



i-Game

Building a community for the co-creation of games with high impact on innovation, sustainability, social cohesion, and growth

HORIZON- 101132449

D3.1

Gamification & Community Design Workshops

Dissemination level:	Public
Contractual date of delivery:	Month 3, 30 April 2024
Actual date of delivery:	Month 3, 30 April 2024
Work package:	WP3: Co-creating games by engaging people from different backgrounds
Task:	T3.1 Gamification, Community and Experience design training
Type:	Report
Approval Status:	Final Draft
Version:	1.0
Number of pages:	92
Filename:	d3.1-iGame-Gamification_and_Community_Design_Workshops_30042024_v1.0.docx
Abstract <p>Deliverable D3.1 from WP3 consists of providing with co-creation methodologies and complementary documentation on experience design to illuminate on the field of Game-based education, Gamification and Serious Gaming, Storytelling and Community building.</p> <p>The information in this document reflects only the author's views and the European Community is not liable for any use that may be made of the information contained therein. The information in this document is provided as is and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk</p>	



and liability.



funded by the European Union



History

Version	Date	Reason	Revised by
0.1	10-April-2024	ToC created	Oscar García Pañella (CB)
0.2	20-April-2024	1st Draft submitted for internal review	Oscar García Pañella (CB)
0.3	21-April-2024	Conduction of internal review	Makrina Viola Kosti (CERTH)
0.4	29-April-2024	Final version after the internal review for quality check	Oscar García Pañella (CB)
1.0	30-April-2024	Quality check, content review and issue of final document	Makrina Viola Kosti (CERTH)

Author list

Organization	Name	Contact Information
Cookie Box	Oscar García Pañella	oscar.garciap@cookiebox.es
Cookie Box	Roman Zabal	roman.zabal@cookiebox.es
Cookie Box	Carlos Andreu	carlos.andreu@cookiebox.es
CERTH	Makrina Viola Kosti	mkosti@iti.gr

Executive Summary

Several gamification, storytelling and community building workshops were delivered to enlighten the different partners of the i-Game EU Project. Deliverable 3.1 states them. In these, we worked on several “how to’s”:

- Briefing and objectives.
- Desired behaviours.
- Skills to educate on.
- Player’s segmentation.
- Motivators behind the targeted audiences.
- Storytelling layer.
- Aesthetical layer.
- Technological layer.
- Resources and constraints.
- Engagement loop, game elements and game mechanics, rewards and pointification techniques.
- Serious Game Canvas and GDD (Game Design Document) presentation and use.

Therefore, and as expected, the partner Cookie Box (CB) offered 2 workshops to the rest of members of the i-Game consortium via a hybrid approach. The technical meeting happened during the days 3-4 of April 2024 in the city of Barcelona, Spain. The 3 workshops were designed to illustrate in the fields of Gamification, Storytelling and Community building.

Here we list some of the syllabus keys that we went through via theoretical lectures and practical exercises in group:

- Learn to design a Gamification layer that operates throughout the entire service and is not a "one-off" activity in the form of an applied game.
- Learn to provide a service tailored to our audiences and their diversity in terms of segmentation into "player types."
- Learn to enhance an educational experience from the very "onboarding" process.
- Learn to offer a proposal of great value and strategic significance.

Via:

- Motivational design definition.
- Gamification framework.
- Game elements.
- Motivators and fun tasks.
- Player types.
- Rewards design.
- Pointification design.
- Structure design.
- Experience and Game Design documents creation.
- The steps in Storytelling (user, goals, plot, characters, tone, story and transmedia).



- The creation of a platform to co-create while ensuring that it also serves to create Communities.
- 2 complementary methodologies and tools for community building:
 - The platform design toolkit.
 - The community canvas.



Abbreviations

Abbreviation	Definition
MVP	Minimum Viable Product
VUCA	Volatility, Uncertainty, Complexity, and Ambiguity
KPIs	Key Performance Indicators
ROI	Return Over Investment
MDA	Mechanics, Dynamics, and Aesthetics
LBE	Location-based Entertainment
EDD	Experience Design Document
PC	Peer Consumers
PP	Peer Producers
PA	Partners
SMBs	Small and Midsize Businesses



Glossary

Canvas — A design canvas is a pre-formatted sheet of paper that enables a group of people to work and think together, as well as having structured conversations around a series of key topics to ultimately produce a shared vision and rich knowledge output. In our workshops, we use design canvases to help the team members to apply step by step our platform design approach, get insights together and share outcomes clearly with their stakeholders.

Platform Design Brief — A Design brief is a document for a design project developed by a person or team (the 'designer' or 'design team'). The brief outlines the scope of the platformization project including initial insights and elements of the initial vision.

Platform (strategy) — a strategy, run by a "platform shaper" that wants to mobilize and help an ecosystem in creating value, with the aim of capturing part of this value. A platform strategy is made of a combination of different elements: narrative, technologies, rules, channels, contexts, enabling services, protocols and more.

Ecosystem — a set of entities playing in a context (e.g. a sector, an industry, a market, an organization) interacting and exchanging value, leveraging resources, generating outcomes. We often use "system" as an alternative to "ecosystem". Note that contexts often overlap, and boundaries of ecosystems are hard to define.

Entity — an individual, economic, and social actor with specific objectives. It can be a person, an organization, an institution, a team.

Role— in platform thinking, defining a role is a way to cluster several kinds of entities into the same category of players, primarily according to how much they share motivations to join, assets and capabilities (resources that they can leverage) and type of value exchanges they're looking for. Clustering entities into roles help you to apply platform thinking. As an example, modelling a healthcare platform-ecosystem, to facilitate booking and consumption of medical advice, one could model a general practitioner (GP) or a specialist under the same role of "medical professional" or "healthcare service provider".

Transaction— a transaction is an interaction between two entities. It happens in a channel or context, and it involves an exchange of value units between the two entities. Transactions are already happening even before we deploy our platform strategy, however, the more the channel is well designed to reduce the coordination/transaction cost the more of these kinds of transactions will happen easily. A good transaction is simple, elementary, 'atomic'. It is something easily repeatable, like filling out a contact form.

Incentive— one of the main pillars of designing and deploying a platform strategy is to deeply understand what the incentives would be we foresee for every entity to join our platform strategy. Usually, incentives have to do with everything that addresses the entities' performance pressures, life goals or generates more convenience for them. The more we understand incentives, the more likely is that they would embrace the "new rules of the game" embedded in our platform strategy.

Platform Narrative — is the macro message that embodies the "new rules of the game" that



a platform shaper wants to offer to the entities of a sector, industry, organizational or market context. The platform narrative aims at convincing existing players to join a platform strategy because it will be easier for them to produce and exchange value, as well as because they will learn and evolve much faster as compared to not joining the platform strategy. One way to describe it is what John Hagel calls a narrative of positive opportunities: “...an effort to broadly redefine the terms [...] for a sector through a positive, galvanizing message that promises benefits to all who adopt the new terms” **Network Effects** — Network effects are the mechanisms, peculiar of networks, whereby adding a new user (or producer) makes the product/service/experience more valuable to every other user. Network effects are of many types. One example could be the network effect generated by adding a landline to the network (Metcalfe’s law).

MVP — in platform thinking this word stands for Minimum Viable Platform, besides the more usual Minimum Viable Product. The MVP is an initial iteration of the platform strategy that is focused on validating the riskiest assumptions: this is normally used to minimize the risk in designing and developing a whole strategy - investing a lot of energy and money in developing it - without actually learning and validating first if the ecosystem really exists and the strategy generates attraction and pull.

VUCA —VUCA is an acronym used to describe or to reflect on the volatility, uncertainty, complexity, and ambiguity of general conditions and situations in the modern world. It’s a key concept in Platform Design, as the shifting conditions of reality create the mounting performance pressure on entities in the ecosystem for which the platform strategy wants to be an answer.



List of Figures

Figure 1. Moments in Barcelona’s technical workshop including online attendance	13
Figure 2. The “hamburger” Serious Game creation model by Cookie Box in depth	17
Figure 3. Images from the Gamification workshop in Barcelona	19
Figure 4. The Serious Games Canvas for their design. Courtesy and copyright Cookie Box s.l. All rights reserved 2024	20
Figure 5. There is a concrete intrinsic motivator related to the Storytelling	21
Figure 6. Description of our final user via an empathy map exercise.....	24
Figure 7. Mapping the goals to achieve thanks to the Storytelling. From the initial status to the desirable final situation and the ways to evidence it	25
Figure 8. The “immortal seed” model by Balló and Pérez.	26
Figure 9. The phases of the Hero’s Journey by S. Campbell / C. Vogler	33
Figure 10. The acts of the Hero’s Journey by S. Campbell / C. Vogler	33
Figure 11. The activity to pick up a subject for the museum’s Serious Game narrative	35
Figure 12. Description of our final user via an empathy map exercise	36
Figure 13. Mapping the goals to achieve thanks to the Storytelling. From the initial status to the desirable final situation and the ways to evidence it	36
Figure 14. Choosing immortal seeds for the plot.....	37
Figure 15. Choosing the appropriate archetypes for our characters in the story	37
Figure 16. The Hero’s journey model template	38
Figure 17. Images from the Storytelling workshop in Barcelona.....	39
Figure 18. The rating when dealing with a community vs a platform (A).....	41
Figure 19. The rating when dealing with a community vs a platform (B).....	41
Figure 20. The rating when dealing with a community vs a platform (C).....	42
Figure 21. The rating when dealing with a community vs a platform (D)	43
Figure 22. The rating when dealing with a community vs a platform (E).....	44
Figure 23. The rating when dealing with a community vs a platform (F)	44
Figure 24. The rating when dealing with a community vs a platform (G)	46
Figure 25. The rating when dealing with a community vs a platform (H)	49
Figure 26. Images from the Community building workshop in Barcelona	51



Figure 27. The logos of the 2 tools recommended for Community building in the i-Game project	51
Figure 28. Intrinsic motivators that lead to an Educational Serious Game for museums thanks to all the sciences	53

List of Tables

Table 1. The participant’s list in the technical meeting	57
Table 2. The narrative seeds	80



Table of Contents

1	INTRODUCTION	12
2	GAMIFICATION WORKSHOP	14
2.1	Objectives	14
2.2	Learnings.....	14
2.3	Tools	19
3	STORYTELLING WORKSHOP	21
3.1	Objectives	21
3.2	Learnings.....	21
3.3	Tools	34
4	COMMUNITIES WORKSHOP.....	40
4.1	Objectives	40
4.2	Learnings.....	41
4.2.1	Platform Design Toolkit	41
4.2.2	Community Canvas	48
4.3	Tools	51
5	CONCLUSIONS	52
6	REFERENCES	55
A	APPENDIX	57



1 INTRODUCTION

When dealing with a challenge related to the interest, as we are in the i-Game project, we need a set of true triggers to boost the desired behaviours for our audiences, while connecting them all with the inner objectives of the cultural-related solution. This means that the product that this project has to offer should be:

- Designed in the top of a framework(s) or a set of technology layers where the content stays.
- Fully adjusted to the final user targets.
- Clear and aesthetic.
- Well-told, in the sense that a narrative structure is present and designed for the motivation.

