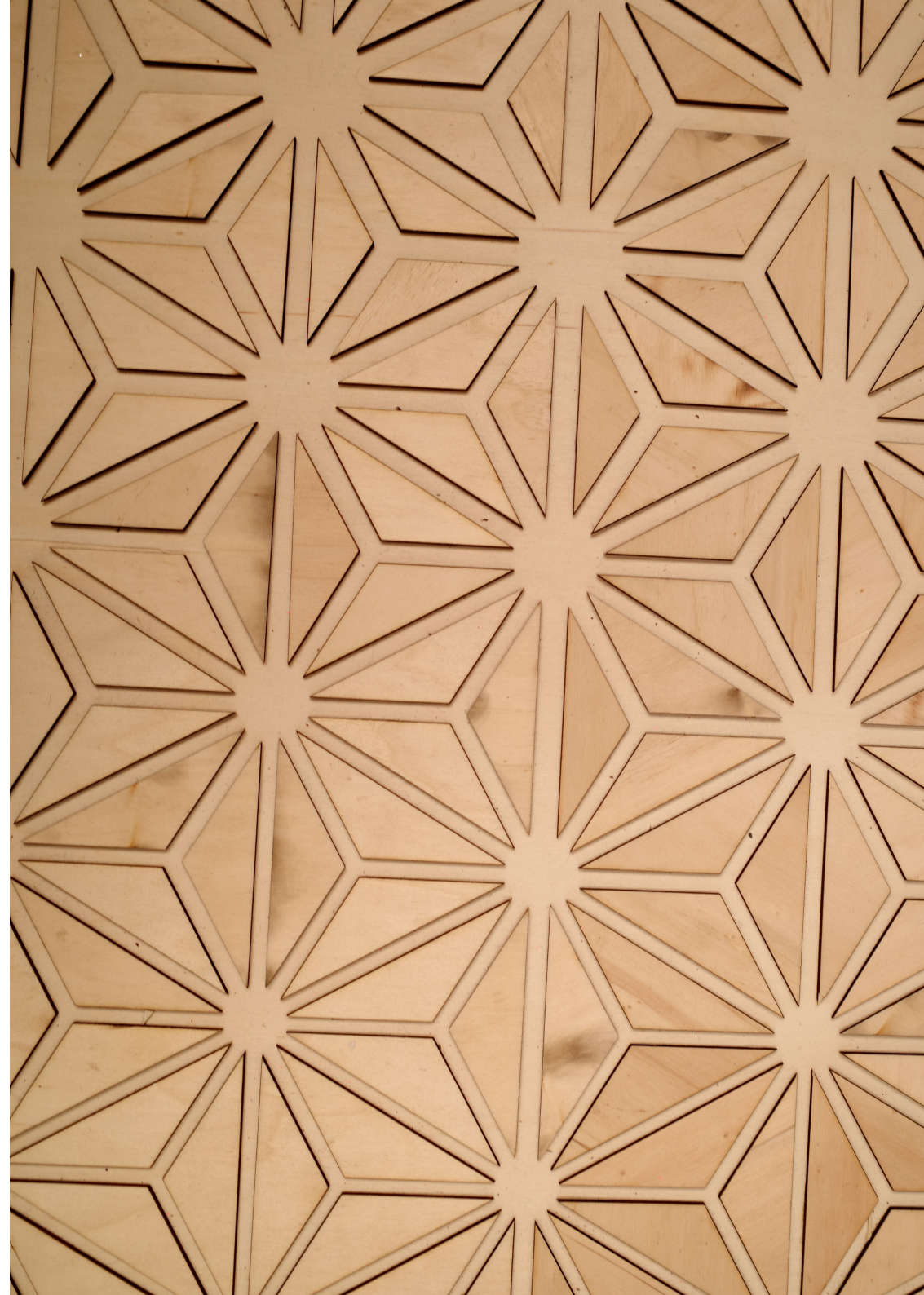


Size

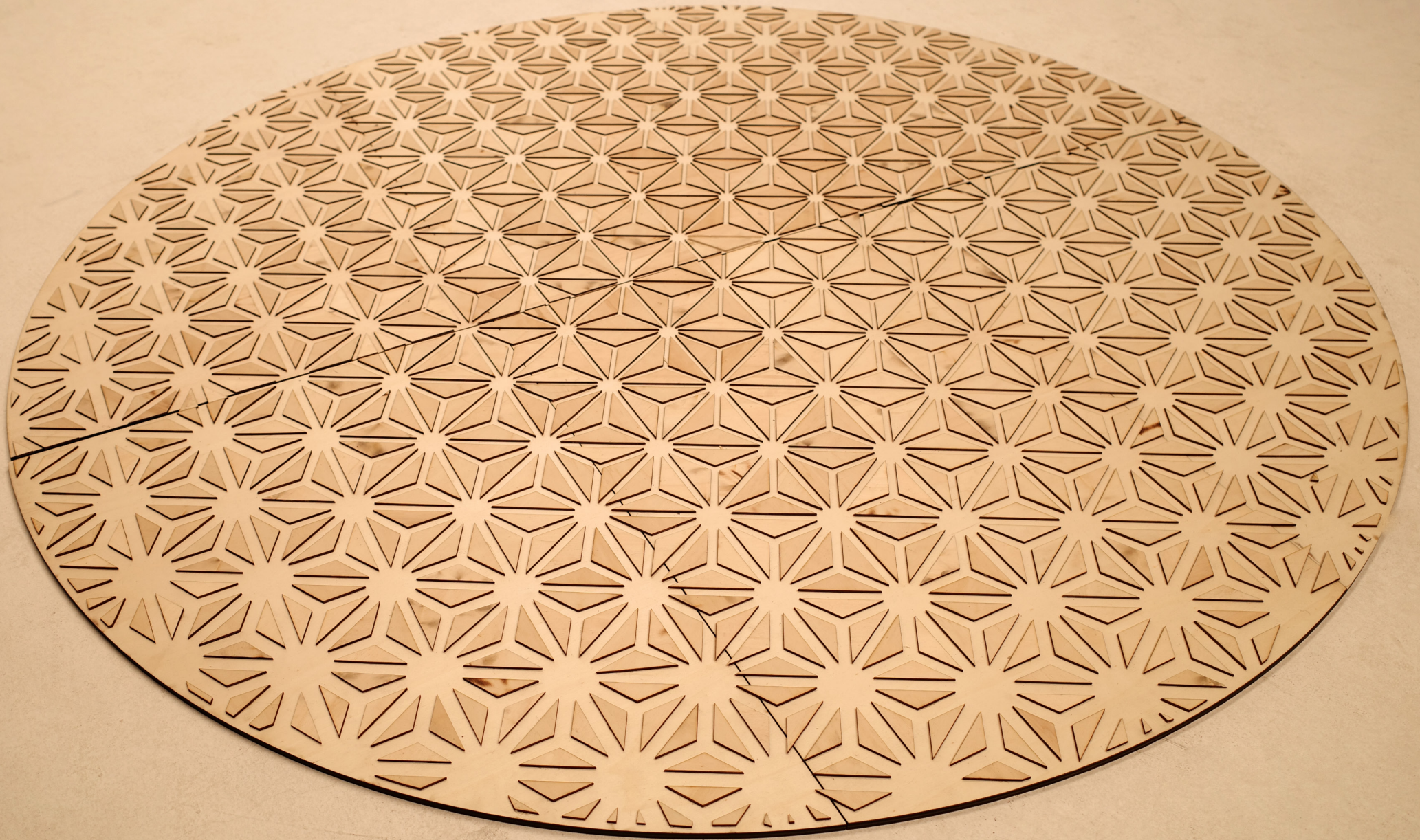
The area division of different functions is carefully considered. Because of the instability of student movement, we have to ensure a certain error-tolerant rate, so we increase the area of moving area appropriately.



03 Product



The Mat



Material & Production



Plywood

Plywood is an environmentally friendly material with high strength and proven processing technology. Moreover, it has a high value of recycling and reuse.



Numerical control

Numerical control (CNC) provides efficient processing and reduces material waste in the production process. It is a technology that is well suited for machining complex patterns on plywood.



Coating

The product is protected by the coating to extend its lifespan.

Technological Support



Spatial Computing

Spatial computing technology can provide VR devices to accurately identify the physical space and location of the user when using the mat. Based on this technology, the VR device can provide the user with functions that correspond to the area by calculating the relative positions of the user and the mat.



Computer Vision

Computer vision can provide a realistic visual representation of the device. It guarantees effective recognition of mat in VR devices when used by users.



ELEVATING

Elevation is where a person moves up or down (i.e. when bending down or standing up)



STRAFING

Strafe is where a person moves left or right (i.e. when sidestepping)



SURGING

Surge is where a person moves forwards or backwards (i.e. when walking)



6DoF tracking

6DoF tracking can help VR devices identify the user's physical location and identify the direction of movement when the user moves.



ROLLING

Rolling is where the head pivots side to side (i.e. when peering around a corner)



PITCHING

Pitch is where the head tilts along a vertical axis (i.e. when looking up or down)



YAWING

Yaw is where the head swivels along a horizontal axis (i.e. when looking left or right)

How To Use It

The principle of ENSO is to provide the students with tactile feedback through different gradients of wood. We grant control to our students so they can fully immerse themselves in the experience with confidence.

ENSO is straightforward and intuitive to use.

Students can just find an idle mat, take off their shoes and use it.

It also offers **two main functions** to the student:



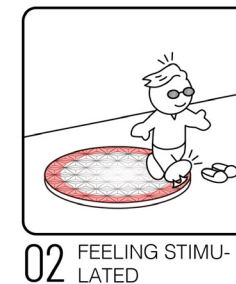
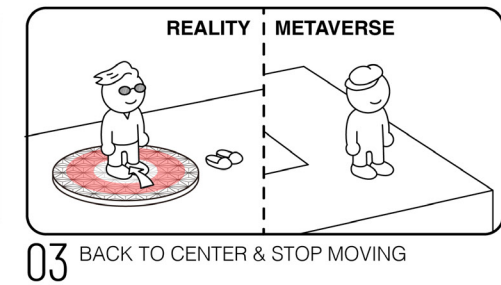
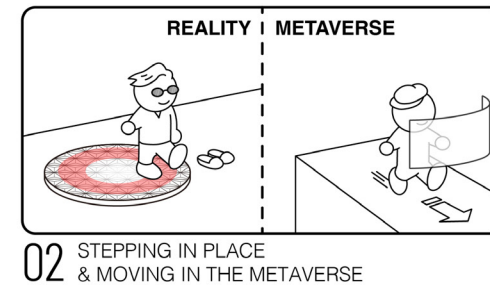
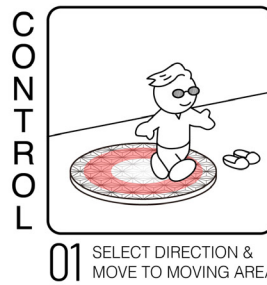
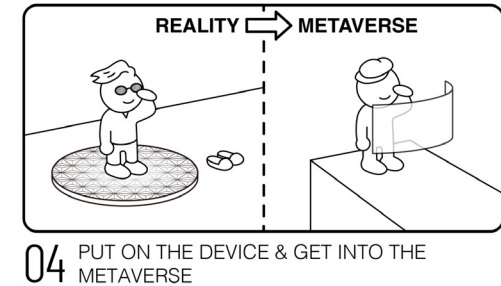
Controller

When students want to control the movement of characters in the metaverse, they just need to follow their intuition and **enter the moving area**. Then move without leaving the bounded area (function 2). The **character in the metaverse will move** in the direction of the target accordingly.



Perimeter setter

When the student is very close to the edge of the mat, the student's feet will be stimulated by the small raised pattern, which establishes a sense of **real-world boundary through touch**.



The image features a solid blue background with several white geometric shapes. On the left, there are several white-outlined shapes, including a large triangle and several smaller trapezoids and rectangles. On the right, there are solid white shapes, including a horizontal bar, a diagonal bar, and a vertical bar. The word "Service" is written in a bold, black, sans-serif font in the upper right area. The number "04" is written in a bold, black, sans-serif font in the lower right area.

Service

04

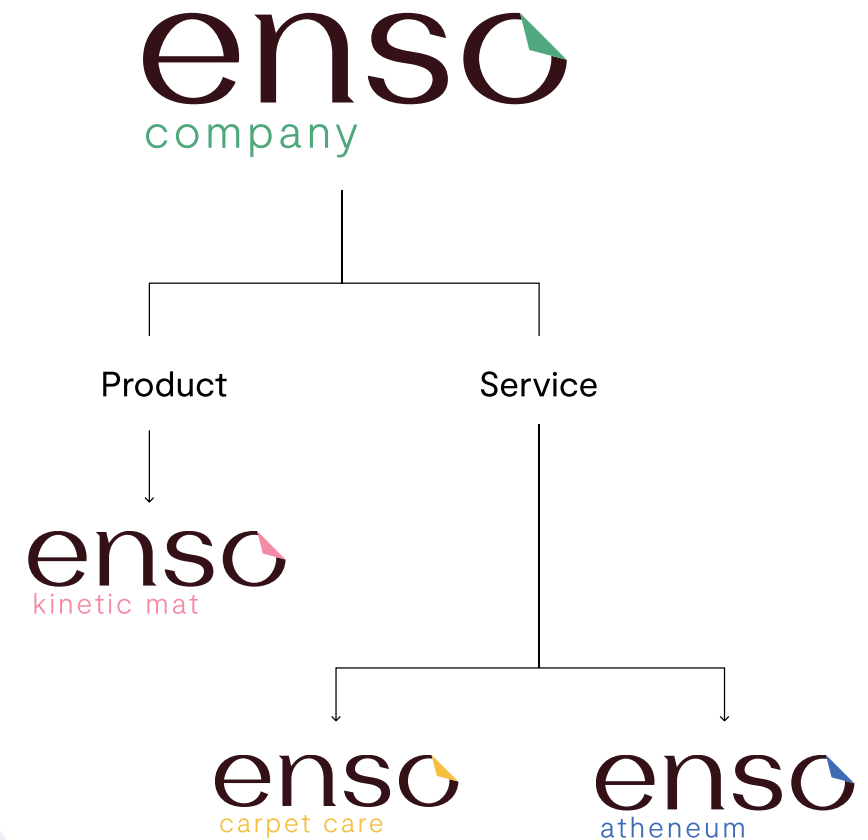
We guarantee an **enriching and complete educational experience** for our students:

online, we offer a full content service; and **offline**, through a physical space delimiter,

we grant **freedom of movement and total immersion** in the chosen course.

Our System

Enso is a system with one offer for **online partners**, one for **offline partners** and one for **students**. Therefore, to create a complete solution, we divided the company into **three main touchpoints: Kinetic Mat** (the physical product), **Carpet Care** (maintenance service) and **Atheneum** (educational content service).



Carpet Care

Once the product is purchased, we **deliver it** to the place requested by the customer, who can immediately use it.

Being subjected to **deterioration**, this carper will be consumed in some parts, losing shape and functionality: and **there is where our service intervenes**.

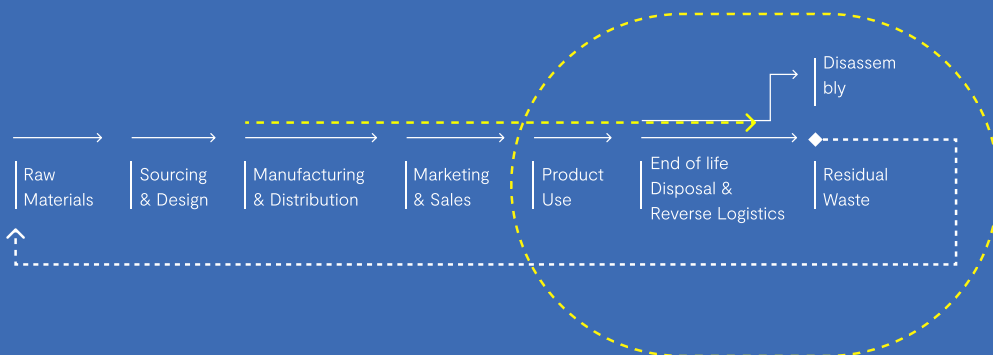
Instead of buying a new carpet, we allow our customers to **replace their worn mat with a freshly engraved one**.