In the i-Game project, engagement is key, and motivational design (i.e. Gamification and Serious Games) are the answer. The gamification discipline applies game design methods to get behavioural change while guaranteeing autonomy and freedom of choose. The discipline can be applied within any action, product, or service. Serious Games do not start with a particular product or service but create it from scratch, as an applied game where the same laws remain (game design). Both belong to motivational design.

The ultimate objective is to keep the educational factor, while avoiding a boring potential effect that might decrease engagement while visiting a museum. Memorable experiences for museums consist of interactive pieces in which the participants use some sort of interface to undertake a series of tasks, while conquering challenges while they live through a playful universe. We might say that motivational design adapts to the user who is interacting, providing visual, auditory and (probably) tactile feedback. Without a doubt, games appear to be the perfect tool with which many practitioners had been dreaming of from immemorial times.

Applied games for museums are good examples of multidisciplinary productions, and like any interactive experience, they should keep our users immersed in “another realities”. Games can be both analog and digital, besides collaborative and even when integrated like virtual environments, which can be the case or not depending on the needs. They also integrate different disciplines (i.e., graphic design, usability and user centred design, script and narrative, content generation, technology, and content management, etc.), and may be intended for different final applications, such as the ones connected to our duty in the i-Game project.

This document describes the workshops related to the design of memorable gamified experiences for museums that were performed during a technical meeting for the i-Game project in the city of Barcelona, Spain during April 3-4th, 2024.

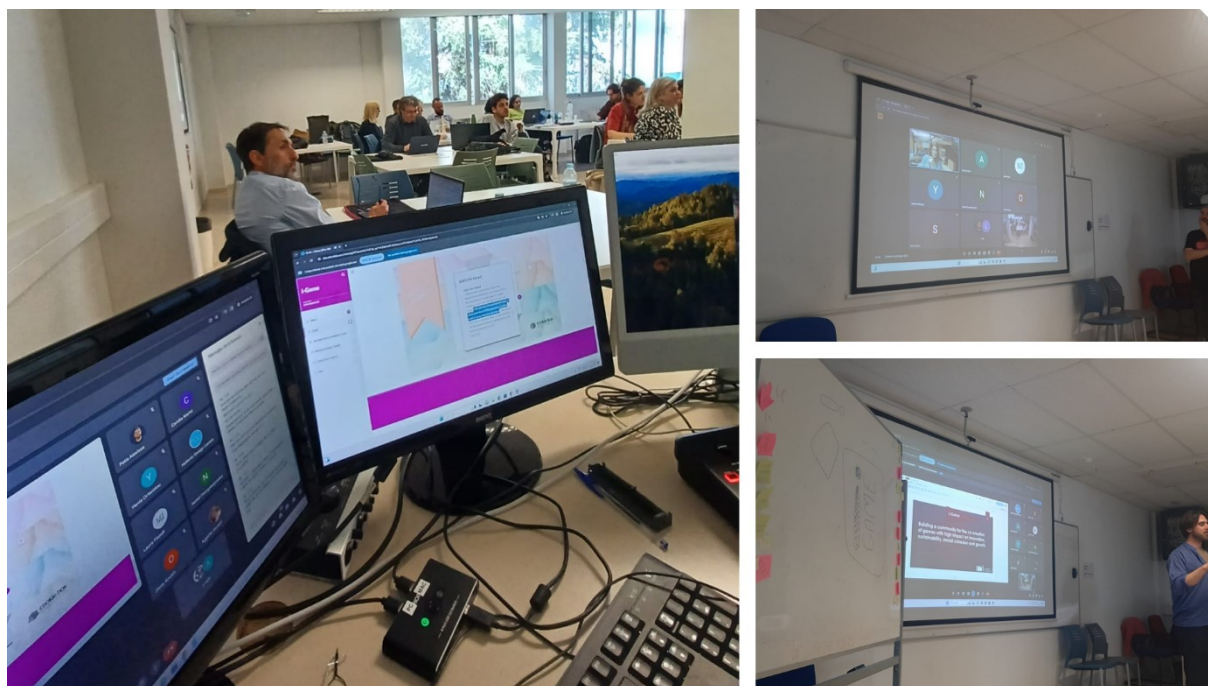


Figure 1. Moments in Barcelona's technical workshop including online attendance



2 GAMIFICATION WORKSHOP

2.1 Objectives

When applying motivational design, that is Serious Games or Gamification campaigns, we are seeking growth in terms of competencies and skills, in addition to educating while providing with a true change in behaviour for the good. The experience must be sustained over time and selected by our participants and then, being designed as a game, that is a set of alternatives to select from.

Immersive, smart, and mobile technologies need some sort of “soul”: it is not about the platform nor the container, but a storytelling layer plus a well-implemented set of content along with some psychology. If we add the technical rigour and enough surprise, we can guarantee that motivation will be present, and the engagement will flow within the entire museum. When engagement happens, transference stays. It is about designing from Psychology first to implement via Technology afterwards.

Evidence for the selection of Motivational Design can be justified by the following aspects:

- It operates via engagement.
- It can be designed specifically for different segments, audiences, targets, and participant’s types.
- It must guarantee measurement, KPIs and indicators, because there is interaction, and therefore a reaction per action.
- Any memorable experience starts as a powerful communicative capsule where both metaphor and narrative play an important role. And museums can benefit clearly from that.
- The activities should be chosen, never forced, and games can help guarantee that.
- Learning by doing flows within a game since it focuses on solving challenges.
- These implementations connect with our new realities where the experiential layer is in the top.
- An applied game allows audience to express themselves as needed because it can happen at any moment and via different platforms.
- Cooperation between several individuals helps them build communities that support their actions and progress.
- Memorable experiences for museums are fully adaptive processes.

The following section outlines the learnings at these respects.

2.2 Learnings

A Gamification and Serious Games implementation needs a clear identification of its final users as to begin. Then, generic, and specific objectives, which help define KPIs, are defined, always looking for an optimum Return Over Investment (ROI). A phase of investigation and



state-of-the-art creation takes place, and the audiences are segmented based on standard market parameters, genre, culture, socioeconomic status and player (motivational) types. Key motivators are extracted and applied within the platforms (transmedia) and via game mechanics and narrative design. Everything is measured thanks to a pointification algorithm, which governs the system, and measures results for each group and user. Playtest (testing the developed system) then helps find the definitive design. It is a process of constant iteration and refining.

Gamification, Serious Games, and simulators, that is motivational design possibilities, have already been applied successfully to improve both the engagement and the results achieved in culture and heritage. *Museums can be seen as educational contexts where memorable experiences should happen* (Sheldon, 2011), (Weinstein, 2011), (Quintana and Garcia, 2017) and (García et al, 2012). According to (Aldrich, 2004), a simulator –like a serious / applied game for a museum or a training experience– starts with an initial “tutorial” phase that is followed by the simulation/game experience, in which the gameplay rules do not have to be linear but depend on the decisions of the participants.

“Our ability to shape, the possibility to focus or concentrate our efforts on a certain task, the fact of being able to show empathy towards someone or something, and our imagination are essential in this mission” (Schell, 2008). Therefore, we can add game elements to a simulator to conclude with a serious game in a museum where both **autonomy and control** happen to be. This is the case within our i-Game project.

In general terms, *“active learning helps to significantly improve both abilities and progress level”* (Regueras, 2008). The benefit of a playful approach to learning in a cultural framework that combines teamwork with competition between team-members has led to specific formats such as the JamToday Game jam co-creation processes used within the i-Game project and analysed before (Pivec et al, 2016). **Co-creation and Learning-By-Doing** are the basis underneath autonomy and control, which are the pillars of cultural memorable experiences. These are combined with a social approach of gamification, which includes social networking elements; this combination “allows combining long-term motivational benefits of social approach with the collaborative and participative capabilities offered by gamification” (De-Marcos et al, 2014).

We shouldn’t forget that according to several studies, such as (Baxter et al, 2016), enjoyment is an important factor contributing to learning improvements. In essence, gamification influences motivation, which becomes especially relevant in **three types of activities**: creative work, mundane tasks, and behaviour change. The latter is totally connected to adherence and its success.

In fact, our storytelling and gamified design pivots around the **four axes of the Design of Memorable Experiences**, as defined by Schell (2008). This is the basis of the “hamburger model” as it was presented by Cookie Box. Namely including: the definition of the aesthetic criteria, the creation of a set of rules or game mechanics, a good story and a suitable, enough validated content in a transferable format and some sort of technological approach. The rules are essential, and they should be defined in a manner that they are consistent for all, connecting with our fundamental motivations according to some of the intrinsic based models

that we foresight during the workshop in Barcelona.

For instance, **the MDA model**, standing for Mechanics, Dynamics, and Aesthetics (Hunicke et al, 2004), where its aesthetics, as they call them, are related to Feelings (Game as sense/pleasure); Fantasy (Game as make-believe); Storytelling (Game as unfolding story); Challenge (Game as obstacle course); Community (Game as social framework); Discovery (Game as uncharted territory); Way of Expressing (Game as soap box); and Submission (Game as mindless pastime). In this respect, the design in the museum considers an analogical or digital platform to connect the needs and desires of participants with the behavioural targets we are looking for. Considering that **the experience does not have to be linear**, the alternatives that come up are taken on based on their own will and, in case of overcoming the challenge, the participant receives a reward that can be shared socially. In fact, **a concrete methodology, S.A.P.S. on rewards definition**, was also presented during the technical workshop) This is the major loop coupled with a non-linear storytelling framework behind it when designing for a **Serious Game to be placed as an LBE** (Location-based Entertainment) piece within a museum.

Garcia et al. (2017) describe motivational design and therefore **a Serious Games design methodology, which combines Transmedia Storytelling and Gamification**, as a full. Firstly, the needs of the final participants are identified based on a briefing that comes from the museum and the users themselves. Then, generic, and specific objectives, which help define KPIs, are defined, always looking for an optimum ROI. Then, a phase of investigation and state-of-the-art creation takes place, as it is happening within the i-Game project.

Audiences are segmented based on standard market parameters, gender, culture, socioeconomic status, and player (motivational) types. Then, **key motivators** are extracted (from frameworks and models such as the ones presented in Barcelona) as well as ideal platforms (transmedia), mechanics and narrative design. Every action is measured according to a **pointification** algorithm, which governs the system, and measures results for each group and user. **Playtest** (testing the developed design) then helps find the definitive version of the Serious Game for the museum. It is a process of constant iteration and refining.

A **balanced** development of our motivational design will tackle on:

- A fair design for everybody implied and depending on their interests and characteristics.
- A correct balance between the challenges presented and the success of carrying them out before, while and after the experience in the museum.
- A set of significant and meaningful decisions to secure autonomy.
- An important dosage of skill (competence) coupled with luck. Balancing is a must in motivational experiences.
- Good use of "head" without forgetting that "hands" will also be important at certain times.
- Cooperation among individuals.
- A well-designed reward system where prizes and awards co-exist with visibility, recognition and status when facing the whole community.
- Detail while preserving a good scope to our imagination.

For the i-Game project we propose a solution backed-up by a **pedagogical model** (Garcia et

al, 2016), based on a deep knowledge of the motivations. As listed before, we consider a set of **motivational archetypes** and then we can choose which are the motivators (dynamics) that connect with the emotions that must be induced. These “intrinsic feelings” get in touch with “verbs” that support the experiences or challenges of gaming (mechanics) which happen in the most suitable platform(s) (Transmedia), always following a powerful and coherent plot, which may also be fictional (Storytelling), with the aim of activating behaviours and transferring knowledge.

We are applying the user-centricity philosophy, which means designing for the final audience’s interest, i.e. the experience should be aimed at letting “what they want” happen “where they want” and “how they want” while in the museum; and not at the making the designer happy “only”.

The **motivational design methodology** is presented in the figure next, and it is at the heart of our Gamification solution.

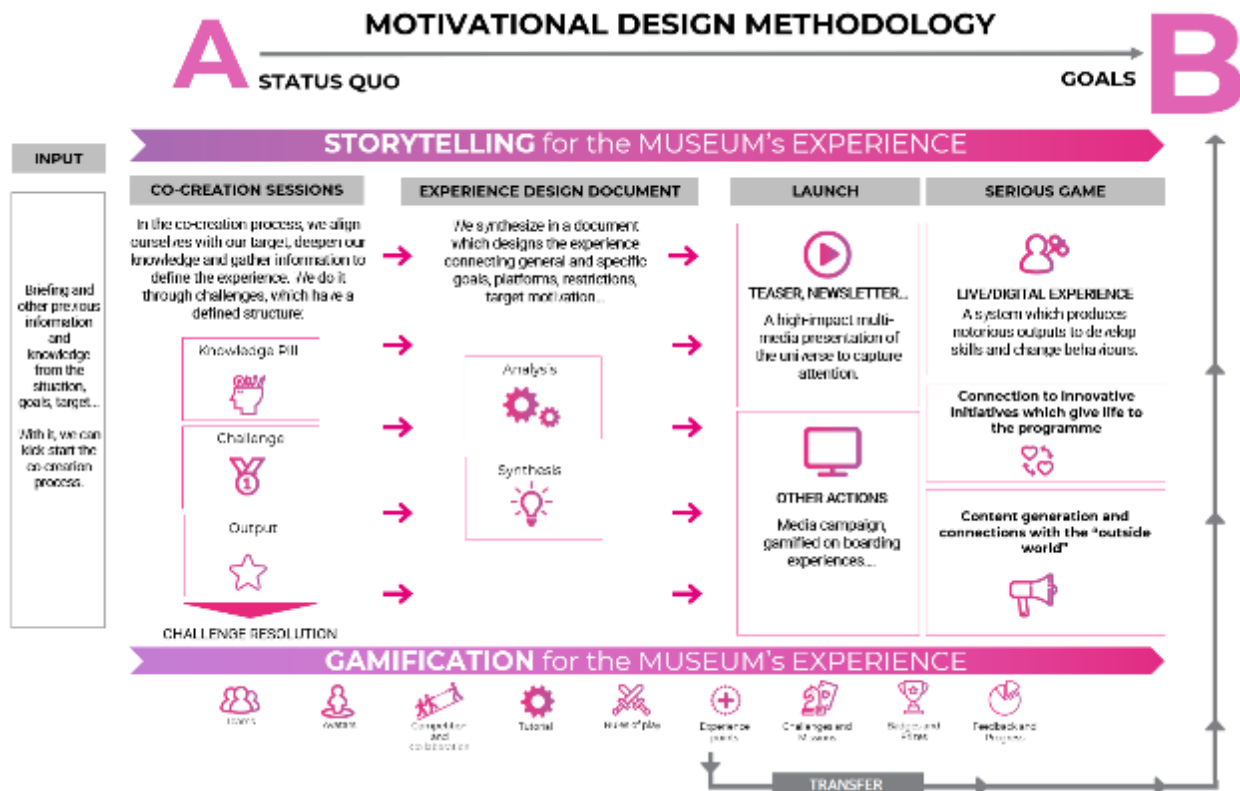


Figure 2. The “hamburger” Serious Game creation model by Cookie Box in depth

This is a **zoom in in the “hamburger model”** that we have presented before. The process starts with our most basic knowledge of the situation to work on. From there, we follow a co-creation journey that will allow us to go from A (the status quo, the current situation in the museums) to B (our desired destination, the place where our goals have been fulfilled regarding participant’s engagement and attendance). Therefore, a process must be carefully followed to craft the final experience for our participants (current and potential).



The **model consists of three layers** as shown in the diagram (and connecting with the model presented in the Barcelona tech meeting):

- **Storytelling.** Its power emotionally impacts the audience to guide them through rational argumentation, keeping a perfect balance between both parts.
- **Transmedia Plan.** The mid layer, the vehicle which allows to deploy a story through a variety of platforms, increasing the number of impacts on the target and, therefore, the impact of the message. As a result, the probability of success is maximized.
- **Gamification.** Game elements, mechanics and dynamics constitute the foundation of the transmedia plan. We ensure fun and pleasure, since they are key elements to achieve engagement, behaviour change and knowledge transfer amongst the targets.

Then, from left to right and from top to bottom, we have:

- We begin by collecting the necessary input. The **initial briefing** of the project itself, where we can find the museum's needs, objectives, associated challenges, previous situation, goals and desired evaluations and KPI's.
- The **co-creation process** starts with the form of a workshop, the co-creation or business jam, where we align ourselves with our target, deepen our knowledge and gather information to define the experience. We do it through challenges, which have a defined structure, and we need all the stakeholders to be present.
- After the analysis phase that emerges from the initial co-creation, we can start working on the synthesis of the solution via **the EDD or Experience Design Document** that describes it all. Therefore, we synthesize the outputs in a document which designs the experience connecting general and specific goals, platforms, restrictions, target motivation and objectives of course. All the axes are contemplated: narrative, aesthetics, technology and transmedia platforms, psychology triggers and game design, production, etc.
- Once there's a first version of the platform, a vertical slice or MVP, we come with the launching phase where the **on boarding and discovery occurs**. It can take several forms: teaser, newsletter, reunion, special event, etc. A high-impact multimedia presentation of the universe to capture attention and guarantee the piloting.
- The museum gamified experience itself can be seen as a **transmedia universe** (different platforms for different users). A system which produces notorious outputs to develop skills and change behaviours while connecting to innovative initiatives. The content can be pre-designed or co-created by the participants. The "outside world" plays a significant role then.

The **engagement loop** that the gamification discipline provides with allows the system to transfer knowledge, measurement, trend, visible and invisible information, participant's data, etc. to the expert system behind. The Serious Game's reaction is refined and adapted in real time depending on the user's needs and preferences while in the museum.

Some photographs from the Gamification workshop are shown next:



Figure 3. Images from the Gamification workshop in Barcelona

2.3 Tools

CB presented the different sections of the Serious Games Canvas to co-create in groups while designing a Serious Game. CB agrees for this canvas to be used within the i-Game EU Project. The different sections in the canvas can be followed to design the Serious Game as an analysis phase.

The sections are devoted to the briefing discussion, the educational components, the expected behavioural per final user, the final user's segmentation and descriptions, some initial insights on Storytelling, Technology and platforms and the resources and constraints to be considered.