Their old mat is brought to the laboratory, where we will **treat, re-engage, and refurbish** it to send to a new customer.

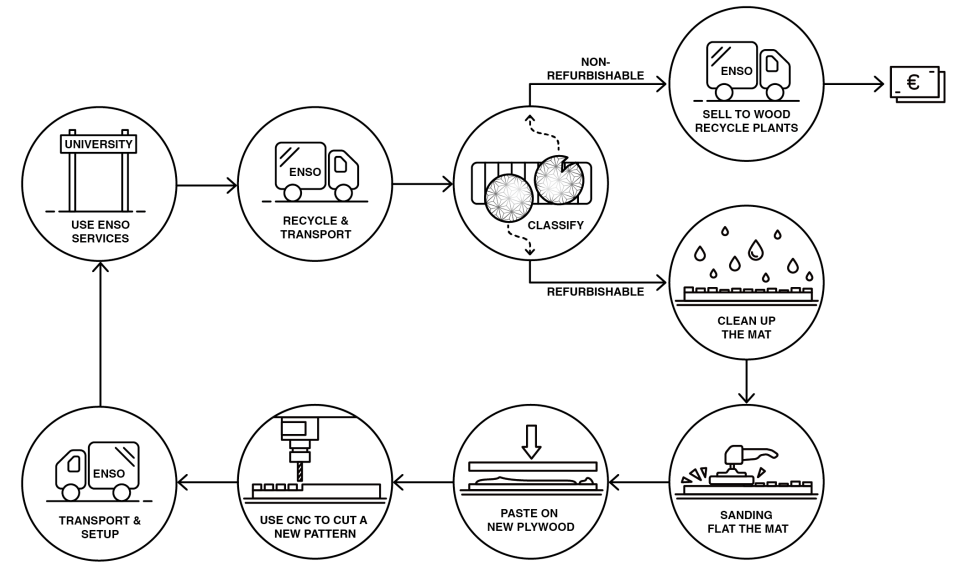
The product is designed to be engraved **several times** before reaching the end of its life. It allows us to extend the total life span of the product and, based on CNC machining. We can also delegate the maintenance part to specialized laboratories.

The aim is to **combine circularity with a socio-technical perspective**, favoring the economic sustainability of the Enso company and facilitating access to students. To stimulate conscious **collaborative consumption**, seeking alternatives of mass production systems and business practices.

Product Lifecycle



Recycle Process



ENSO has a specific cycle design for the carpet recycling process.

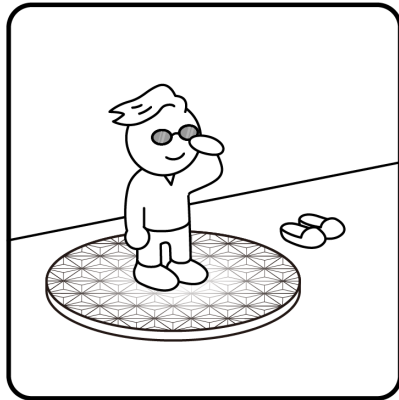
First, ENSO staff will come to the campus to **collect the damaged carpets** and **install new ones** after receiving a maintenance request.

Then, in the fablab, the recycled carpets will be **classified** according to the criteria of reformable and non-reformable.

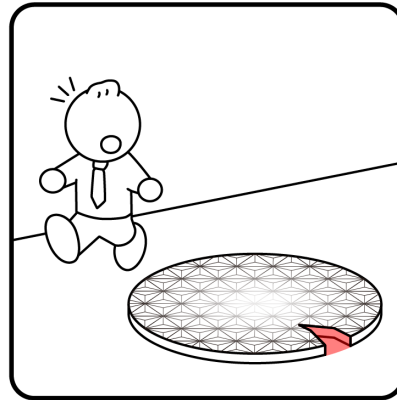
The non-reformable carpet is sold to a **wood recycling plant**. The remanufactured mats are **cleaned and sanded by staff**, and new plywood is put back on the bottom. Finally, the raised pattern on the mat is **cut out by CNC**.

In this recycling process, ENSO **reduces the waste** of production resources, **extending the life cycle** of the mat.

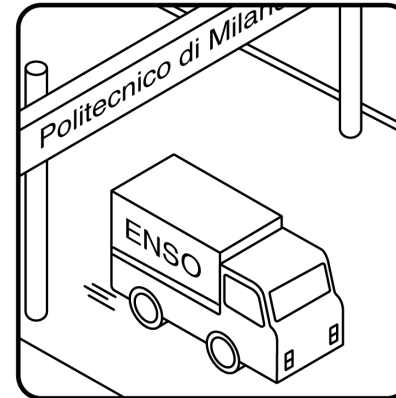
Storyboard



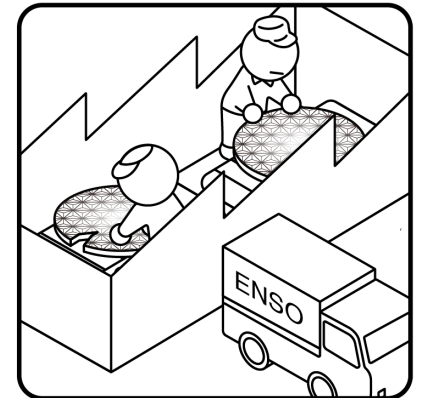
00 FOR DAILY USE



01 LOGISTICS FOUND DAMAGED MAT



04 TRANSPORT THE MAT



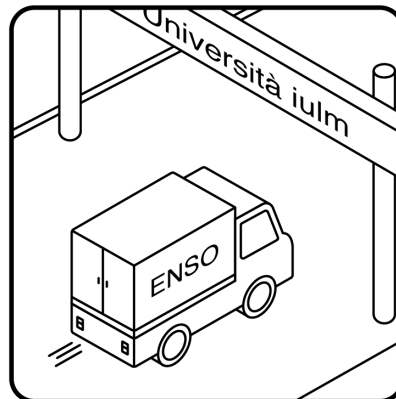
05 MAINTENANCE THE MAT



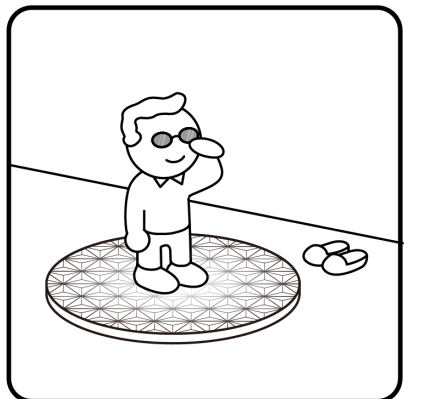
02 CONTACT THE ENSO STAFF



03 STAFF COME AND REPLACE MAT



06 DELIVER MAT TO NEW SCHOOL



00 FOR DAILY USE

Enso Atheneum

We are a bridge between educational content producers and universities/college students.

It is a **global multi-mode content services platform for education in the metaverse**.

We connect our students* to the most diverse educational offerings through **strategic partnerships** with various **high-quality organisations** that provide **immersive experiences**, enhancing their learning potential and capacity.

We do not create or sell our courses. We are an **independent content services platform** that helps our users to **explore the countless sources of knowledge** of the metaverse.

In order to access the platform, the users have to **use one of our mats**. Once they connect to it, our service connects the student and the platform. Therefore, we think about developing carpets of **various materials to be used in off-campus situations** in the future.

Our profit drivers for our partners are:

- Increasing the level of user immersion and interaction
- Different approaches to education
(e.g., hands-on experience and movement through scenarios)
- Connecting universities and educational services
- Diversified target audience

*As students, we define any person who is studying a subject.

[noun] used in the names of libraries or institutions for literary or scientific study

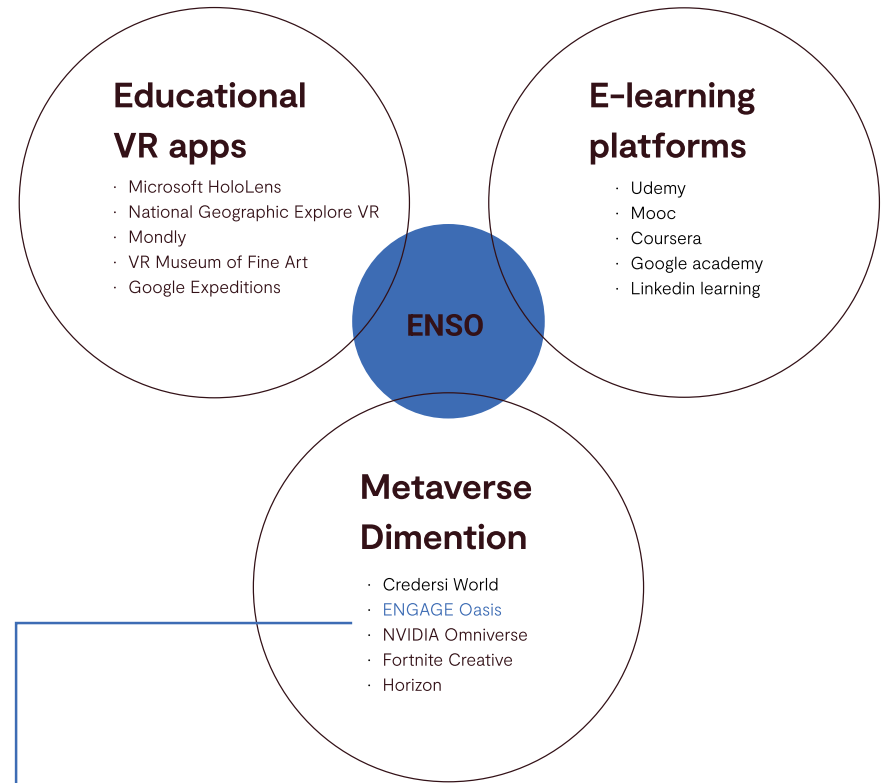
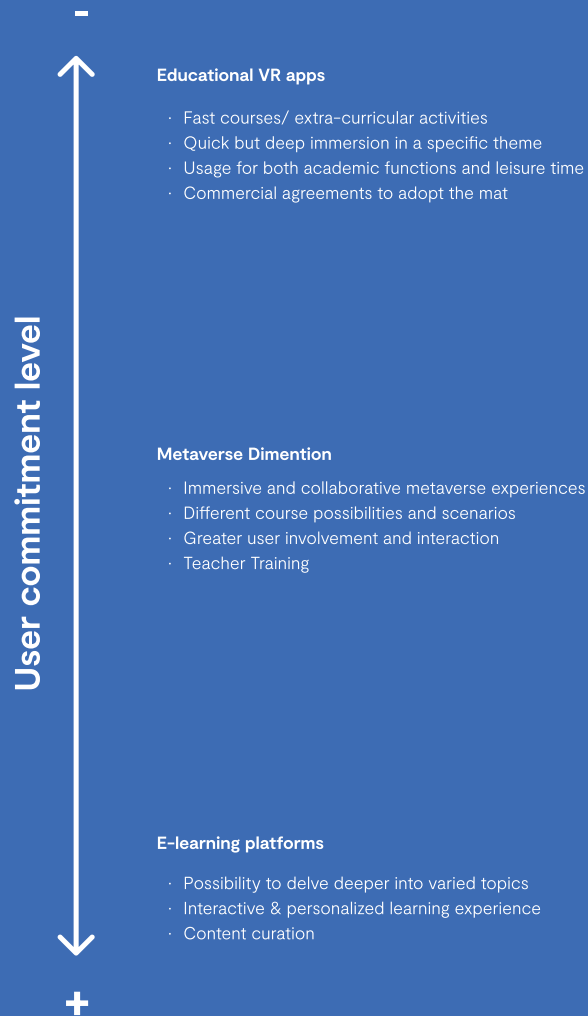
As we are designing a service for a **15-year future**, we believe that many touchpoints will change dramatically. Therefore, we focused on showing the **structure of how the service works**, which could be applied to **future touchpoints**, no matter what they are. Just as we are concerned about the obsolescence of the mat itself, we aim to create an **adaptable service, keeping up with the evolution of technology**.

Partnerships

We provide **high quality and diverse educational content** and **virtual reality experiences for students** by partnering with the most advanced content providers.

Divided into three categories, we mapped our main partners according to the **possibility of immersion and student engagement (user)**.

In addition to the advantage of increasing our market share and perceived value, each partnership category can **add the following values** to us:

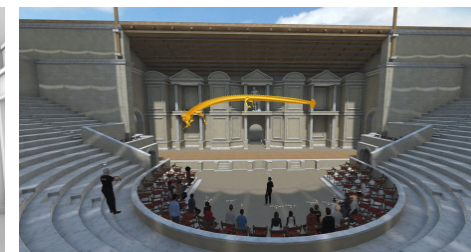


As an example to go in deep in our service and understand every detail, we focused on **ENGAGE OASIS**.

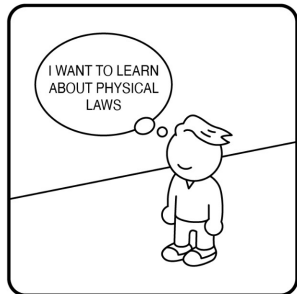
A **virtual/augmented reality software company** dedicated to transforming how training & educational content is delivered and consumed globally by providing educational institutes and businesses with the tools they need to create their own content using virtual classrooms or virtual training environments.

In the software, universities can:

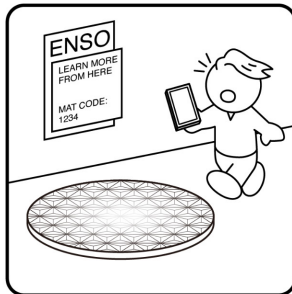
- Host live virtual reality sessions & recorded experiences in VR.
- Create VR training and experiences using the assets library and a range of customization options.
- Share content privately within groups and manage users in an administration dashboard.
- Full menu of platform customization upgrades available.
- Customer support and training packages included.



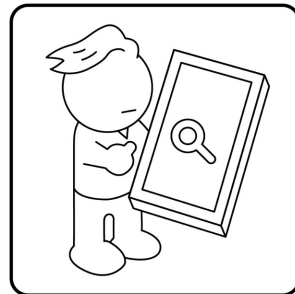
Storyboard



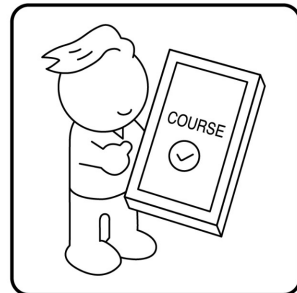
00 WANT TO LEARN A BIT MORE ABOUT AN SPECIFIC THEME



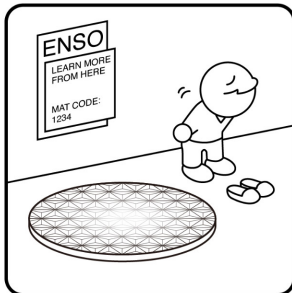
01 SEE THE MAT & CONNECT TO THE PLATFORM WITH THE MAT'S CODE



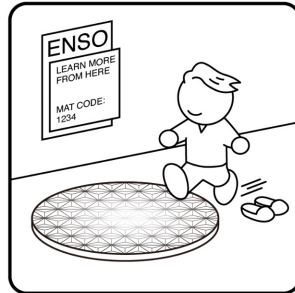
02 SEARCH THE TOPIC NAME



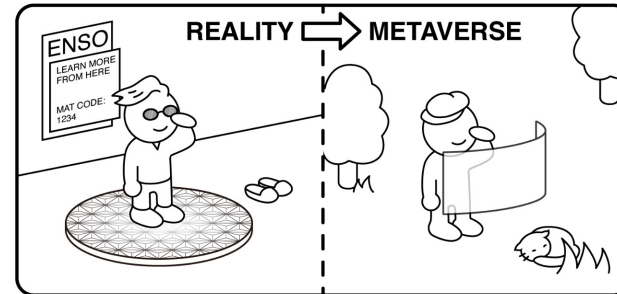
03 CHOSE A TRAINING COURSE OFFERED BY ONE OF OUR PARTNERS



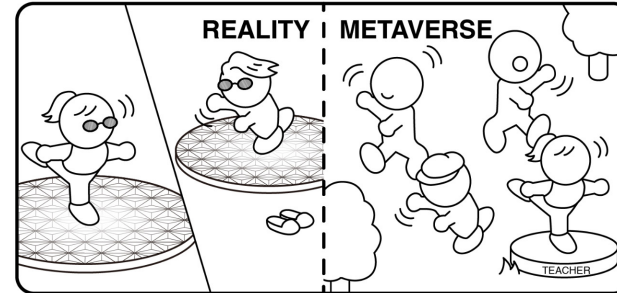
05 TAKE OFF THE SHOES



06 WALK INTO THE MAT



07 PUT ON THE DEVICE & GET INTO THE METAVERSE

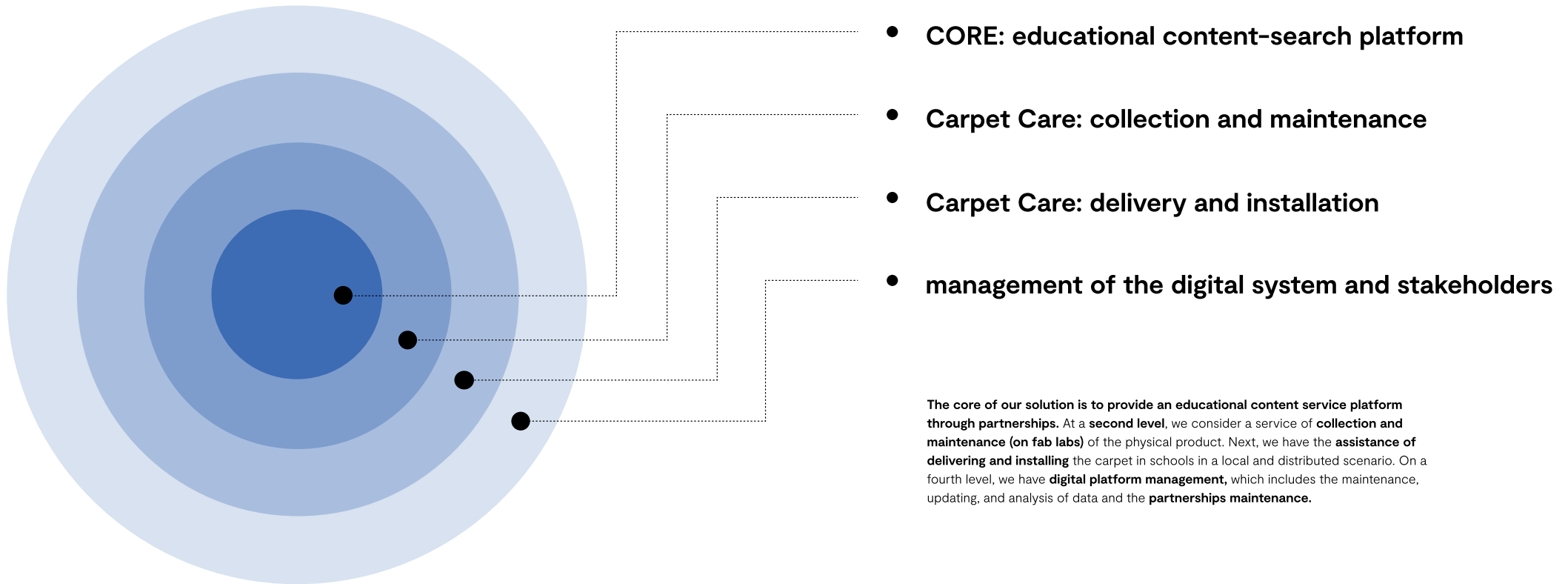


08 JOIN THE CLASS WITH STUDENTS ALL OVER THE WORLD



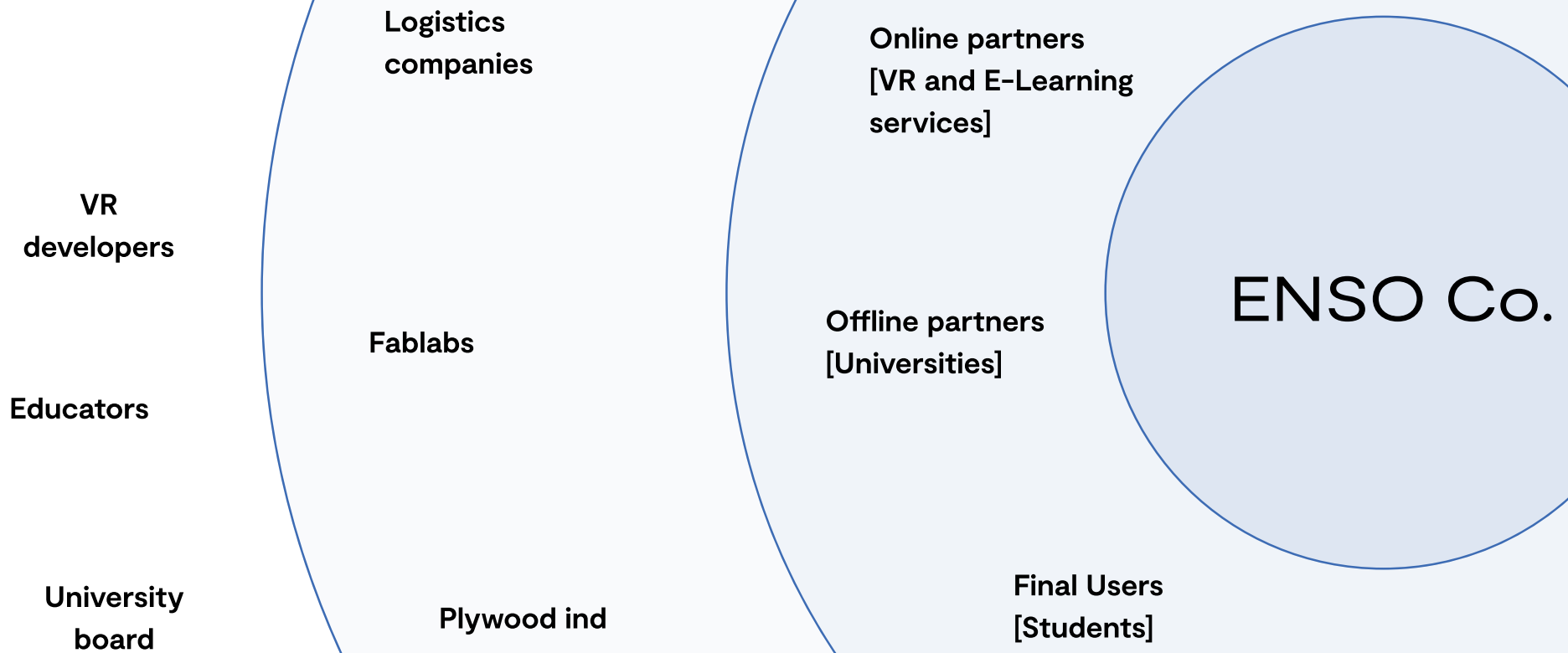
09 GIVE A FEEDBACK

Offering Map

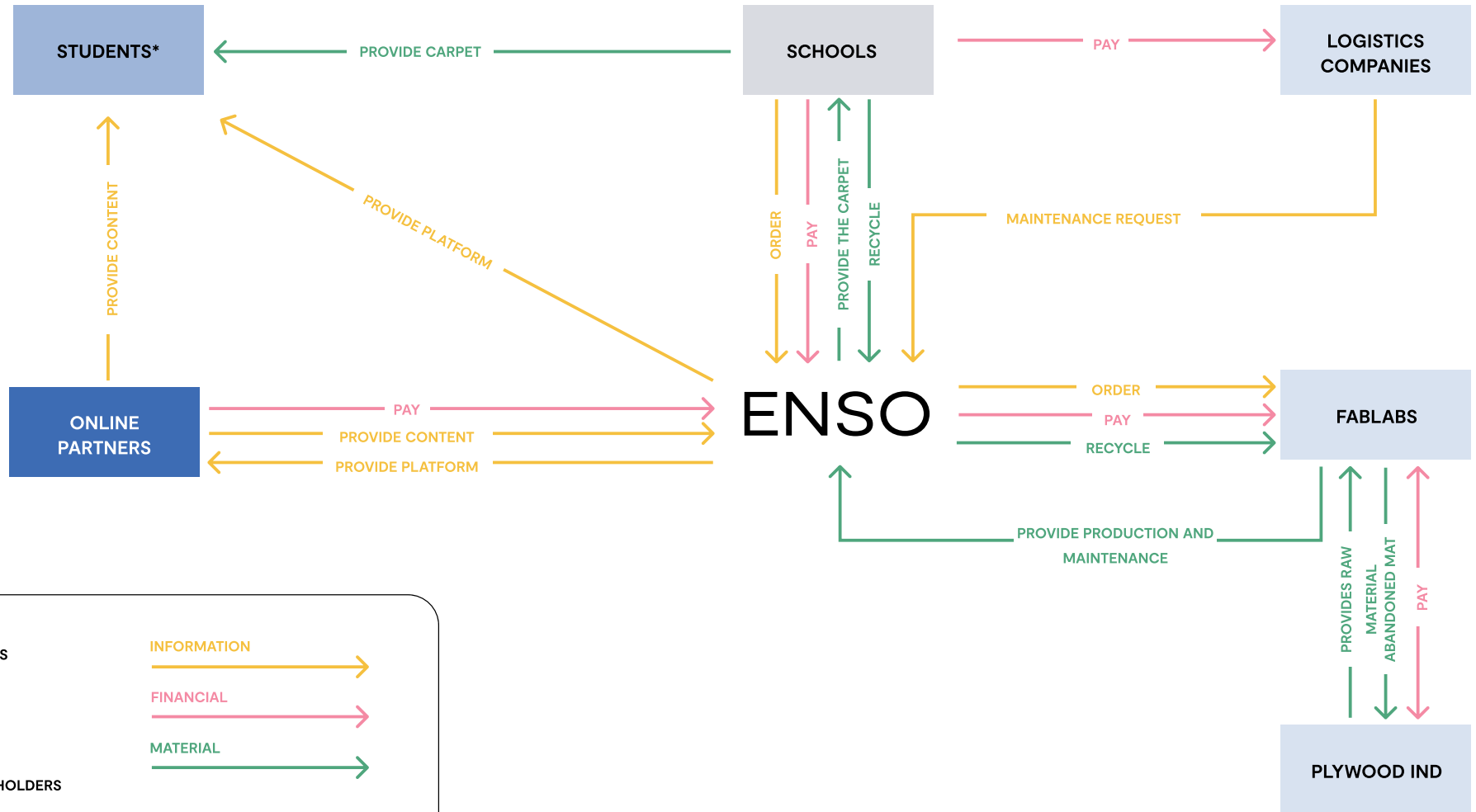


The core of our solution is to provide an educational content service platform through partnerships. At a second level, we consider a service of collection and maintenance (on fab labs) of the physical product. Next, we have the assistance of delivering and installing the carpet in schools in a local and distributed scenario. On a fourth level, we have digital platform management, which includes the maintenance, updating, and analysis of data and the partnerships maintenance.

Stakeholders Map



System Map



Business Canvas



Persona #1



Marco
Student Master Degree
METAVERSITY of Milan

SOCIAL SKILLS



ORGANIZATION



ADAPTABILITY



CONFIDENCE



NEGOCIATION



When Marco started his journey in metaspaces design, the demands of classes were more daunting than he expected.

What scares him the most is that he is almost graduating but still doesn't know what he wants to work with. So he tends to try a little bit of everything to find a passionate subject. But sometimes, selecting a course feels like a treasure hunt in this hyper-connected world.

Moreover, Marco has always had a hard time making friends and in romance, because he finds it challenging to build a valuable relationship from a distance, even if he works and talks with them constantly. So he often goes to the university's coworking spaces to study, also because his family is noisy and he finds it difficult to concentrate at home. He finds it exhausting and stressful to speak to screens and avatars all day long but sometimes is relieved to hide in them.

BEHAVIOR TRAITS

CURIOUS **CONSIDERATE**

INTROVERT **NERDY**

FAITHFUL **GUARDED**

QUOTE

“My mother will never understand how I've traveled the whole world without leaving our house.”

USER NEEDS

- Achieve good grades
- Find a subject he is passionate about
- Get a well-paid but fun job
- Switching off from online life for a while
- Integrate your personal with your professional/academic life

GOALS

- Finish his studies
- Be economically independent
- Improve his social life
- Find a partner
- Get himself a house

PAIN POINTS | FRUSTRATIONS

- He is very insecure about his appearance because he constantly uses an avatar
- Small social anxiety (difficulty interacting with people in real life)
- Fear of looking like a fool and annoying other people
- Willingness to learn new things but not knowing where to start looking
- Not earning enough money to gain their independence and their own space

DAILY SCHEDULE



CJM Marco

LEGEND

**near field communication*

Delightful Efficient Functional Unfit Unacceptable Terrible

ACTIONS
GAINS
PAINS
QUOTES
TOUCHPOINTS
CHARACTERS
OPPORTUNITIES

BEFORE

NEED	AWARENESS	INTEREST
<ul style="list-style-type: none"> Try searching for courses on metaverse Find a lot of options 	<ul style="list-style-type: none"> Find an Enso's advertising Read the description 	<ul style="list-style-type: none"> Enter the link (or NFC*) (communication label) Access the platform
Thinking	Excited	Fascinated
Overload		
"I didn't understand this concept, I wanted to see a good tutorial on it, but I couldn't choose any. There are so many options available!"	"...but what is this for? ...enso?!"	"Well, it looks like it will help me choose a course"
Search platforms [e.g. Google]	Ads Social Media NFC*	Enso Website NFC*
VR Glasses	VR Glasses	Enso Platform NFC*
		VR Glasses
Student	Student	Student
	<ul style="list-style-type: none"> Explore different and creative kinds of promotion 	<ul style="list-style-type: none"> Keep the user's interest Develop an easy and user-friendly first impression

DURING

DECISION	SEARCH	ACTION
<ul style="list-style-type: none"> See the variety of courses offered and the different well-known partners 	<ul style="list-style-type: none"> Search for the closest empty mat and book it 	<ul style="list-style-type: none"> Access the platform via the mat code
Fascinated	Concerned	Annoyed
"Wow, they have a partnership with Google, I want to try this course."	"Ah, I need an Enso Mat to connect to, let me see if my college has any available..."	"Ok... I need to scan this code..."
Enso Website NFC*	Enso Website NFC*	Enso Website NFC*
Enso Platform NFC*	VR Glasses	Enso Mat
VR Glasses		VR Glasses
Student	Student	Student
<ul style="list-style-type: none"> Explore creative approaches and communications 	<ul style="list-style-type: none"> Invest in more accessible versions of the product Leverage the app to help the user find and book an empty mat 	<ul style="list-style-type: none"> Invest in easy ways to pair the mat

AFTER

FEEDBACK	BROWSE	PLANNING	ADVOCACY
<ul style="list-style-type: none"> Finish the session Evaluate the experience 	<ul style="list-style-type: none"> Explore the platform's course options 	<ul style="list-style-type: none"> Save favorite options Arrange them in folders on the theme 	<ul style="list-style-type: none"> Invite colleagues/friends
Satisfied	Enthusiastic	Lively	Pleased
"I liked the choice of images and the exercises created by the teacher. Let's look for more of his classes."	"They have different filters and categories... And I can choose the movement level I am willing to do... I wonder how the maximum level works?"	"You can even learn how to cook here! I'll save this course for later...Maybe I'll make a surprise dinner for my mom"	"I'd like to try this with David next time ... I'm forwarding it to him!"
Enso Website NFC*	Enso Website NFC*	Enso Website NFC*	Chat app NFC*
Enso Mat	Enso Mat	Enso Mat	VR Glasses
VR Glasses	VR Glasses	VR Glasses	
Student	Student	Student	Student Other Users
<ul style="list-style-type: none"> Ensure a pleasant user experience 	<ul style="list-style-type: none"> Create creative, personalized and interactive ways to conduct that search. For example short games and quizzes 	<ul style="list-style-type: none"> Allow the user to share their study plan, show progress and results. 	<ul style="list-style-type: none"> Word-of-mouth promotion

Persona #2



Julia
Phd Student in psychology
Univesty of Colorado

SOCIAL SKILLS



ORGANIZATION



ADAPTABILITY



CONFIDENCE



NEGOCIATION



Julia recently started the second year of her doctoral studies in psychology at the University of Colorado. A year ago, she moved to Boulder from Pittsburgh to be closer to Carnegie University to complete her undergraduate degree in psychology, she also works in a small clinic four times a week to pay her bills.