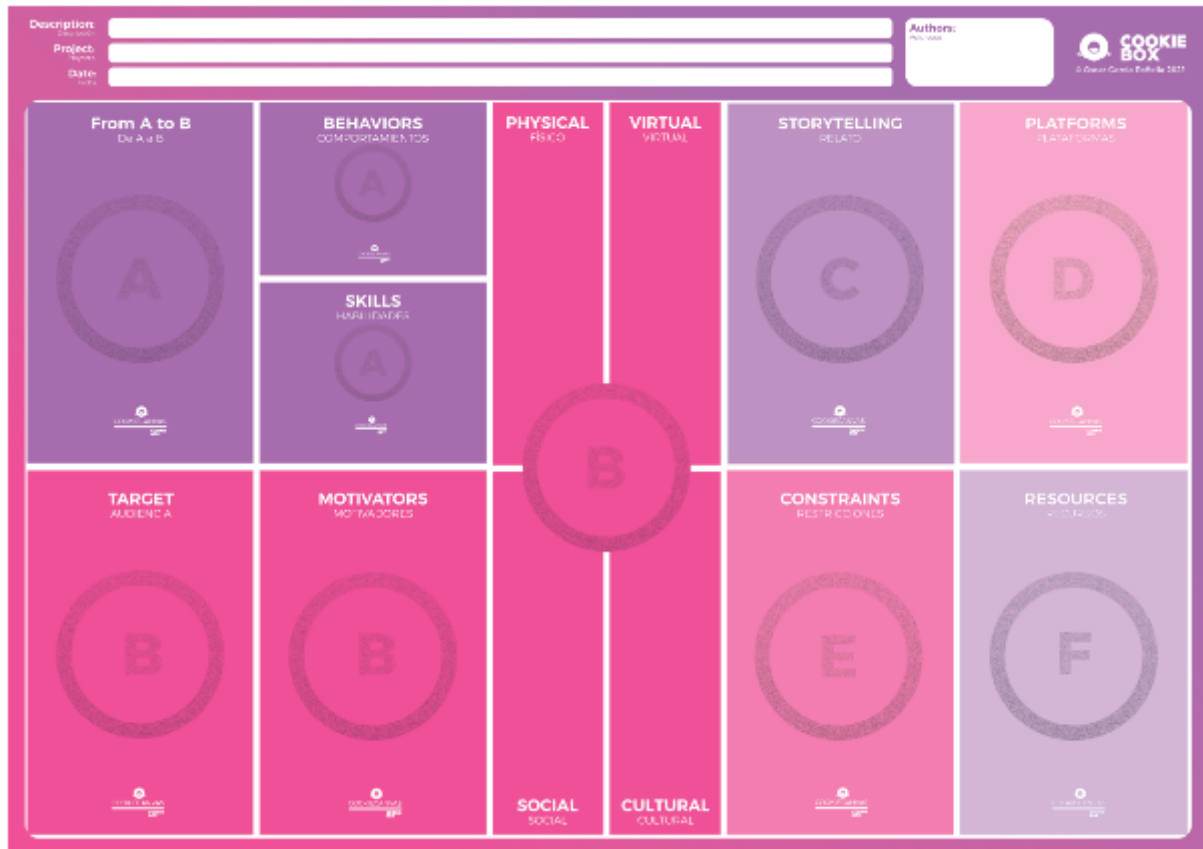


Figure 4. The Serious Games Canvas for their design.
Courtesy and copyright Cookie Box s.l. All rights reserved 2024

3 STORYTELLING WORKSHOP

3.1 Objectives

To propose a solution backed-up by a pedagogical model, based on a deep knowledge of the participants audience. We consider a set of motivational and narrative archetypes and then we choose which are the motivators (dynamics) that connect with the emotions that must be induced among people. These “intrinsic feelings” connect with “verbs” that support the experiences, challenges and stories which happen in the most suitable platform(s) (Transmedia), always following a powerful and coherent plot, which may also be fictional (Storytelling), with the aim of activating behaviours and transferring knowledge.

The 2nd workshop focused on Storytelling design. It informed on applying the user-centricity philosophy, which means designing for the final audience’s interest, i.e. the experience should be aimed at letting "what they want" happen "where they want" and "how they want". Great stories are a powerful way to accomplish that.

3.2 Learnings

Storytelling can be seen as the science to create narrative universes to make our participants come back again:



Figure 5. There is a concrete intrinsic motivator related to the Storytelling



To start by the beginning, why should we be using Storytelling?

- **To Connect with the audience**

It is proven that when we talk or present any information with data our audience starts judging our speech (why is he/she showing just last 6 months sales in this graphic? why not 1 year? Is that figure alright? How has he/she obtained it?)

On the other hand, when we talk with stories, with emotions, audience barriers and judgment go down and we start impacting our audience in a totally different way, without rational stoppers.

This happens because when we talk on:

- **Facts:** Two brain areas are activated: Language processing and Language comprehension (we are calling for Neocortex). These two interconnected areas of our brain are activated when we read a descriptive text: the Broca's area, involved in language production, and the Wernicke's area, which belongs to the association cortex. These areas receive the 'data' to later decode it so we can understand it.
- **Storytelling:** Multiple areas may activate: Including the Motor Cortex and the areas that control emotions, smells, emotional reactions, memories, and visual images (Calling for Limbic Brain).

So, the best way to connect is through a universal language. It's biological, chemical: it triggers the secretion of hormones that affect our feelings, as:

Oxytocin (the love hormone) (Berkeley) (Stories focusing on characters and their problems and overcoming them cause the brain to release more oxytocin, making the listener more inclined to help others.)

Dopamine: increases heart rate and blood pumping (A scientific study by Dr. Jorge Medina published in the journal Science asserts that dopamine is key in the duration of memory.)

The brain is particularly receptive to messages received in this way. And the result is that we stop judging and start feeling.

- **Attract and keep the attention**

Once judgment barriers have been put down, we need to offer a story that on the one hand keeps the audience's attention and on the other, touches the relevant points of our communication objectives. That needs some mastery: we cannot forget the story has to work as a story and that the communicational objectives need to be reached.

The point is that the story must touch the relevant pain points of our audience and give them a solution at the end. So that the audience connects with those conflicts and -with subtlety- understand that the resolution of the story gives them their very resolution to their pain.

- **Simplify, offer perspective, or reduce complex problems**

Often, we have too much data, and if we want to communicate anything technical, historical... this excess of information can overwhelm us: do I have to say everything? How can I be rigorous and not provide all available data? By what criteria do I stop sharing certain data?



Storytelling requires the selection of the most relevant data to weave a story that works. This selection has various virtues: it allows us to focus on the most relevant while authorizing us not to be 100% rigorous, since stories have their own requirements. More important than rigor and the abundance of data offered is the result of influence and memory they generate. This does not mean that incorrect data can be offered, but rather that among all the data, those most significant for the communication project's objectives can be chosen those we want our consumers to know and remember. This allows us to reduce complex problems to their most essential and easy-to-understand foundation.

By simplifying the narrative, it becomes more accessible to the target audience, allowing them to understand and connect with the message more effectively. This not only facilitates comprehension but can also generate a stronger and longer-lasting emotional response in the audience. We eliminate the branches (not all) to focus on the trunk.

Additionally, the use of metaphor, which distances us from the original data to embark on comparison, on analogy, allows us to visualize reality from new perspectives, generating new insights and reflections on the content.

To sum it up, over a bunch of data we select the ones that help us better understand the point we as communicators consider the most relevant, offering new perspectives and reducing complex problems, fundamental aspects in the art of telling effective stories.

- **Promote understanding and memory**

Numerous studies demonstrate that we remember what emotionally resonates with us, especially in the long term (what do we remember from our childhood, if not?). Therefore, if we aim for our audience to remember some fundamental data, isn't it best for them to be incorporated within stories that connect with them and give them meaning? Without a doubt.

To create a story, we propose the following 7 steps to be considered when creating a Narrative according to Cookie Box model:

- To deepen our understanding of our **Users**
- Defining the **Goals**
- Finding the **Plot**
- Working the **Characters**
- Selecting the **Tone**
- Structuring the **Story**
- Specifying the **Transmedia Formats**

Let's structure and define step by step then. In order to craft a Narrative that truly resonates with our users, **we must thoroughly understand them—the participants**. This entails accurately describing them to the extent that we comprehend the struggles that are causing them distress (particularly those related to our solution). We need to be able to answer the following questions:

- Who is he/she?
- What does he/she think and feel?
- What does he/she hear?

- What does he/she see?
- What does he/she say and do?
- What motivates him/her?
- What frustrates him/her?
- What channels does he/she use?

To do so in co-creation sessions, we propose a model called the **Empathy Map** that allows to work all these questions at a single page:

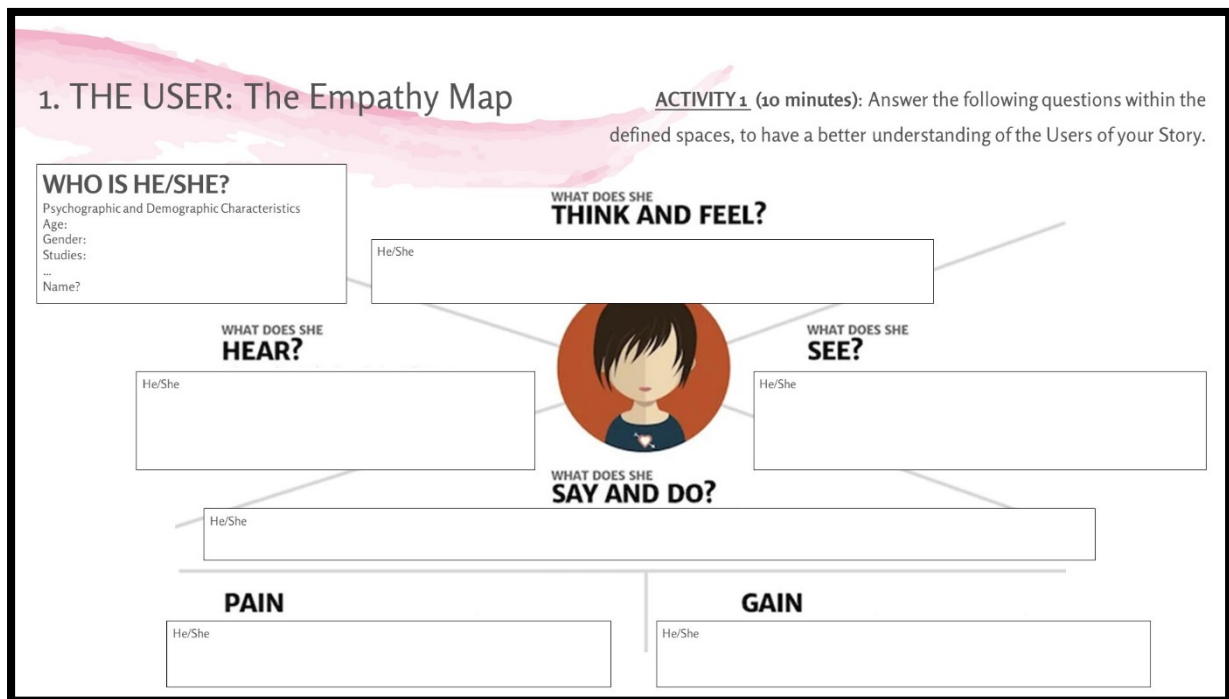


Figure 6. Description of our final user via an empathy map exercise

Now it's time to **establish clear goals**. The narrative project can begin by establishing objectives and then proceed to gain a deeper understanding of the target audience (the Users). However, it often happens that we initiate a project upon recognizing a target audience that, for various reasons, is not being properly catered to or is encountering difficulties—such as a lack of interest in visiting a museum. This recognition serves as the starting point for a project, for which specific objectives are subsequently defined).