She lives off-campus and shares an apartment with her two friends (and also colleagues), they are actively (tutoring and hosting lectures and speeches) and passively involved (attending lessons and group projects) in academic activities; they are also very present on the campus activities with those who live inside. They frequently organize social gatherings for all doctoral students, such as picnics, happy hours, and evenings in Denver.

In her limited free time, she loves going to the movies (especially foreign films) and is currently training for her first half marathon.

BEHAVIOR TRAITS

- CURIOUS
- DETERMINATE
- EXPANSIVE
- PERFECTIONIST
- FAITHFUL
- GUARDED

QUOTE

“I just received a free invitation to a 5 day event at Harvard & ENGAGE on neuroscience!!! Breathe, Julia, breathe.”

USER NEEDS

- Get good grades
- Better balance her professional and academic life
- Physical distress
- Pay her bills
- Develop soft skills

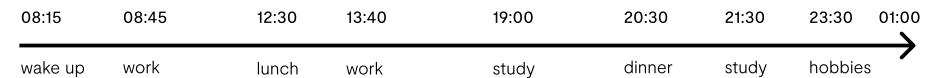
GOALS

- Finish her doctorate
- Be more financially secure
- Build an effective image for her career
- Build confidence

PAIN POINTS | FRUSTRATIONS

- Fear of not looking as credible as elder colleagues
- Difficulties in working under pressure
- According to feedback from previous job interviews, she needs courses and extracurricular activities to enhance her CV

DAILY SCHEDULE



CJM Julia

LEGEND

**near field communication*

Delightful Efficient Functional Unfit Unacceptable Terrible

ACTIONS
GAINS
PAINS
QUOTES
TOUCHPOINTS
CHARACTERS
OPPORTUNITIES

BEFORE

NEED	AWARENESS	DISCOVER	BOOK
<ul style="list-style-type: none"> Receive an event invitation 	<ul style="list-style-type: none"> Enter the link (or the NFC* label) Access the platform 	<ul style="list-style-type: none"> See the variety of courses offered and the different well-known partners 	<ul style="list-style-type: none"> Accept the event invitation Access a list of places nearby with available book mats for those dates
Intrigued	Excited	Fascinated	Intrigued
<p>"Well, I received an invitation to a 5-day Harvard & ENGAGE event, but need access through an app called... Enso?"</p>	<p>"Oh! Looks like it is more about lectures than events"</p>	<p>"Wow, they have a partnership with Google, I want to try this course."</p>	<p>"Ah, I need an Enso Mat to connect, let me see if there is one near me..."</p>
Email NFC*	Enso Platform NFC*	Enso Platform NFC*	Enso Platform NFC*
VR Glasses	Enso Website NFC*	Enso Website NFC*	Email NFC*
	VR Glasses	VR Glasses	VR Glasses
Student Partners	Student	Student	Student
	<ul style="list-style-type: none"> Explore different and creative kinds of promotion 	<ul style="list-style-type: none"> Keep the user's interest Develop an easy and user-friendly first impression 	<ul style="list-style-type: none"> Invest in more accessible versions of the product Leverage the app to help the user find and book an empty mat

DURING

ACTION	GET STARTED	EXPLORE	EXPERIENCE
<ul style="list-style-type: none"> On the right day, head for the reserved mat Pair her device with the mat via a code 	<ul style="list-style-type: none"> Get on the mat & put on the VR goggles (NFC*) Connect with via the invitation link 	<ul style="list-style-type: none"> Access the event page via the invitation link Explore the space 	<ul style="list-style-type: none"> Enter the metaverse Attend the session
Annoyed	Impressed	Involved	Looking forward
<p>"Ok... I need to scan this code... Why do we even need this carpet?"</p>	<p>"In the instructions, I was asked to take my shoes off to feel the carpet better... A bit strange, but I'm curious"</p>	<p>"How nice! They made available a range of activities in addition to the lectures! Are those people... meditating?"</p>	<p>"Now that class is over, I will explore these extra activities! I am told there is a workshop inside the human brain in ward 12!"</p>
Enso Website NFC*	Enso Website NFC*	Enso Platform NFC*	Enso Platform NFC*
Email NFC*	Email NFC*	Enso Mat	Enso Mat
Enso Mat VR Glasses	Enso Mat VR Glasses	VR Glasses	VR Glasses
Student	Student	Student Other Users	Student Other Students
<ul style="list-style-type: none"> Invest in easy ways to pair the mat 	<ul style="list-style-type: none"> Explain the use of the product before this step, as a tutorial video in the email (NFC) 	<ul style="list-style-type: none"> Use this scenario as an advertising medium 	<ul style="list-style-type: none"> Create event activity tips based on user preferences Make it clear that it is possible and comfortable to sit in the center of the carpet

AFTER

FEEDBACK	BROWSE	PLANNING	ADVOCACY
<ul style="list-style-type: none"> Finish the event Evaluate the experience End session on the carpet 	<ul style="list-style-type: none"> Explore the platform's course options Create a personal account 	<ul style="list-style-type: none"> Save favourite options Arrange them in folders on the theme 	<ul style="list-style-type: none"> Invite colleagues/friends
Satisfied	Enthusiastic	Lively	Pleased
<p>"I loved the way the event was planned, I loved doing physical activities during the talks, I was much less bored. I want to see what other options the platform has!"</p>	<p>"They have different filters and categories... And I can choose the level of movement I'm willing to do... I wonder how the maximum level works? I want to sign up!"</p>	<p>"It has courses on the themes... I'm going to learn to surf!"</p>	<p>"Okay, I loved that! I'm going to recommend it to my flatmates"</p>
Enso Platform NFC*	Enso Platform NFC*	Enso Platform NFC*	Chat App NFC*
Enso Mat	Enso Mat	Enso Mat	VR Glasses
VR Glasses	VR Glasses	VR Glasses	
Student	Student	Student	Student Other Users
<ul style="list-style-type: none"> Indicate similar courses 	<ul style="list-style-type: none"> Create filters and categories to improve the user experience Create creative, personalized and interactive ways to conduct that search. For example short games and quizzes 	<ul style="list-style-type: none"> Allow the user to share their study plan, show progress and results. 	<ul style="list-style-type: none"> Word-of-mouth promotion

The image features a solid green background. On the left side, there are several white, irregular geometric shapes that resemble stylized, jagged mountain peaks or abstract architectural forms. In the upper right quadrant, the word "Communication" is written in a bold, black, sans-serif font. The text is positioned within a white-outlined, irregular shape that resembles a speech bubble or a stylized letter 'C'.

Communication

05

Personality

We believe that the intensity of the experiences depends only on you but that **the trajectory is much more enjoyable when shared.**

We define ourselves as a **solid and confident brand** that faces tomorrow. We nurture those around us in a way that creates **comfort and calm.**

We are **solid, reliable, and adaptable.** We become what is most crucial in our moment of use. We value **your freedom above all** else and want to be the **small step of courage** you lack to be the best version of yourself.

Value Proposition

We are a service that removes boundaries, letting our users enjoy the completeness and complexity of the metaverse. In that way, we aim for education to become limitless.

We create a system that allows people to:

Move the body and mind freely in the metaverse (and out of it), developing a **safe mental place** to help them integrate into their daily lives. Individual Benefit

Connect with different types of class and content. **Interacting with students around the world** and collaborating for an **immersive and complete learning process.** Community Benefit

Provide a circular economy, combining circularity with a socio-technical perspective. We are trying to decouple the production systems from new resource extraction by using a product with a long lifespan and a complete service for refurbishment and reuse. Environmental Benefit

Confident

Bold

Adaptable

Free

Reliable

Our Values

PRUDENCE

Short steps also lead to the desired location and create a more structured and safer final environment.

FLEXIBILITY

Allowing the same idea to be driven by multiple points opens up a wide range of possibilities and empowers systems to maintain their drive and flow

FUN

By offering moments of relaxation, we encourage pleasant moments and the feeling that life is worth living.

EMPOWERMENT

Creating a safe path is about knowing where we are going and why we decide on specific courses.

FREEDOM

To become free is to understand which rules or validations are exciting or applicable for where you want to go.

CONNECTION

Being inserted in a digital world means aligning what is most valuable in your ideas to a language and structures aligned to what is consumed.

Vision

Free people's bodies so that minds can create.

Mission

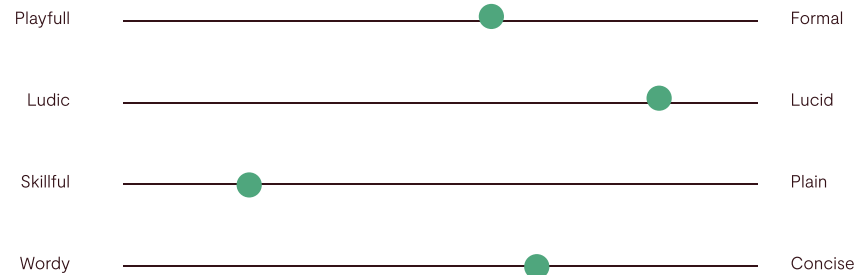
To give people the comfort to be inspired and give their best in whatever they do, online and offline.

To raise awareness of body and mind, empowering the collective. To create connection through freedom.

Tone Of Voice

Because we deal with different types of partners, in our communication we try to be light, concise, and coherent. We want anyone to be able to understand and recognize themselves in our goals and truths.

We value clarity above all else. However, we always recognize our limitations and are willing to learn together, adding ideas and sharing moments.



We Don't...

Offend

We know how to communicate serious issues in an empathetic way so that people can relate, but we never lack politeness or respect.

Deceive

We know our service's true potential and value, and we communicate it with fair, transparent, and truthful language.

Underestimate

We seek to disseminate knowledge and solve problems in the best possible way, but we are always open to new learning.

Naming

Enso (formally spelt ensō) is a sacred symbol in Zen Buddhism, meaning circle or, sometimes, circle of union. It is traditionally drawn using only a brushstroke as a meditative practice to **express the moment the mind is free to let the body create**.

The Japanese practice of drawing ensō requires allowing the body to create freely and then **observing the result without feeling the need to modify its actions**. According to Buddhist tradition, one must draw the ensō in a single, quick stroke, and it is not possible to go back and change the drawing. It is a manifestation of the artist at the moment of creation and the acceptance of our innermost self. **It symbolizes beauty in imperfection, the art of letting go of expectations, the circle of life, and connection.**

An ensō should display the following characteristics: kanso (**simplicity**), shizen (no pretence; **natural**), and datsuzoku (**freedom**).

Key Terms

Students

[instead of Users]

Zone

[instead of Perimeter]

Boundaries

[instead of Limits]

Take a step

[instead of Start]

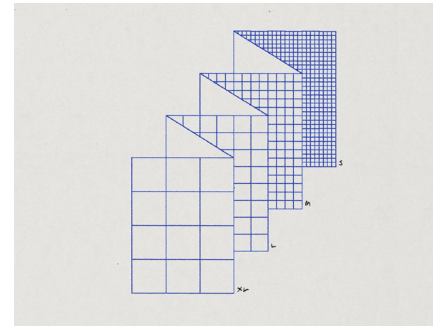
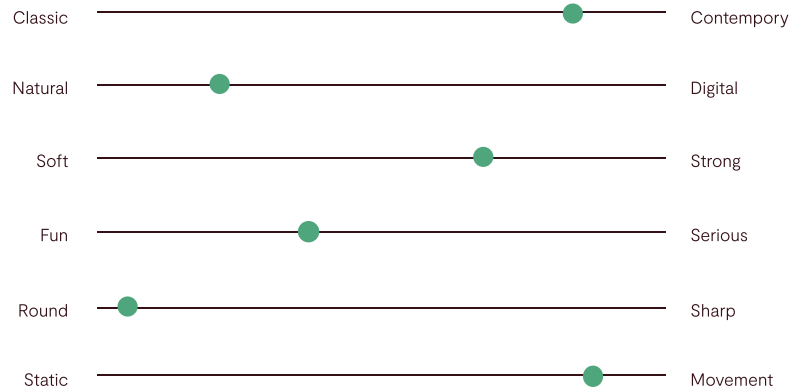
Moodboard

The mood board was created considering the main elements we wanted Enso to communicate.

Gradient and Geometry were the key components we selected as the starting point. These artists inspired us to create a brand identity coherent with both our service system's product and core values.