The **Goals are related to the reasons for doing the narrative project**, the behavioural that we seek and the main aims. It should address the questions:

- Why am I telling a story to these users?
- What behaviours do I want to foster?
- What do I want them to do?
- What am I aiming in explaining this story?

To define the goals in co-creation sessions, we suggest using a **model called the A-B model**. This model enables us to visualize the current situation and the desired one, and to establish the KPIs that we will measure to determine if we are moving closer to the desired outcome. Here is an image of the model:

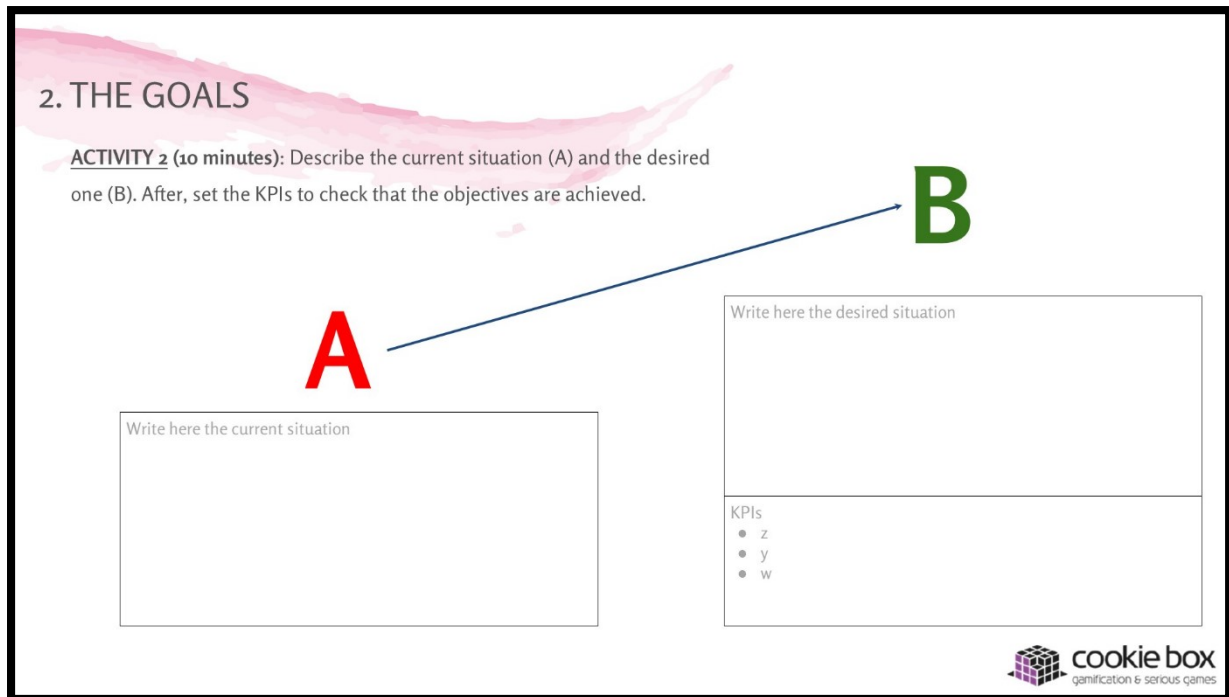


Figure 7. Mapping the goals to achieve thanks to the Storytelling. From the initial status to the desirable final situation and the ways to evidence it

The third step involves **identifying the overarching sequence of events and the order** in which they. We do this by evaluating various options and selecting the one that we believe best suits our users and project/contents. The chosen plots should be compelling to our users and align with specifics of our project/content.

We need to be able to answer the following questions:

- What plot makes sense for my goals and user?
- How can I find the plot of my story?

To find the overarching argument, we propose to use any of the following models:

- The immortal seed -La semilla inmortal, Balló and Pérez (2006)
- 20 Master Plots: And How to Build Them, Ronald Tobias (2020)

According to (Balló and Pérez, 2006), the **universal arguments** in the cinematography are various adaptations of a handful of universal archetypes present in the classical tales. They recognize **21 Universal patterns**, taking main references from the theatrical, mythical or literary work that come with every topic. These Universal references become a Seed that make grow a tree with a trunk (main characteristics) and branches (films and series):

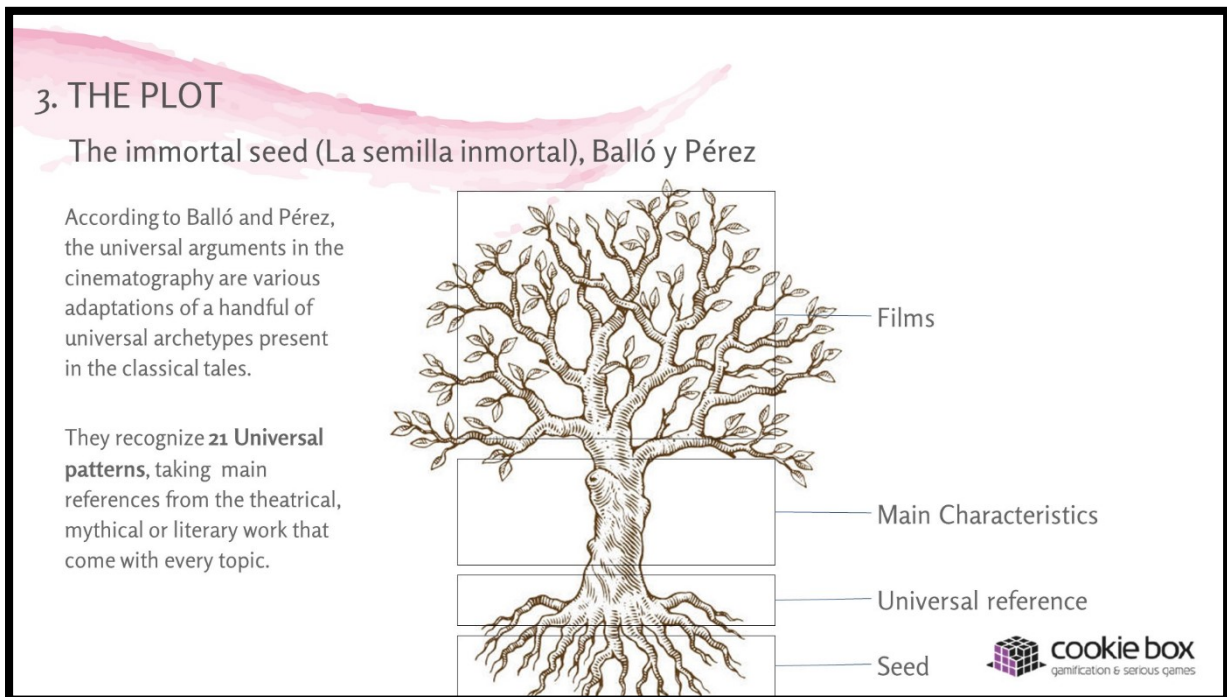


Figure 8. The “immortal seed” model by Balló and Pérez.

The list of the 21 seeds is in the appendix of this document. It helps exploring which one(s) make more sense for a project and to start inspiring a story.

There's a second possibility. A model to look for our overarching plot is Ronald Tobias' "20 Master Plots: And How to Build Them", a book in which he explores and breaks down 20 common narrative archetypes used in storytelling.

The author identifies and analyses universal plotlines that have been utilized throughout the history of literature and cinema, from ancient myths to contemporary tales. These 20 plots provide a basic framework upon which writers can build their own stories, adapting them as needed to meet the requirements of their creative projects.

They are divided into Action and Characters Plots. The **action plots** are:

- **Adventure Plot:** The protagonist leaves home in search of fortune or to fulfil a mission, encountering various incidents along the way, with the journey and heroic actions of the protagonist forming the essence of the plot. For example, "Raiders of the Lost Ark."
- **Pursuit Plot:** One person pursues another, focusing on the chase and physical action involved. Sometimes the protagonist pursues the antagonist, as in "The Hunted" (2002), or vice versa, as in "Duel" (1972).
- **Rescue Plot:** The protagonist intervenes to rescue a victim from an antagonist who has kidnapped or abducted them, typically involving phases of separation, pursuit, and confrontation. For example, "The Searchers" (1956).
- **Escape Plot:** The protagonist seeks to evade unjust confinement, involving phases of detention, challenges within the confinement, and eventual escape. For example, "Stalag 17" (1953) and "The Great Escape" (1963).



- **Rivalry Plot:** Two characters of comparable strength compete for the same goal or object, such as a job, sports title, kingdom, or land. For example, the rivalry between Ben-Hur and Messala in "Ben-Hur" (1959).
- **Underdog Plot:** Similar to rivalry, but the protagonist is physically weaker, younger, older, less experienced, or has fewer resources, often facing a stronger antagonist.
- **Revenge Plot:** The protagonist seeks retribution for an injustice committed against themselves or their loved ones, often involving pursuing the antagonist. For example, "Death Wish" (1974).
- **Enigma Plot:** Typical in mystery and detective films, where the protagonist must uncover a killer, thief, or solve an extraordinary event. Examples include Agatha Christie adaptations and films like "Gothika" (2003) and "The Bone Collector" (1999).

And for the **character plots**:

- **Search Plot:** The protagonist searches for a person, place, or thing, with the focus on character transformation during the search. For example, "Raiders of the Lost Ark" (1981).
- **Discovery Plot:** The protagonist seeks to understand themselves or the world, leading to greater knowledge of humanity and nature. For example, biopics about scientists like "Gorillas in the Mist" (1988).
- **Metamorphosis Plot:** The protagonist or object undergoes a curse and is transformed into an animal or terrible creature until love or death breaks the spell.
- **Transformation Plot:** Positive psychological change occurs in the protagonist, such as gaining self-confidence or overcoming addiction. For example, "My Fair Lady" (1964).
- **Coming-of-Age Plot:** The protagonist transitions from childhood or adolescence to adulthood, often symbolized metaphorically. For example, Pinocchio's journey from puppet to real boy.
- **Rise Plot:** A character of humble origins ascends to the top of society, as seen in "The Elephant Man" (1980) and "All about Eve" (1950).
- **Fall Plot:** A noble, rich, or powerful protagonist falls to the lowest point, as seen in "Citizen Kane" (1940).
- **Temptation Plot:** The protagonist is tempted to do something immoral or forbidden, as in the myth of Faust.
- **Price of Excess Plot:** The protagonist leads a dissolute life or succumbs to a passion, paying the price for their actions, as in "The Lost Weekend" (1945).
- **Sacrifice Plot:** The protagonist fulfils their duty despite personal loss, even at the cost of their life, as in "Casablanca" (1943) and "High Noon" (1952).
- **Love Plot:** Two people face obstacles to their relationship, such as illness, rival suitors, or differing life goals, as in "It Happened One Night" (1934).
- **Forbidden Love Plot:** Similar to love plots, but with social taboos as obstacles, such as interracial, class, or same-sex relationships, as seen in "Romeo and Juliet."

Again, these are potential plots that can be reused and/or mixed to develop our own. These two materials (The Immortal Seed & 20 Master Plots) are basically inspiring materials that help story designers to start defining the basics of their stories.



The kind of questions story designers should be asking themselves are: is our story about going to some external place to get something desirable? (In Search of Treasure) Is it about coming back “home” from an external place to recover identity? (The Return Home) Or about the Creation of a new World by a group of Characters (the Foundation of a New Homeland). All these plots need to be considered from an elevated and inspiring place to look for the character(s) main journey, which can be external, internal, and mental.

The 4th step when designing a narrative are the **characters**. We need to find a main character and the traits that define it. We also need several secondary roles along the story.

We should answer the following questions:

- What is the main character like? What defines it?
- What is his/her weak point?
- What does it have to learn during the story
- What secondary characters appear?
- What are their roles in the story?
- Are they memorable?

On one hand, we can begin by reviewing the various **character archetypes** described by Carl Gustav Jung and Joseph Campbell, emotional and behavioural patterns that can help us identify a preliminary range of characters, broadly defined by their role in the story or their most prominent patterns. Then we have, coming from **Jung**:

- **The Hero**: The central figure in the story who embarks on a journey, faces challenges, and undergoes personal growth or transformation.
- **The Mentor**: A wise and experienced character who guides and advises the hero on their journey, often providing crucial insights or tools to help them succeed.
- **The Shadow**: The darker, repressed, or unknown aspects of the hero's personality, often represented by a villain or antagonist in the story.
- **The Trickster**: A mischievous or disruptive character who challenges conventions, questions authority, and brings about change through unconventional means.
- **The Wise Old Man/Woman**: A figure of wisdom and guidance, often possessing esoteric knowledge or insights beyond the ordinary.
- **The innocent**: A character that embodies purity and naivety, viewing the world with child-like wonder and seeking to maintain harmony despite adversity.
- **The Caregiver**: A figure that exemplifies compassion and selflessness, deriving fulfilment from nurturing and aiding others.
- **The Orphan**: A character that seeks security and connection, often facing adversity with resilience and a quest for identity.
- **The Explorer**: A figure that embraces the unknown, driven by a thirst for discovery and adventure.
- **The Rebel**: An archetype that embodies defiance against authority and societal norms. Rebels challenge the status quo, advocating for change and individual freedom.
- **The Lover**: The Lover archetype symbolizes passion, intimacy, and connection. They prioritize relationships and emotional fulfilment, seeking harmony and affection.



- **The Creator:** A figure that embodies innovation, imagination, and artistic expression. They manifest ideas into reality, driven by a desire to bring something new and meaningful into the world.
- **The Sage:** Representing wisdom, insight, and introspection. Sages offer guidance and knowledge, seeking understanding and enlightenment.
- **The Ruler/Governor:** Symbolizing leadership, authority, and responsibility. They govern with integrity and vision, striving for order and justice in their domain.

From **Joseph Campbell:**

- **The Herald:** A character or event that signals the beginning of the hero's journey, often by presenting them with a call to adventure or a challenge that sets the story in motion.
- **The Threshold Guardian:** A character or obstacle that the hero must overcome to enter a new phase of their journey, symbolizing the transition from one state of being to another.
- **The Shapeshifter:** A character who embodies ambiguity, deception, or transformation, often changing allegiances or appearances throughout the story.
- **The Ally:** A companion or supporter who assists the hero on their journey, providing friendship, assistance, or moral support when needed.
- **The Femme Fatale:** A seductive and dangerous female character who lures the hero into perilous situations or represents the destructive power of desire.
- **The Everyman/Everywoman:** A relatable and ordinary character who represents the audience or reader and experiences the events of the story from a grounded perspective.
- **The Jester/Fool:** A comedic or eccentric character who provides comic relief, challenges authority through humour, and offers unconventional perspectives on the events of the story.
- **The Outcast:** A character who is marginalized or ostracized from society, often due to their differences or nonconformity, and who may ultimately find acceptance or redemption through their journey.
- **The Scapegoat:** A character who is blamed or punished for the sins or mistakes of others, often serving as a symbolic sacrifice or scapegoat to maintain social order or absolve guilt.
- **The Survivor:** A resilient and resourceful character who overcomes adversity, trauma, or hardship, often serving as a symbol of hope and perseverance in the face of adversity.

Once we've decided on the types of characters that make sense in our story, we must develop them and make them grow in depth, moving beyond the general outline to make them specific (and then, attractive, and memorable). For this purpose, **there's a classic model of 100 questions** to the character that allows us to define them with the maximum detail of their history, feelings, desires, frustrations.

Searching on the internet for "the 100 questions to the character" will yield various models of this questionnaire. It's crucial that, once we've filled out this form for each character we want to flesh out, we don't forget the answers we've provided to each of these questions when writing the story and all the scripts. These answers should guide us in crafting the story and scripts.

If there's only one question to prioritize, it's likely the most relevant one: "86. What is your



greatest weakness?”. As someone said: "Give me a weakness and I'll give you a character." That means that there is no (interesting) character without a weakness.

The next step relates to **the tone of the story** to be built. How to express and address it depending on the feelings that we are interested in motivating.

The fifth step involves **defining the attitude conveyed by the narrator** or the overall feeling created by the language, style, and content. We do this by evaluating various options and selecting the one that we believe best suits our users and project/contents. The chosen tone should be compelling to our users and align with specifics of our project/content.

We need to be able to answer the following question:

- What narrative tone do you believe is most appropriate for the target audience or project?

Here is a (not exhaustive) list of possible tones for one to select for the narrative project:

- Intimate
- Epic
- Sober
- Informal
- Formal
- Ironic
- Fantastic
- Serious
- Humorous
- Active
- Magic
- Loving
- Dramatic
- Elevated
- Popular

It's important to note that the same plot and characters can create entirely different stories depending on the tone adopted.

Once we have decided the tone, we need **to go write our story**. The definition of the main moments of our story requires **delving into the main conflict of the main character** (or characters). It's important to note that without conflict, there is no story (in a classical narration). On the other hand, the **narrative tension** we create with this conflict will determine the audience's interest in continuing to consume the story.

So, we must play very well with the two elements that define the conflict and gradually bring them closer or push them further apart throughout the story:

- What the main character has
- What the main character desires

It's common for both elements to be together at the beginning of a story (the main character



has what they desire), and for this unity to be broken by some circumstance, causing our main character to lose what they desire (or to begin desiring something they don't have). This is where the story begins (called The Call of Adventure), and as consumers, we won't be at ease until the main character returns to the initial point of equilibrium (and once they do, the story will no longer interest us).

The **interplay** between the distance of these two elements is key to generating interest, and typically, they gradually come closer together as the main character struggles to achieve their desire, only for it to be further out of reach through plot twists just when it seems they were about to achieve it. It's also common for a story to have around three plot twists that define a radical change in the distance between the elements of possession and desire.

In this step, we need to be able to answer the following question:

- What is the main conflict that defines the narrative arc (structure of the Story)?
- How far is the reality of the main character from its desire at each moment of the Story?
- How are you playing the Dramatic Tension? Which elements are you using to strengthen it? (time pressure?)
- Does your story have plot twists?
- What does the Main Character learn after the whole story Journey?

To define the main moments of our story and its conflict, Joseph Campbell's monomyth model (presented in his book "The Hero with a Thousand Faces") is the ultimate reference (although the most widespread version is the one distilled by Christopher Vogler in his book "The Writer's Journey"). The monomyth or the hero's journey is a well-known narrative scheme to develop the phases of a complete narrative.

Joseph Campbell (mythologist, writer, and American professor, best known for his work on comparative mythology and religion) focuses on common patterns found in myths and religions from different cultures that had a significant impact on the understanding of human narrative and the universal themes that permeate stories across history and geography.

Here are **the 12 stages of the hero's journey** as adapted by Christopher Vogler:

1. **Ordinary World:** The hero begins in a mundane or familiar setting, unaware of the adventure to come. This stage establishes the hero's ordinary life and sets the stage for their journey.
2. **Call to Adventure:** The hero receives a call to action, often in the form of a challenge, problem, or opportunity that disrupts their ordinary world. This call invites the hero to embark on a journey and sets the story in motion.
3. **Refusal of the Call:** The hero initially hesitates or refuses to accept the call to adventure due to fear, doubt, or a sense of inadequacy. This reluctance is a natural response to the unknown challenges ahead.
4. **Crossing the Threshold:** The hero commits to the adventure and crosses the threshold into the unknown, leaving behind their familiar world and entering a new and unfamiliar realm. This step signifies the hero's willingness to face the challenges and uncertainties of the journey.