- Gradient 01
- Product 02
- Evolution 03
- Geometry 04
- Repetition 05

Visual Identity Direction



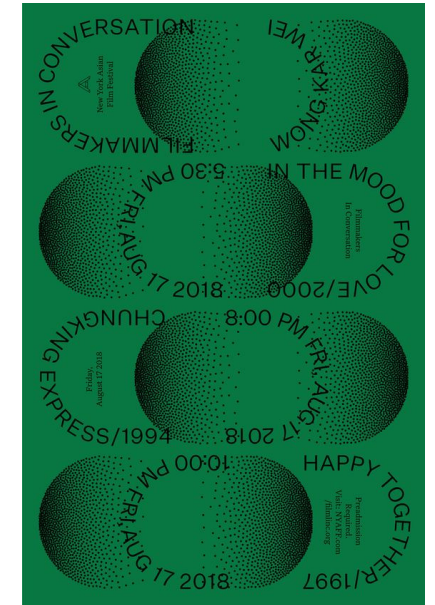
01 Rayan Carl - Blue prints



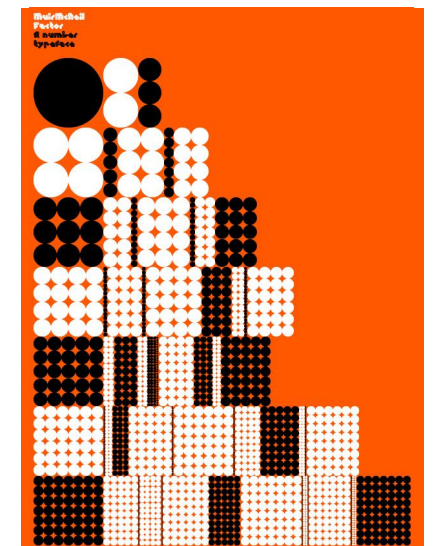
02 Enso - Gradient Pattern



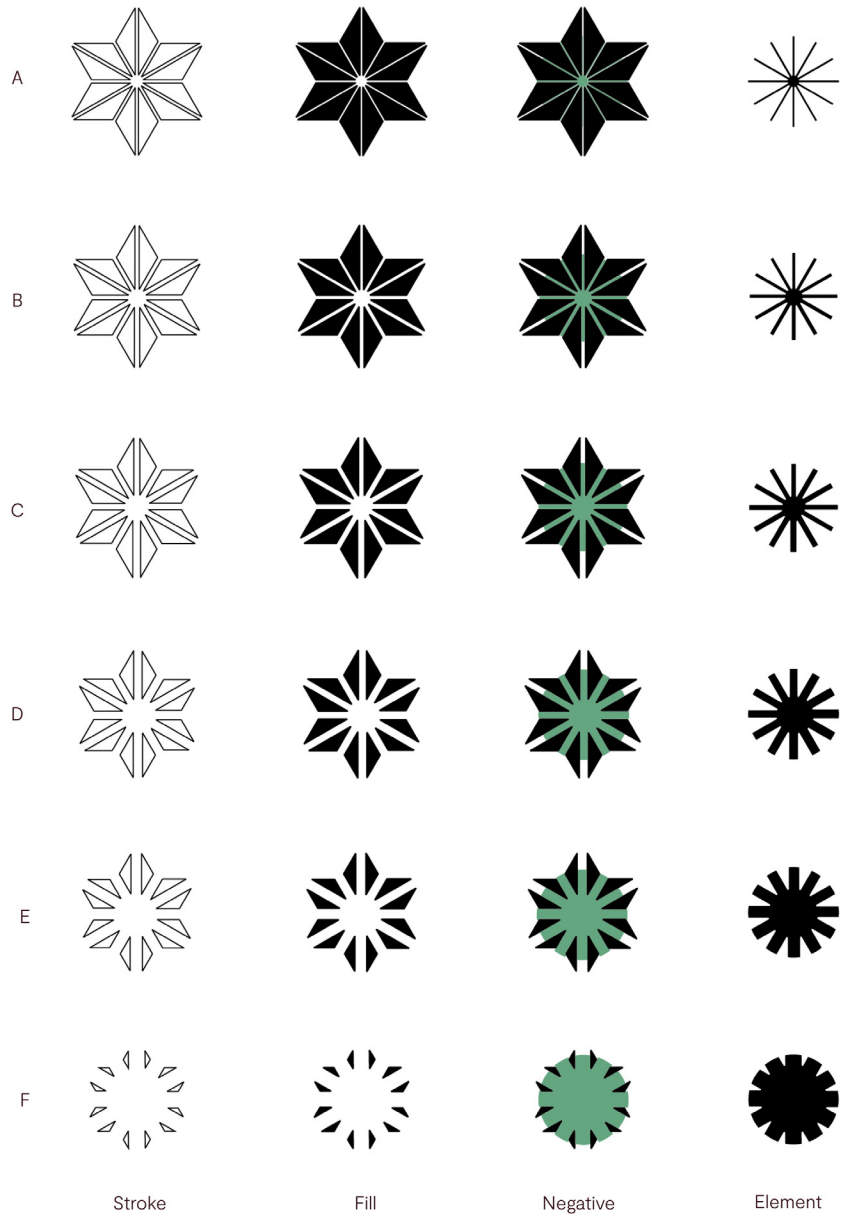
03 Sagmeister - Casa da Musica



04 Asian Film Festival New York



05 MuirMcNeil Factor - Visual Numbers



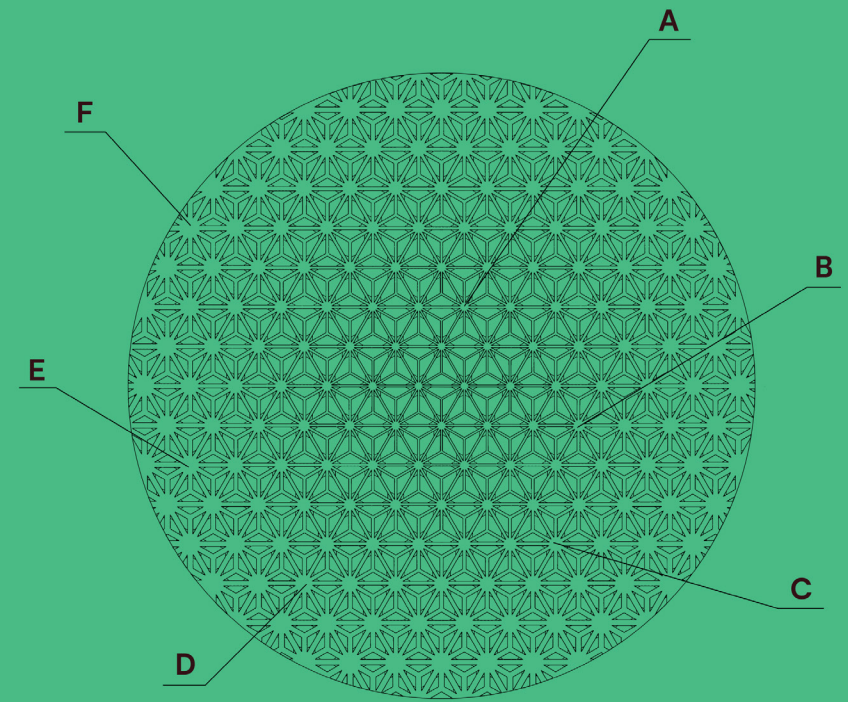
Stroke

Fill

Negative

Element

Identity Elements



The characterizing elements of the visual identity have been translated from the **product pattern**.

By filling the outline of the pattern, we identified the negative shapes that the product generates.

The process allowed us to select 6 different elements ready for the brand.

Primary Logo

Enso is more than a product: it is a plural community.

The logo is based on a **fluid identity** that works with shapes identified in the **pattern's geometry**.

The **primary logo is used to refer to the company as a whole**, while we use different specifications for the secondary one. We thought of this differentiation due to the **plurality of services** offered and to enhance the **company's growth potential**.

enso
company



Secondary Logos

The Enso company is currently made up of **three main touchpoints: the product itself and the two services**.

Therefore, to differentiate them, we created a **secondary version of the logo for each of them**, where the chosen colour will be used in the communication.

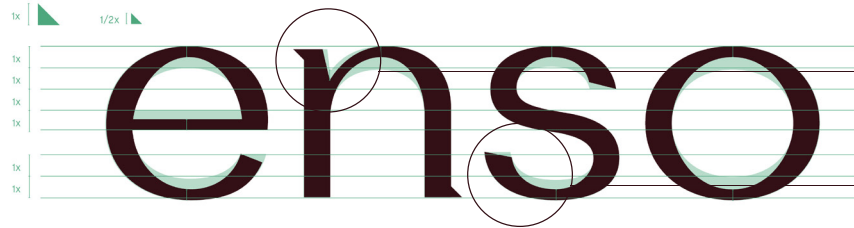
enso
atheneum

enso
carpet care

enso
kinetic mat

Logo Elements

The whole pattern of the carpet is **composed of small triangles** distributed gradually that **together form the design**. As we explore the negatives in the elements that make up the visual identity, for the logo, we chose to **use the triangle detail**.



Triangle corners

We adapted the typography used in the identity (Moderat) to make it more triangular and personalised. So, we added triangular figures on the extremities, using the original font's own characteristics as a measurement pattern.

30° angle

The pattern is formed by the isosceles triangle of 30° and 120°. In the extremities where it wasn't possible to fit the triangle, we finished with a 30° angle to harmonise.

Triangular Module

The triangular is used in the corner to simulate a fold and recall the pattern.

Company

Since the logo has different versions for the product and for each service, the primary version must contain the word "company".

Stroke

In the negative version, we apply a stroke to the shape so as not to lose the shape and keep the same balance of the weights as the coloured version.

Typeface

We decided to choose a single font and play with its weight and size. It's a geometric typeface that works very well for both body copy and display type and that allows us to fulfil our need to be both fun and very professional.

Moderat Family

Moderat is a geometric sans-serif typeface family, consisting of 42 styles, ranging from Thin to Black in three widths – Condensed, Standard and Extended, with corresponding Italics and six Mono styles. Initially designed in 2015 and continuously developed, the low stroke contrast, closed apertures, and several angular details define its distinctive characteristics. With an enhanced set of OpenType features and stylistic and positional alternates, Moderat is suited for any kind of use, printed or display.

Header

Subtitle

Extra style

Moderat Typeface - Regular

Designed by Fabian Fohrer and Fabian Huber, published by TIGHTYPE in 2015 and redrawn by Fabian Fohrer in 2019. Third version of Moderat Family.

A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P
Q	R	S	T	U	V	W	X
Y	Z	a	b	c	d	e	f
g	h	i	j	k	l	m	n
o	p	q	r	s	t	u	v
w	x	y	z				

→ Moderat Bold

MODERAT BOLD

→ Moderat Regular

MODERAT REGULAR

→ Moderat Light

MODERAT LIGHT

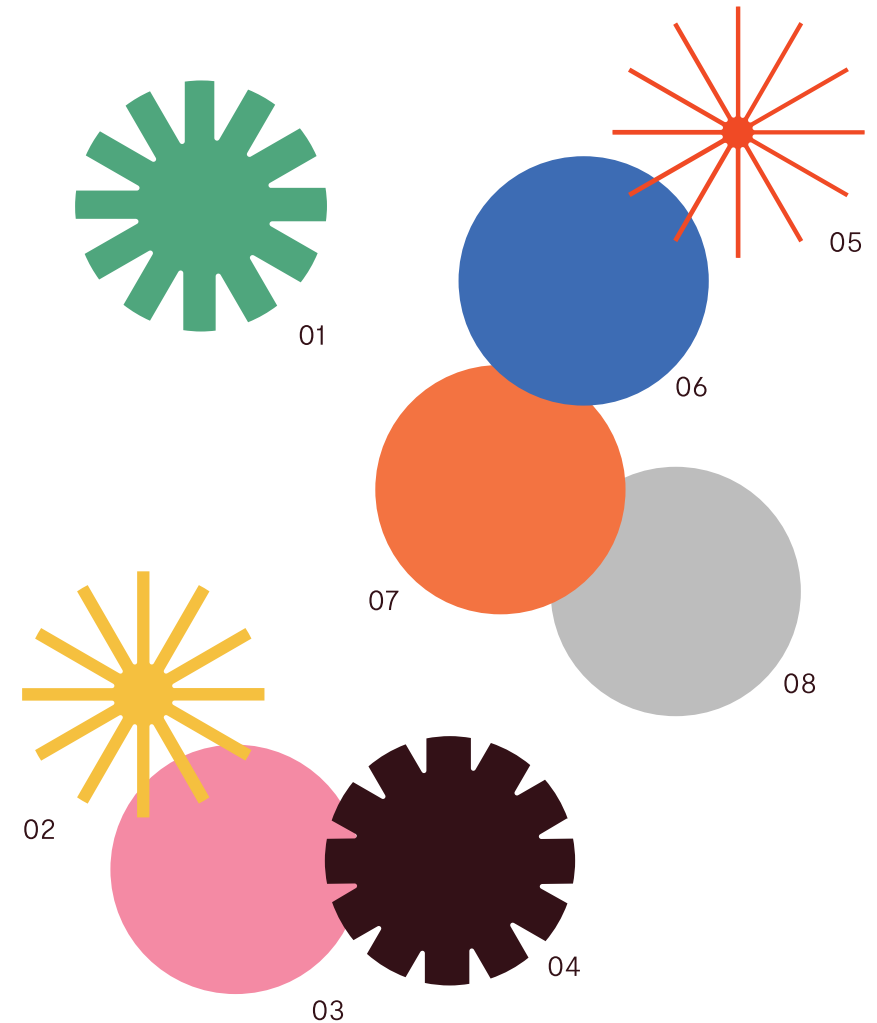
→ Moderat Mono

MODERAT MONO

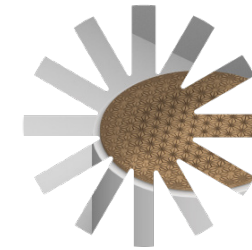
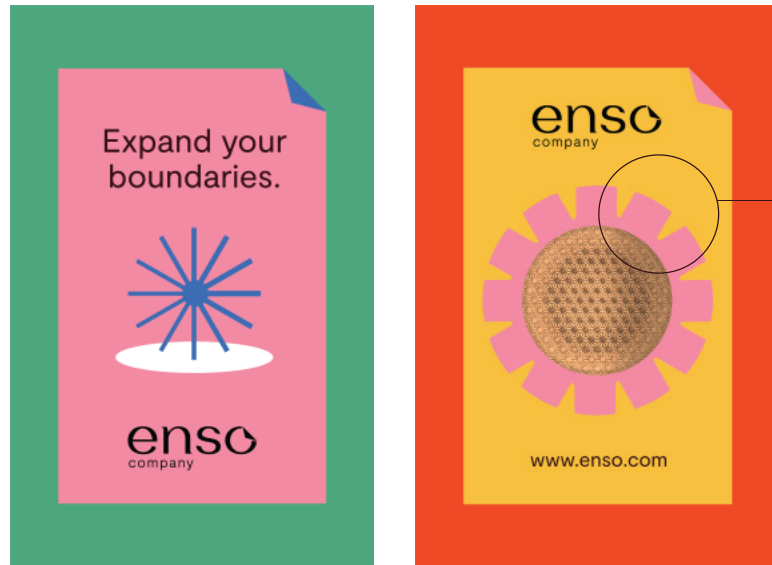
Palette

Enso is a robust ecosystem that allows users a free and new connection. It uses **colour to express its strength** and bring potential students closer to a professional system that is also direct and close to the consumer. **The colour is used according to the topic and the user will be educated in its use.**

01.	Shiny Shamrock	#4FA67D	79, 166, 125
02.	Maize	#F5C03F	245, 192, 63
03.	Pink Sherbet	#F48AA4	244, 138, 164
04.	Dark Sienna	#331117	51, 17, 23
05.	Flame	#F04A25	240, 74, 37
06.	Steel Blue	#3D6CB4	61, 108, 180
07.	Burnt Orange	#F37341	243, 115, 65
08.	Silver	#BDBDBD	189, 189, 189



Institutional Communication



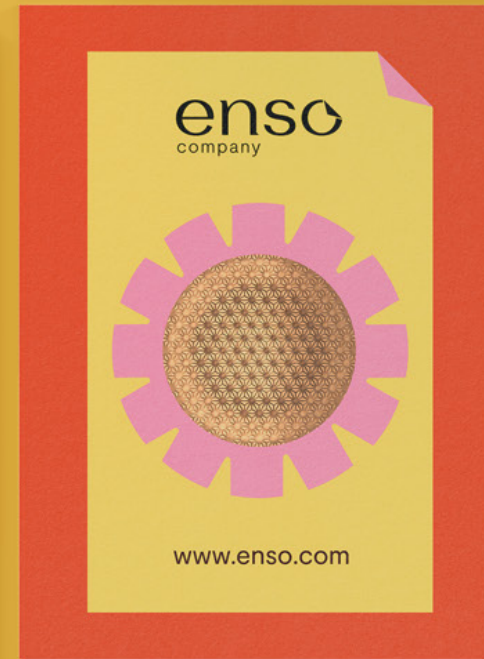
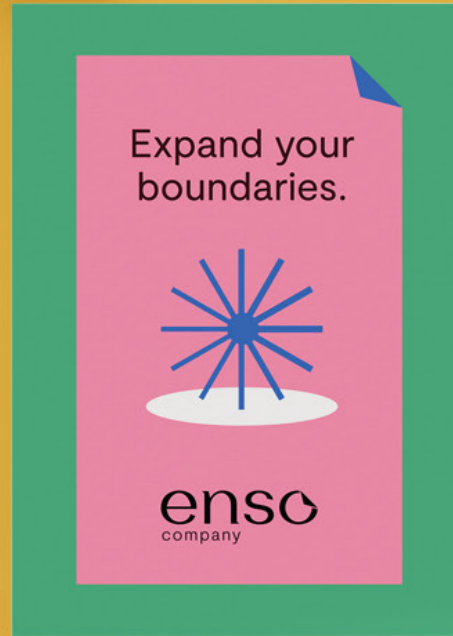
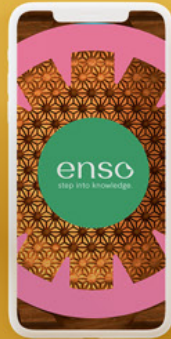
Photography

The pictures have the 6 shapes that represent the identity. When needed, they can be placed according to other shapes as long as they are geometric.



Triangular Module

The triangular shape module that generates the pattern of the product is used in the border of images and graphics to simulate a fold and recall the pattern.



Confidential
Direct and
User Centered

Imperative Verb

Expand your
boundaries.

Free your
mind.

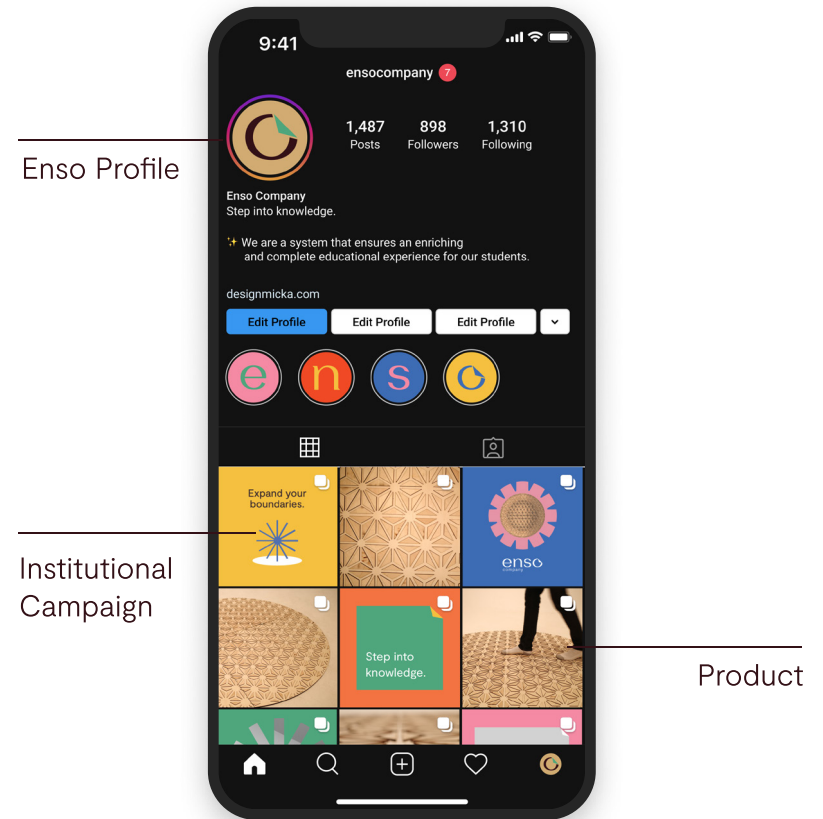
Final Dot

Social Campaign

As an example of a **social media platform**, we used Instagram to promote our product and interact with the Enso Community.

We use **imperative verbs with a confidential and direct tone** to engage the users and put them in the centre.

The Enso campaign aims to **empower the user** to experiment with a new way of learning to free his body and his mind.



Enso Profile

Institutional Campaign

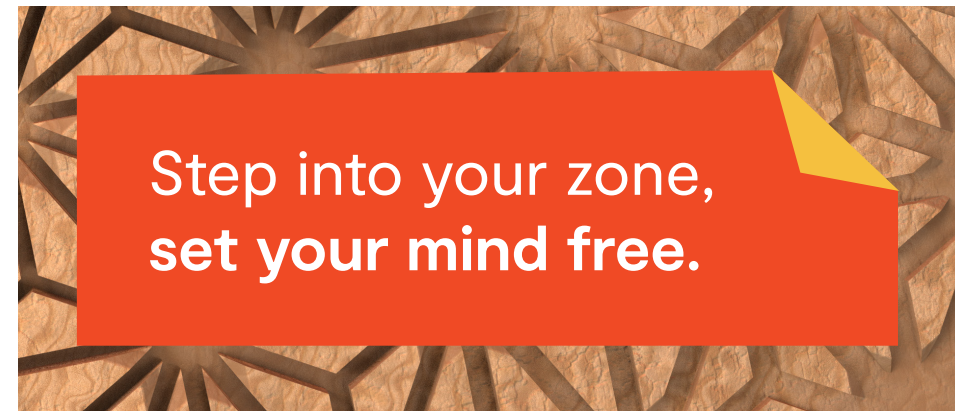
Product

Art Direction

For the art direction in promoting our product and services, we **adapted the institutional language to a more photographic approach.**

Besides the supporting elements already presented, the photographs used involve **either the product itself** (pattern highlights) or montages of the **user in a learning scenario in the metaverse** (surreal), using virtual reality glasses, **mixing the two realities.**

We wanted to bring a more **sensorial language closer to the reality of our students.** The typography and chromatic palette follow the same, and the campaign slogan is: **Step into knowledge.**





$$F = G \frac{m_1 m_2}{d^2}$$
$$a = \frac{F}{m_1}$$

$$G \cdot \frac{m_1 \cdot m_2}{r^2} = m \cdot g$$
$$5,98 \cdot 10^{24} \text{ Kg} \cdot r = 6,378 \cdot 10^6 \text{ m}$$
$$\frac{6,67 \cdot 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \cdot 5,98 \cdot 10^{24} \text{ Kg}}{(6,378 \cdot 10^6 \text{ m})^2} = 9,81 \frac{\text{N}}{\text{Kg}}$$
$$r = 981 \text{ m}$$

Step into knowledge.

enso
company



Annex

06



VR In Education

In education – which we consider here as the process of receiving or giving systematic instruction – Virtual Reality is already making significant inroads with many start-ups and established companies offering packages of experiences and services aimed at schools (but also at factories, armies and other institutions). The virtual world is becoming helpful in learning safer and faster while also saving much money.

However, we believe that higher education institutions will face many choices offered by virtual worlds and need to consider various strategic and legal issues carefully. In recent years, the "software-as-a-service" trend has grown. Instead of purchasing a software product installed and hosted on the institution's servers and managed by internal staff, the institution pays an outside company to host the software application and provide services to customers over the Internet – and this is an excellent opportunity for potential service.

Virtual world platforms seem to essentially follow this model, which puts higher education institutions in the position of relying on the service provider for everything from data security, uptime, and reliability to the governance of the legal relationships between the institution and its faculty, staff, and students under the provider's terms of service. However, the choice of the platform must be made carefully, as existing platforms may not meet the legal requirements to which higher education institutions are bound, such as accessibility, accreditation reporting, and student privacy requirements. Therefore, colleges and universities will be forced to weigh these issues carefully and understand the implications of their choices.

What Is Metaverse

To begin our research, we first understand the term "metaverse" and where it came from. In short, it is an **immersive version of virtual Internet reality where people can interact with digital objects and digital representations of themselves and others and can move more or less freely from one virtual environment to another**. It can also involve augmented reality, a mixture of virtual and physical realities, representing people and objects from the physical world in the virtual and, conversely, bringing the virtual into people's perceptions of physical spaces.

Neal Stephenson coined the term "metaverse" in his 1992 novel **Snow Crash**, which was referred to as inhabited by avatars of real people. It was a persistent, immersive 3D virtual environment in which any user, anywhere in the world, could engage everything from business to entertainment with access to a terminal.

Almost 30 years later, this definition is taking shape before our eyes. Some call it **the new Internet** (or the Internet incarnate), others a democratized virtual society, still others the convergence of virtual and physical realities, persistent virtual spaces, or a digital twin of our world. In recent years, **the term includes aspects of the physical world objects, actors, interfaces, and networks that build and interact with virtual environments**.

What makes this scenario full of opportunity is the concept that the Metaverse is **not owned by a handful of just a few companies**, as there are new technologies that could facilitate less centralized virtual worlds, such as cryptocurrencies and non-fungible tokens or NFTs. Not one product a single company can build alone, **these metaverse visions overlap with the concept of Web3**, a term that covers the concept of decentralized internet services where users retain more personal control over the data they put online.



The Near Future

In 15 years, virtual reality will be the protagonist of a vast development that will allow us to discover new sensory horizons. Although VR technology is now limited only to touch and sight, most developers are working to extend this sensory hijacking to our other faculties, such as touch and smell, to deepen this sense of immersion and enter a new universe.

This will make the experience more immersive in the future, although, on the other hand, the tools used will be cheaper, lighter and more comfortable. In this era, characterized by the so-called Metaverse, we will be involved in something more than Virtual and Extended Reality (XR). It involves augmented reality with virtual reality and, of course, will be enabled by other technological trends, including **super-fast networks that will allow us to experience VR as a cloud service, just as we consume music and movies today.**

At the same time, **artificial intelligence will be instrumental** in providing more **personalized virtual worlds** to explore, characters and activities that best fit our personalities and evolutions.

When we turn our focus to education in this scenario, we must consider that much of the advantageous virtual reality production and presentation **software is already available to educators and students.** Unity software may well be considered the industry standard for VR production (Gaudiosi 2015); it is also freely available in its "personal edition" form and relatively easy to use (Catanzarti 2015a, b).



To better understand possible technological avenues to explore in our product, we researched imminent technological advances:

- **LiDAR (Light Detection and Ranging):** essentially used to create a 3D map of the surroundings, which can seriously increase the AR capabilities. It can provide a sense of depth to AR creations – rather than looking like a flat graphic. It also enables occlusion, where any physical object located in front of the AR object should block the view of the object. This is vital to make AR creations look more rooted in the real world and avoid clunky experiences.

- **VR headsets:** will get smaller, lighter, and incorporate more features. Hand detection and eye tracking are two prominent examples of the technology increasingly incorporated into VR headsets. Because hand detection allows VR users to control movements without clunky controllers, users can be more expressive in VR and connect with their game or VR experience on a deeper level. Moreover, the inclusion of eye-tracking technology allows the system to focus the best resolution and image quality only on the parts of the image the user is looking at (just as the human eye does). This taxes the system less, reduces lag and reduces the risk of nausea.

- **New XR accessories:** to further deepen the experiences, such as robotic boots (Ekto One), haptic gloves, or even full-body suits (Teslasuit). These accessories will become more affordable, mainstream, and effective over time, ensuring a more immersive experience.

- **AR contact lenses:** While it is true that AR glasses will become better, cheaper and more comfortable, in the future, they may also become obsolete as AR lenses take over. Eventually, AR lenses could be used to magnify the world around us so that we could see whatever we want. They could also help us improve our vision in low-light conditions (even though our vision is unobstructed) or even serve as a teleprompter for speaking events. All this would further blur the boundary between the natural world and the virtual world.

Interview Insights

“We can work wherever we want since we are cooperating on projects”

S.G. / High Tech Developer

“I believe in 15 years VR devices will get smaller and lighter, becoming more portable”

Y.W. / VR Hard User

“Reality wont stop to exist, a new virtuality can give more possibilities but go blended is the key ”

L.V. / Pro Gamer

“Technology must accelerate continuity between university and education out of university”

D.d.T. / Ovr CEO

“The ‘metaverse’ is a set of virtual spaces where you can create and explore with other people who aren’t in the same physical space as you.”

Andrew Bosworth (VP Facebook Reality Labs)
and Nick Clegg (VP Global Affairs)

Process Recap

29/10/2021



VERSON 0.1 - NOLAN TABLE

A new way to connect students.



VERSON 0.2 - SYNC

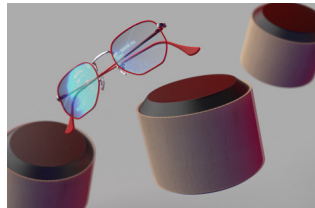
A tool that helps students find a shared rhythm.



VERSON 0.3 - GENIUS

Different spaces, same classroom

19/11/2021



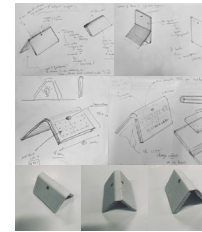
VERSON 0.4 - BUBBLE

A safe interaction between students.

In the first stage, we focused on **teamwork and remote communication issues in the future of higher education**. We designed **three different products** through rapid brainstorming and solution iterations. From the first presentation of the concepts, we decided to **focus on how interactions will be perceived in the future**.

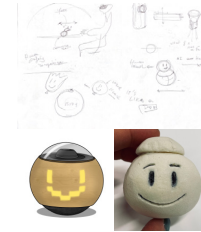
Therefore, we narrowed our **scenario into the metaverse**. Fifteen years from now, its technologies and concepts will be **widely available in society**. Through the second research stage and based on the data from the first, we tried to create an original product solution to **build a safe virtual reality experience**.

10/12/2021



VERSON 1.1 - TENT

A portable device that transports you safely to the metaverse



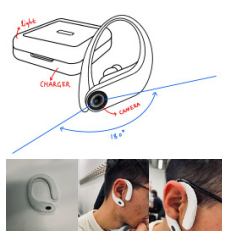
VERSON 1.2 - MINI

Emotional feedbacks when someone gets too close



VERSON 1.3 - CHARME

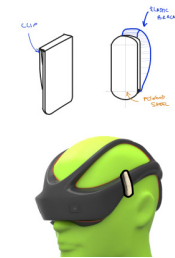
Device that can be worn or placed on a surface



VERSON 1.4 - CAMEAR

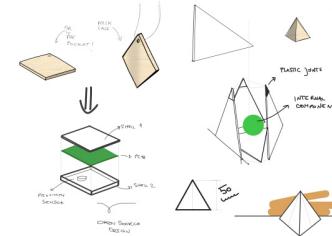
Headphones with a split camera

03/12/2021



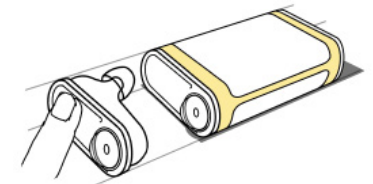
VERSON 2.1 - GUARD PIN

How to integrate our product to VR glasses



VERSON 2.2 - PYRAMID

A kind of jewel, which adds value to the product



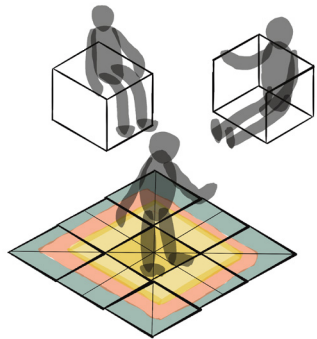
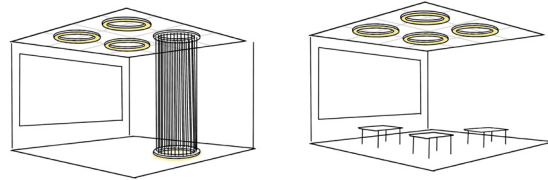
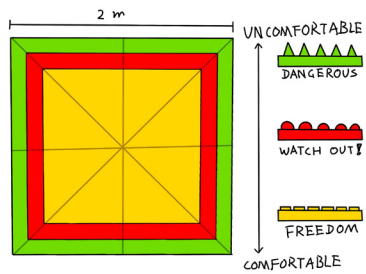
1.4.1 - CAMERA V2

A more ergonomic way to fit headsets

Our first design direction was to **identify and monitor the user's environment** through **radar or cameras** to create physical limits for the user.

Therefore, from version 0.1 to version 2.2, we tried to **use technology to help users build boundaries**. We have researched and found a mature and feasible **technical solution** during this period.

However, after several generations of iterations and rethinking our solutions, we decided that using technology as a solution was too straightforward. So we just **kept the core elements** of these solutions and tried to find more exciting and **more innovative answers**.

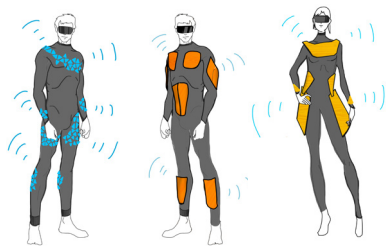


VERSION 3.3 - UMBRELLA

Curtain that helps the user to understand, through touch, that they are exceeding their area.

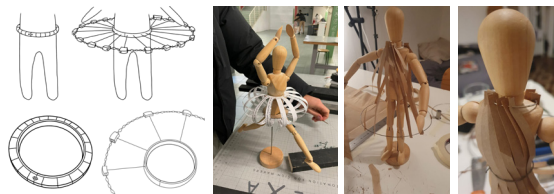
VERSION 3.1 - MULTI MAT

Harness the human senses to create a safe space.