5. **Tests, Allies, and Enemies:** The hero encounters trials, challenges, and obstacles on their journey, as well as allies who offer support and enemies who oppose them. These tests help the hero develop skills, gain knowledge, and overcome their weaknesses as they progress toward their goal.
6. **Approach to the Inmost Cave:** The hero approaches a central challenge or ordeal, often symbolized by an innermost cave or inner conflict. This stage represents a critical turning point in the hero's journey, where they must confront their deepest fears and prepare for the final showdown.
7. **Ordeal:** The hero faces their greatest trial or ordeal, a life-threatening challenge that tests their courage, resolve, and character. This stage is a pivotal moment of transformation for the hero, where they must confront their fears and overcome seemingly insurmountable obstacles to achieve their goal.
8. **Reward (Seizing the Sword):** After overcoming the ordeal, the hero reaps the rewards of their journey, often in the form of a valuable treasure, knowledge, or insight. This reward represents the culmination of the hero's efforts and the fulfilment of their quest.
9. **The Road Back:** The hero begins the journey back to their ordinary world, carrying the rewards and lessons learned from their adventure. This stage marks the hero's transition from the special world back to the familiar realm, where they must confront any remaining challenges or obstacles.
10. **Resurrection:** The hero faces a final, life-threatening challenge or confrontation, where they must prove their newfound strength, wisdom, or courage. This stage represents the hero's ultimate test and transformation, leading to their symbolic death and rebirth.
11. **The Hero returns (with the Elixir):** The hero returns to their ordinary world, transformed by their journey and armed with the elixir or boon gained from their adventure. This final stage represents the hero's homecoming, where they share their wisdom, gifts, or treasure with their community and fulfil their destiny.

Here you can find an image of this circular journey.

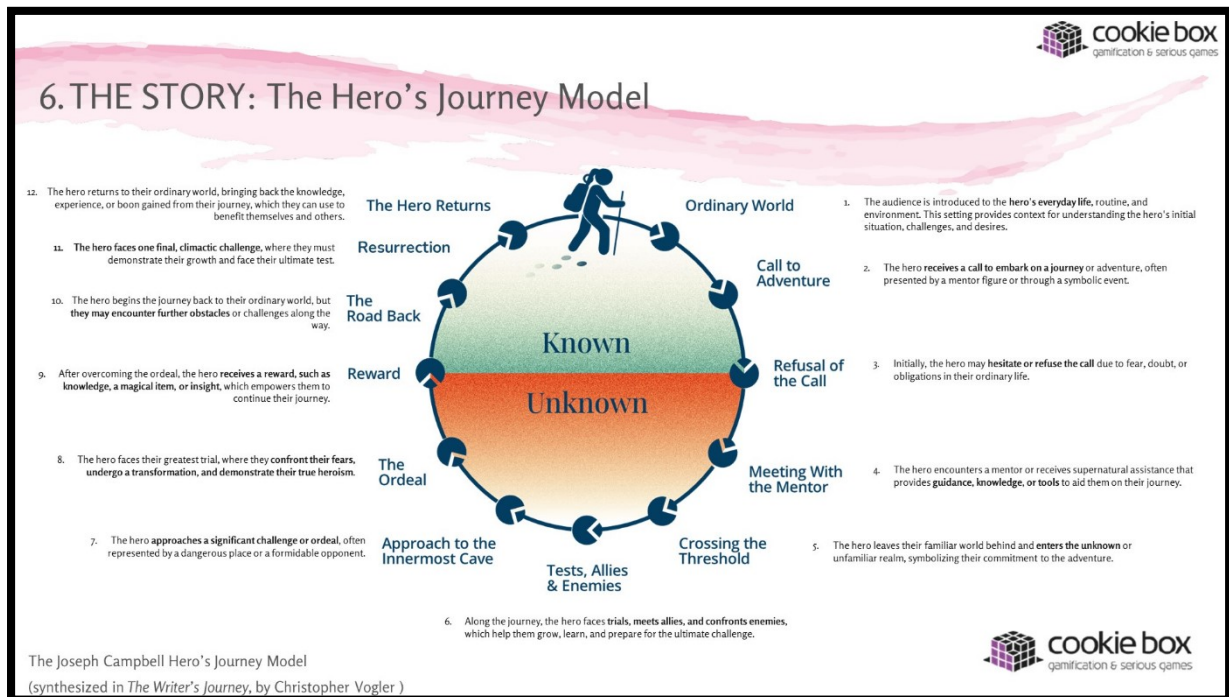


Figure 9. The phases of the Hero's Journey by S. Campbell / C. Vogler

Another way to look at this journey is this cross-section one (connected with the 3 narrative phases defined by Aristotle: Acts I, II and III):

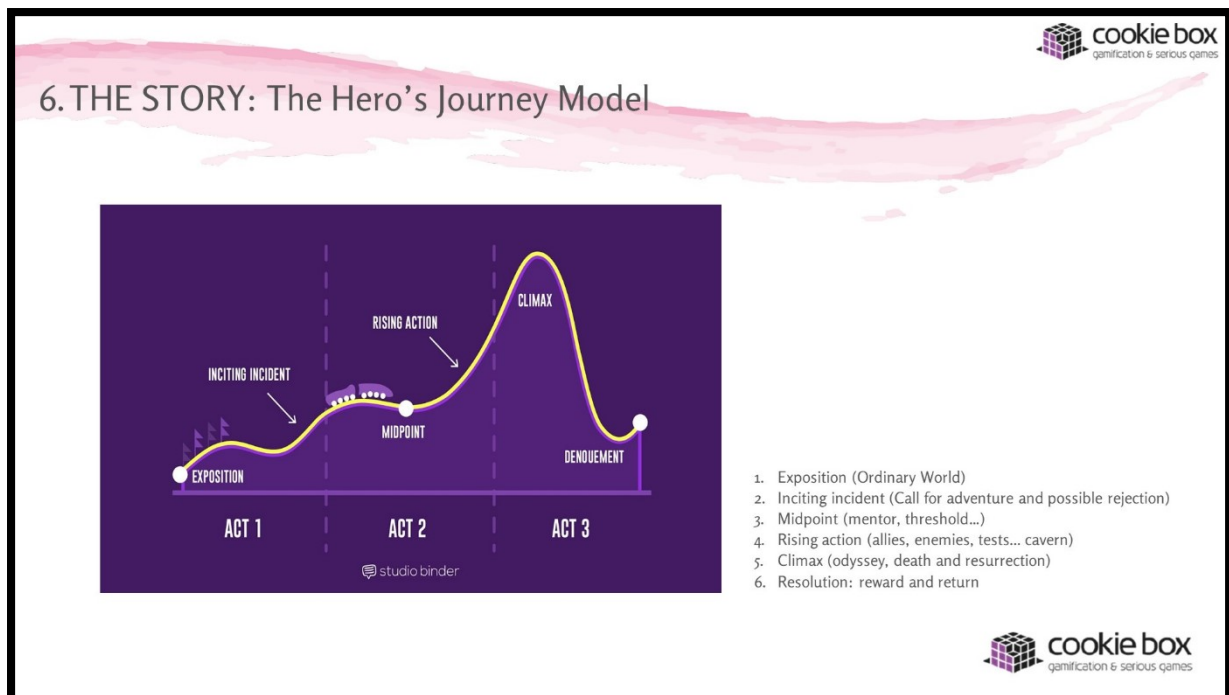


Figure 10. The acts of the Hero's Journey by S. Campbell / C. Vogler



Where we have:

- **Exposition:** The story begins by introducing the protagonist, setting, and initial situation. This phase establishes the context and background information necessary for understanding the events that will unfold.
- **Inciting Incident:** A significant event or action occurs that disrupts the protagonist's ordinary life and sets the plot in motion. This incident triggers the protagonist's journey and compels them to take action in response to the new circumstances.
- **Midpoint:** a crucial moment in the narrative where a significant event occurs that changes the direction of the story and leads the main characters into a new phase of development or conflict. It may involve revelations, intensified conflicts, or new goals for the characters.
- **Rising Action:** The tension and conflict escalate as the protagonist faces obstacles, challenges, and conflicts that drive the story forward. This phase builds suspense and anticipation as the protagonist confronts increasing stakes and risks.
- **Climax:** The story reaches its highest point of tension and dramatic intensity, where the protagonist confronts the central conflict or faces a critical decision. This pivotal moment determines the outcome of the story and leads to a resolution of the main conflict.
- **Falling Action:** The intensity of the conflict diminishes as the story moves towards its conclusion. Loose ends are tied up, and lingering questions are resolved as the protagonist navigates the aftermath of the climax.
- **Resolution:** The story concludes with a resolution or outcome that brings closure to the central conflict and provides a sense of satisfaction or closure for the audience. This phase offers insights, lessons, or reflections on the protagonist's journey and its impact on their life or the world around them.

Using any of these 2 models allows us to give the proper structure to our story and its main conflict.

Other important elements that need to be defined to develop our narrative universe are:

- **SPACES:** how are the spaces where events happen? What functions do they play? How do they relate to the main character's journey?
- **OBJECTS:** what relevant objects appear? What role do they play?
- **TIME:** in what (historical) time does the Story take place? Is the time of the Story chronological? Are there any Time jumps?
- **RULES OF THE UNIVERSE:** What rules govern the universe? What is the World like?

Once all the previous steps have been fulfilled, the final step will be to produce the Transmedia Elements (defining the formats, writing down the scripts for each one, producing the elements).

3.3 Tools

We used several tools to develop Storytelling in the practical sessions of the workshop. These were:

- Picking up a subject, or the theme of the story.
- The empathy map, or the user's definition.

- The goals mapping, or the objectives to fulfil.
- The plot selection, or the main conflict.
- The characters definition, principal and secondaries.
- The Hero's journey sequence that develops the full story and its acts.