VERSION 3.2 - ARMOR

A more playful and technological path.



VERSION 3.4 - PEACOCK BELT

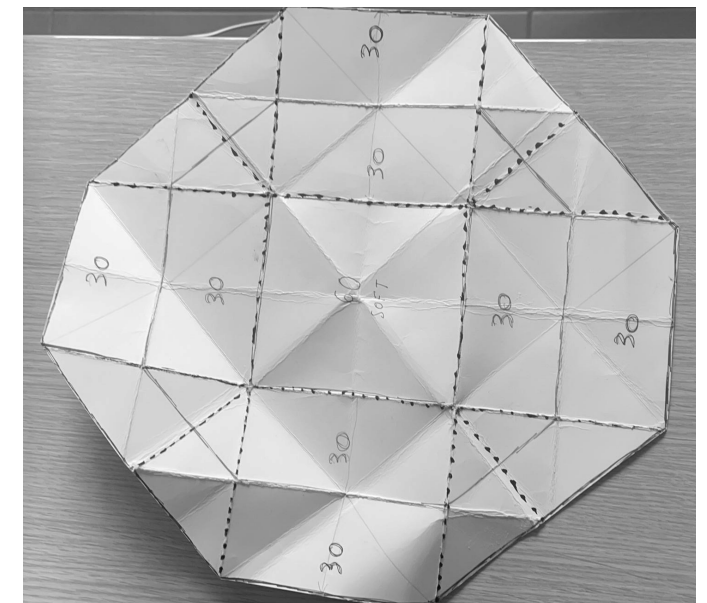
Expansible belt that set a safe distance.

We tried to change our thinking by using the **physical boundary as the entry point** and **combining the elements** of the previous solutions to rethink the product solution with low technology as the project's core.

In the end, we chose the **tactile mat as the final direction** of the product, inspired by way of the blind. Because we found that the user's feeling when using virtual reality devices is very close to that of the blind due to the lack of sense of boundary with the real world.

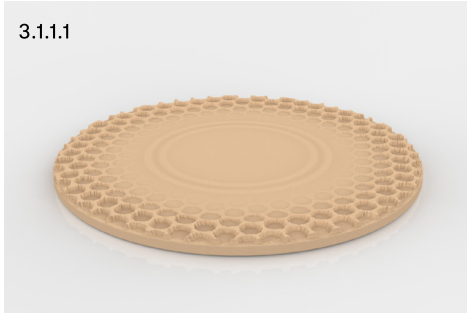
Version 3.1.1

After determining the design direction of the product, we did a brainstorm to design and iterate on the functionality of the mat and other details of the product. During this phase, we determined the **basic functionality and the usage of the product**.

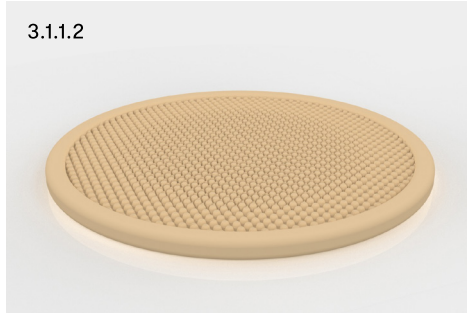


Prototype & Testing

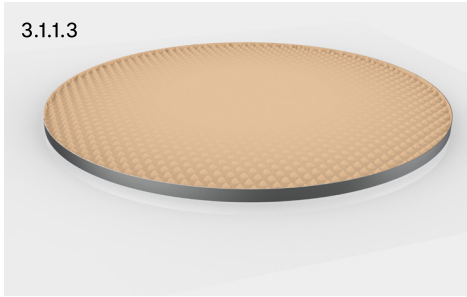
3.1.1.1



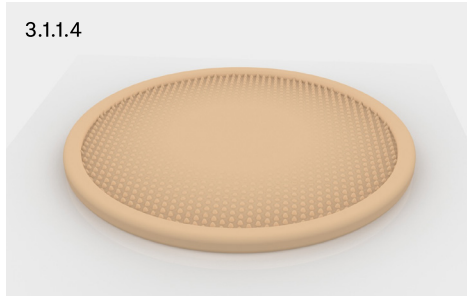
3.1.1.2



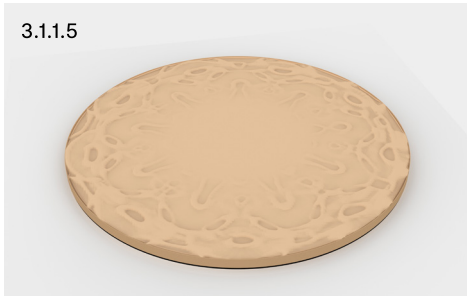
3.1.1.3



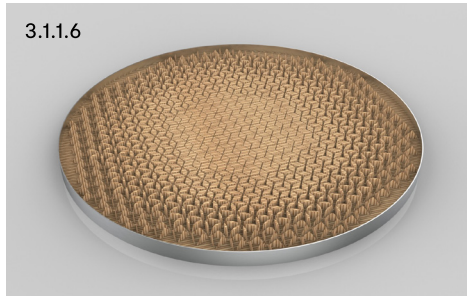
3.1.1.4



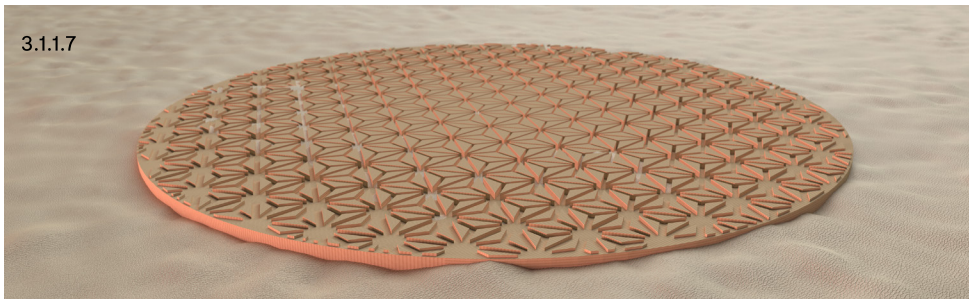
3.1.1.5



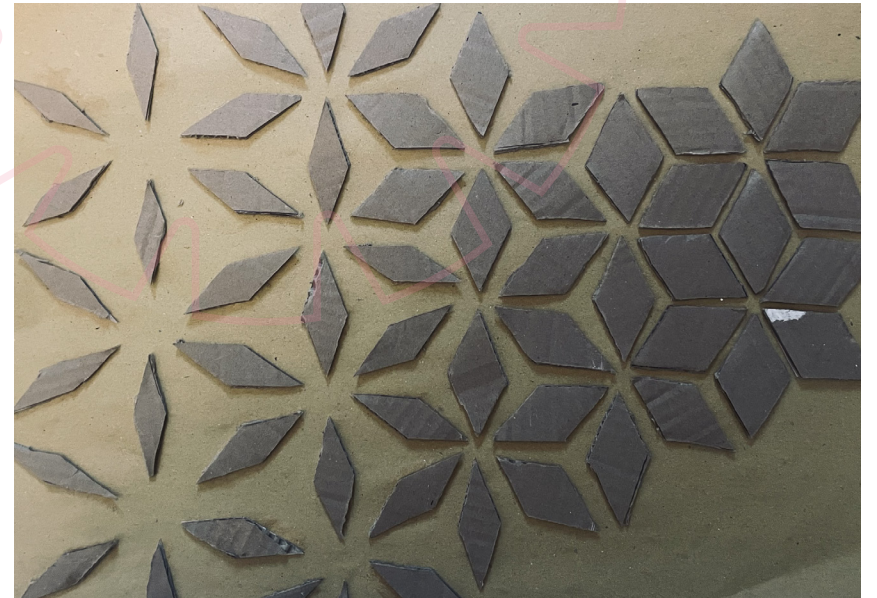
3.1.1.6



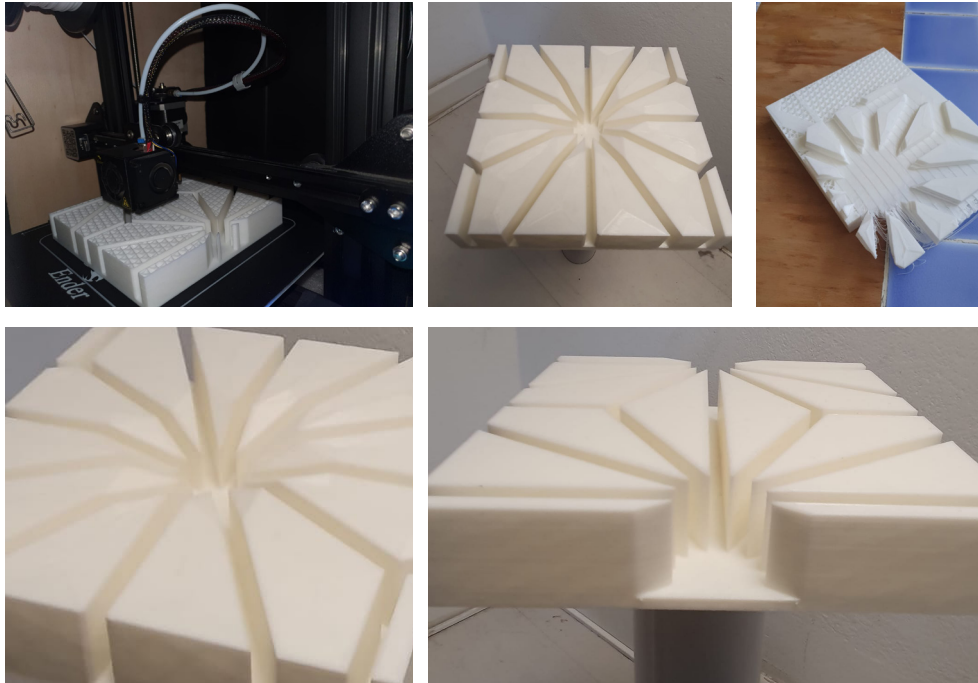
3.1.1.7



We ran **multiple iterations of the mat's raised pattern**. And scored the selection based on **aesthetics, processing difficulty, and use perception**. In the end, we chose a **hexagonal pattern with size and distance gradient**, and then we made a prototype of the product based on the pattern and tested that prototype in actual usage. The pattern was then fine-tuned based on the test results to improve its functions.



Product Development

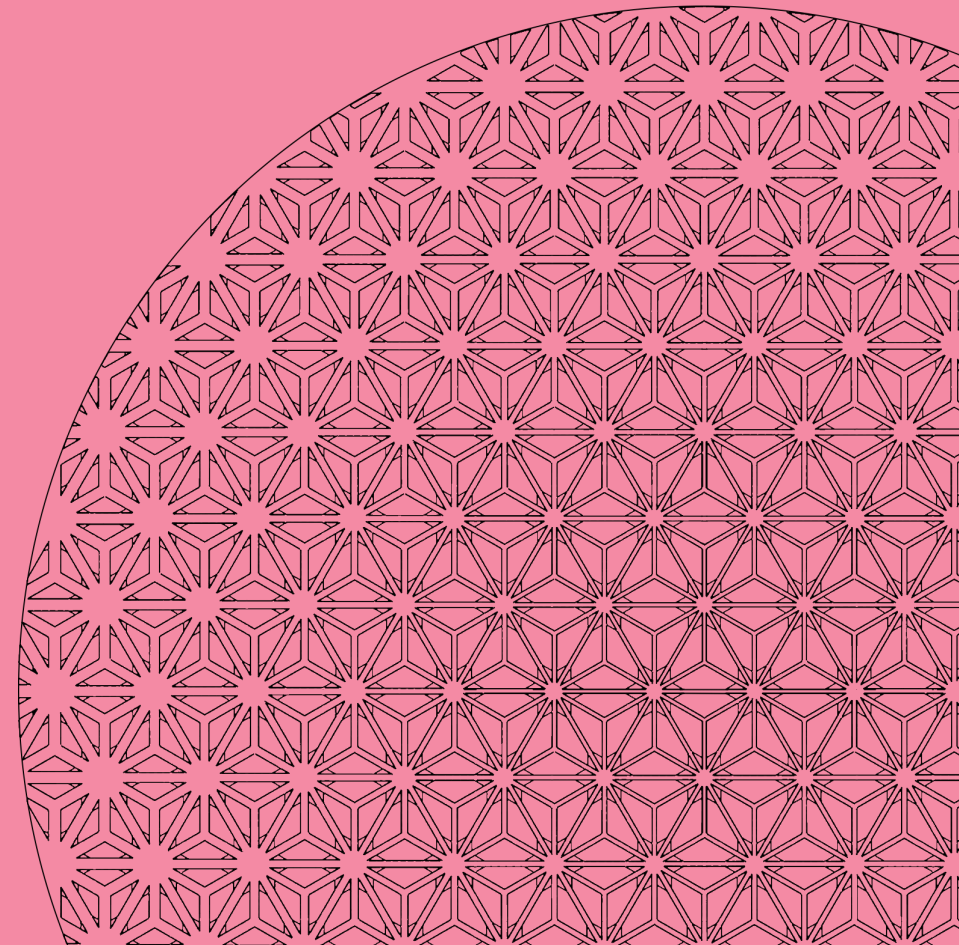


Final Pattern

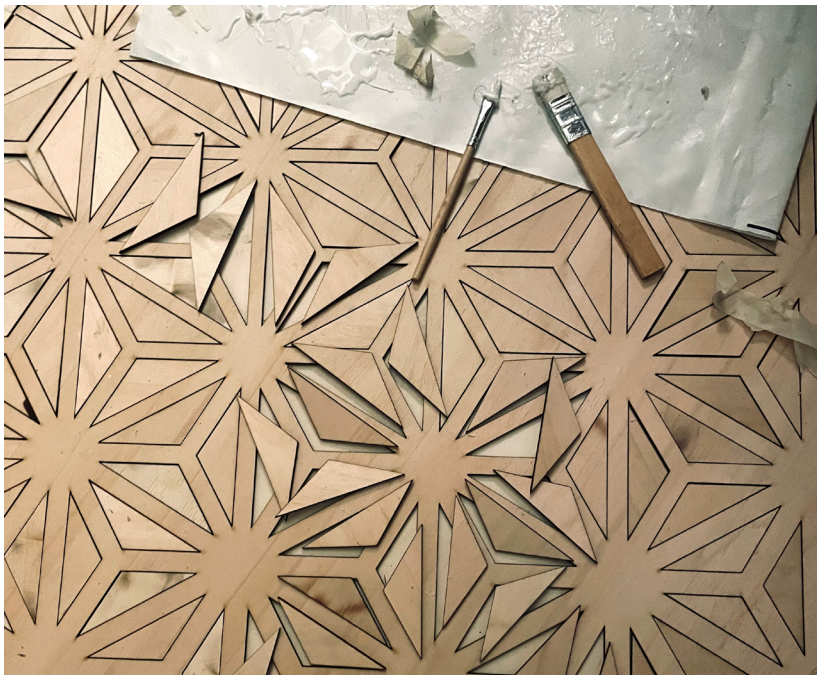
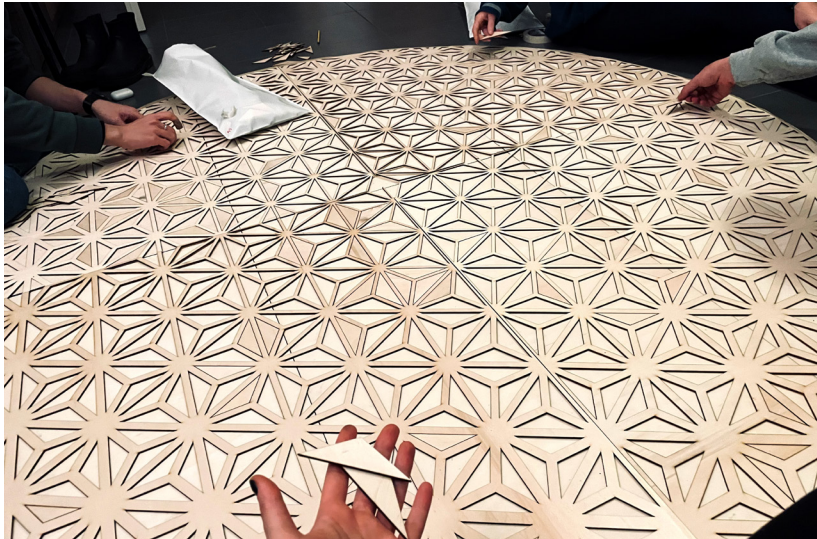
Later, when designing the final pattern, we made **prototypes in various materials** to test both the **feasibility** and, above all, the **usability** of the mat itself.

First, we made a sliced pattern using the **3d printer**. After printing this piece (visible in the images), we walked on it and discovered some issues related to this type of shape. The extreme corners of the triangle that make up the pattern were **too sharp and bothered our feet**, increasing the risk of possible accidents while using the product.

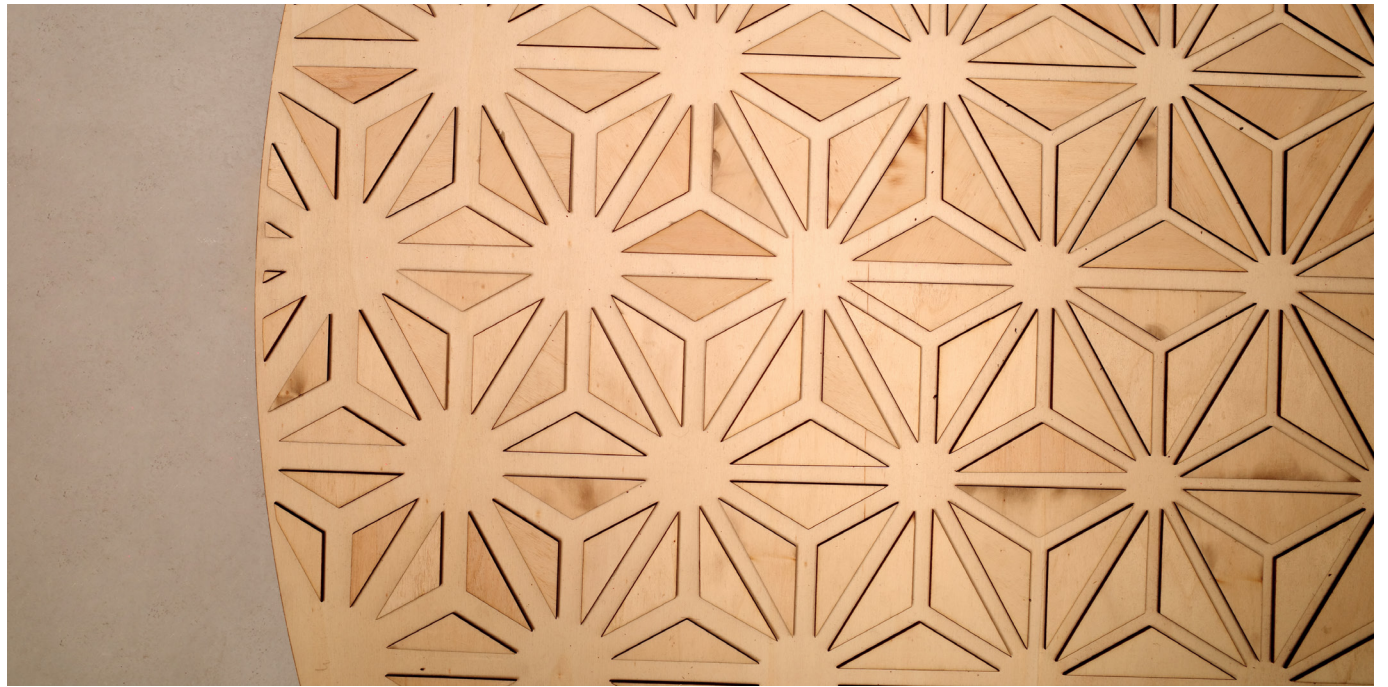
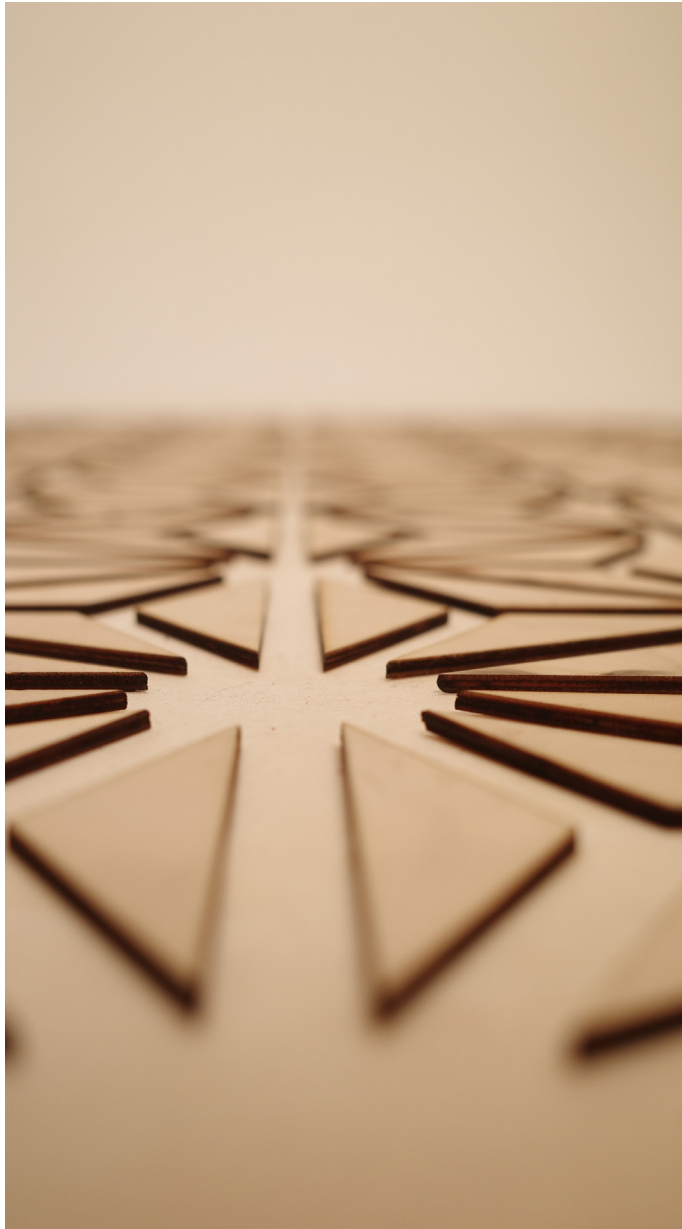
Once we understood how our feet might react to the pattern and the definite possibility of producing it, we **modified the extrusions by adding inserts** in the critical parts. The problem was solved. We used the CNC machine for further attempts to get closer and closer to the final production. **A singular plywood cylinder will mill the final mat.**



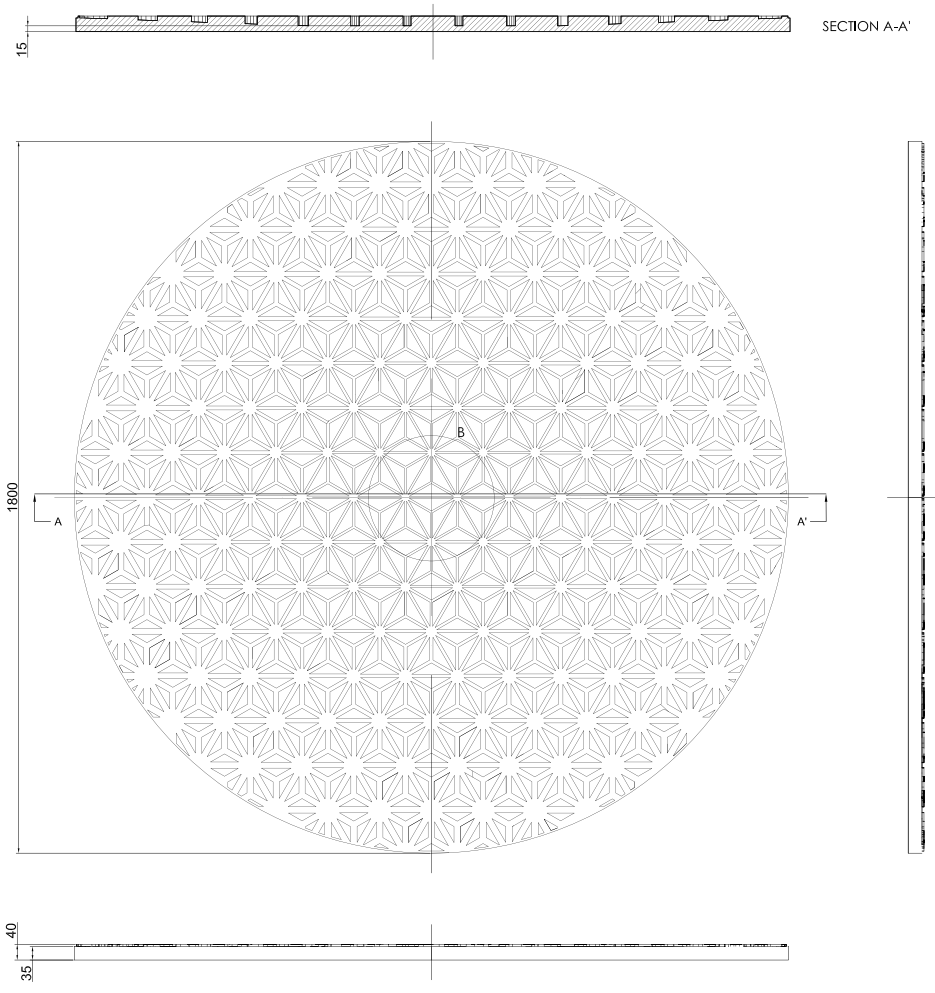
Final Prototype



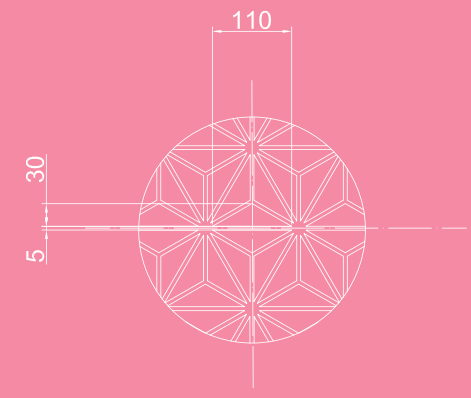
Final Prototype



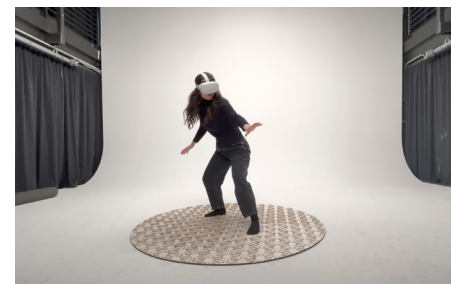
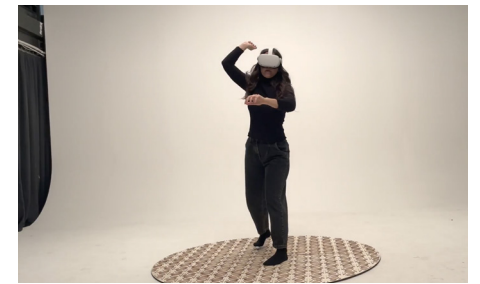
Technical Drawing



ZOOM IN B
SCALE 1:1



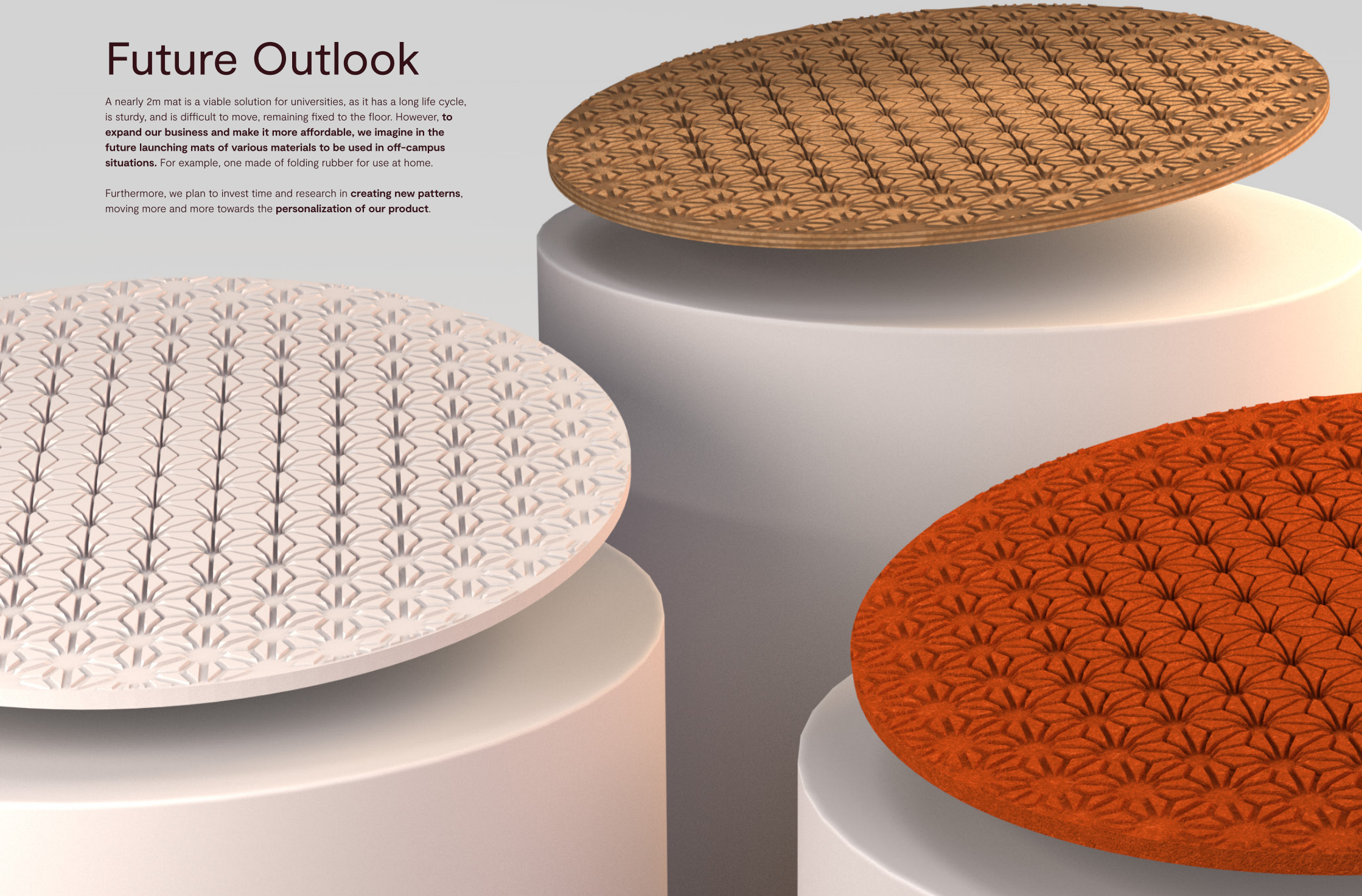
Video Making-Of



Future Outlook

A nearly 2m mat is a viable solution for universities, as it has a long life cycle, is sturdy, and is difficult to move, remaining fixed to the floor. However, **to expand our business and make it more affordable, we imagine in the future launching mats of various materials to be used in off-campus situations.** For example, one made of folding rubber for use at home.

Furthermore, we plan to invest time and research in **creating new patterns,** moving more and more towards the **personalization of our product.**



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07

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