And we show them next:

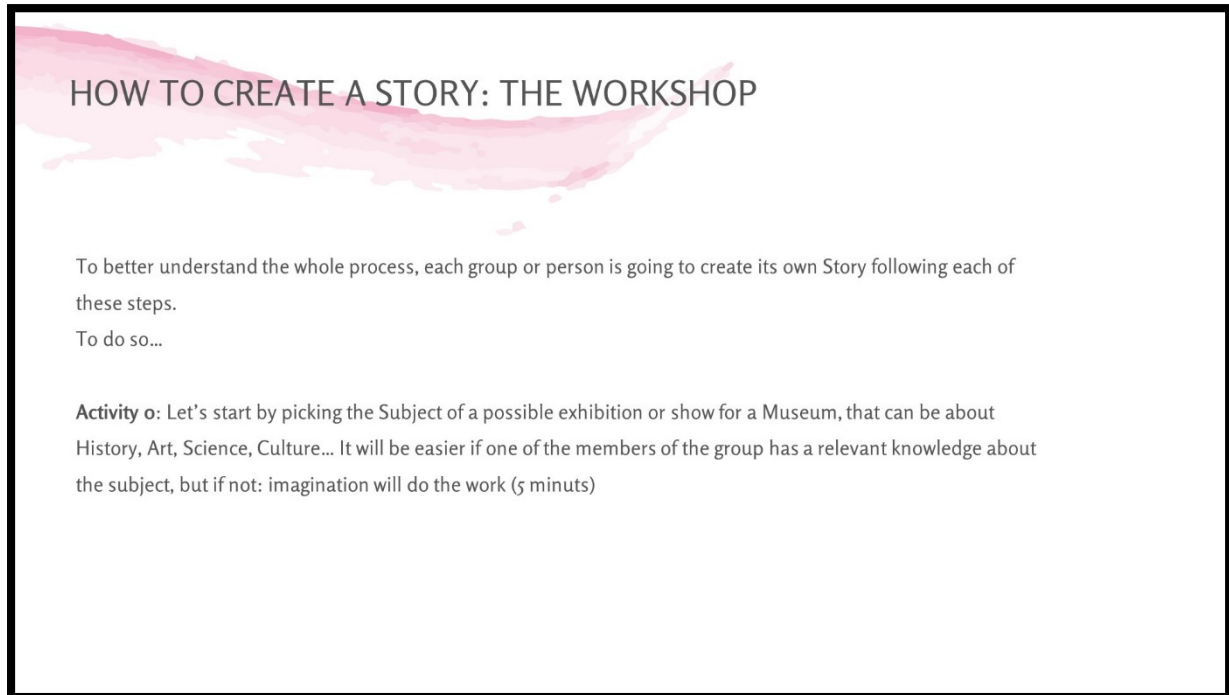


Figure 11. The activity to pick up a subject for the museum's Serious Game narrative

1. THE USER: The Empathy Map

ACTIVITY 1 (10 minutes): Answer the following questions within the defined spaces, to have a better understanding of the Users of your Story.

WHO IS HE/SHE?
 Psychographic and Demographic Characteristics
 Age:
 Gender:
 Studies:
 ...
 Name?

WHAT DOES SHE THINK AND FEEL?
 He/She

WHAT DOES SHE HEAR?
 He/She

WHAT DOES SHE SEE?
 He/She

WHAT DOES SHE SAY AND DO?
 He/She

PAIN
 He/She

GAIN
 He/She

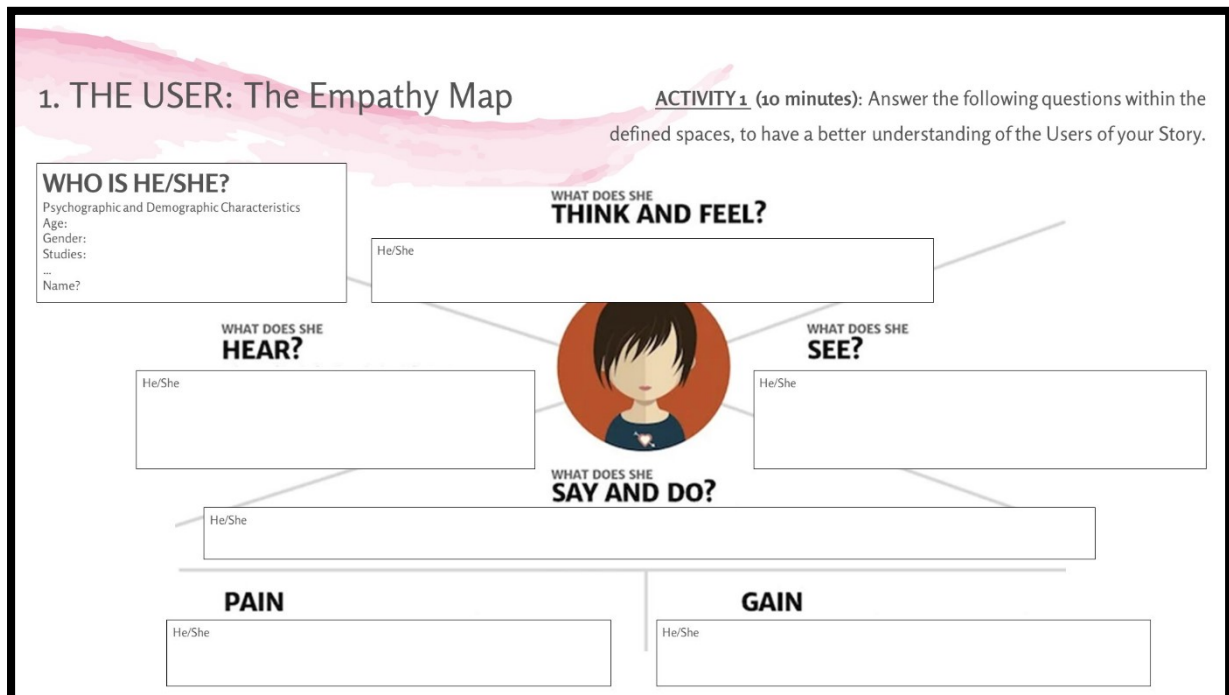


Figure 12. Description of our final user via an empathy map exercise

2. THE GOALS

ACTIVITY 2 (10 minutes): Describe the current situation (A) and the desired one (B). After, set the KPIs to check that the objectives are achieved.

A
 Write here the current situation

B
 Write here the desired situation

KPIs
 • z
 • y
 • w

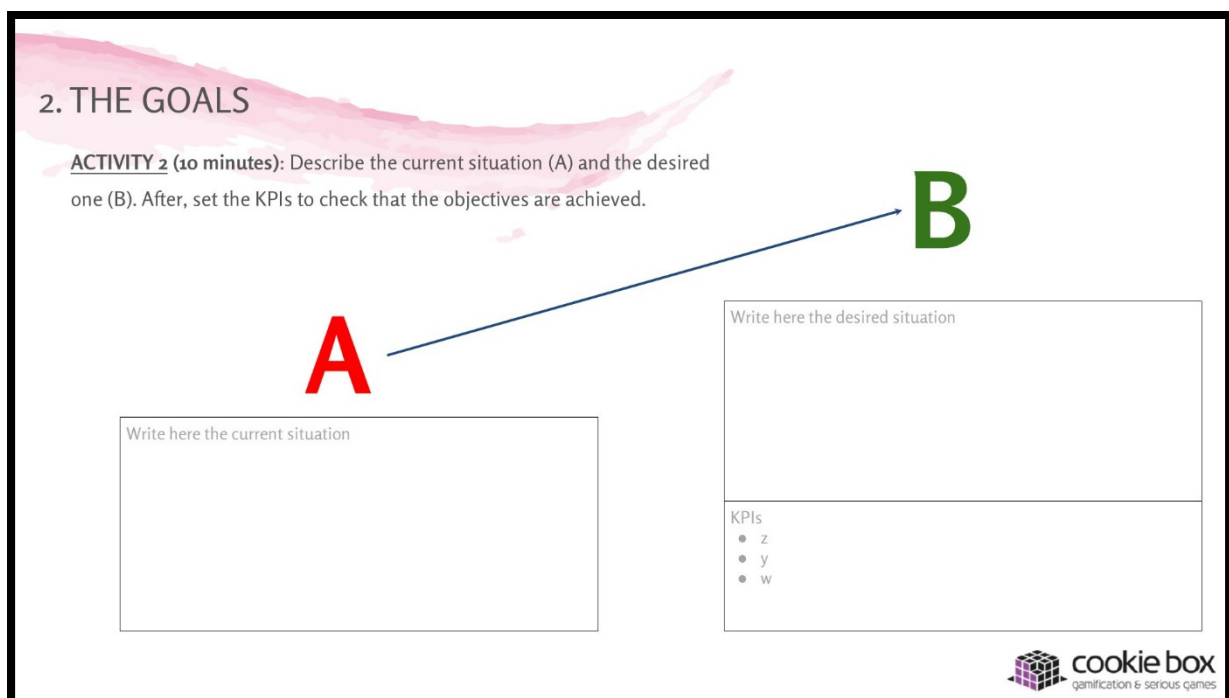


Figure 13. Mapping the goals to achieve thanks to the Storytelling. From the initial status to the desirable final situation and the ways to evidence it

3. THE PLOT

The immortal seed

ACTIVITY 3 (15 minutes): What plots do you believe are most interesting/relevant to your target audience, to fulfill your goals and to address your subject?

- Place up the PINK STARS on the arguments you consider most interesting for your project (up to 4), with 1 being the most relevant and 4 being the least relevant.
- Write here the reason to choose your first choice.

We have selected...

Figure 14. Choosing immortal seeds for the plot

4. THE CHARACTERS: The Archetypes

ACTIVITY 4 (10 minutes): Which Archetypes fit our story best?

Choose the Archetypes most suitable to our Story (1 the most relevant and 3 the least).

Answer on the boxes on the right why you made this choice.

Character 1:

Character 2:

Character 3:


THE WISE

THE SAGE

THE GOVERNOR

Figure 15. Choosing the appropriate archetypes for our characters in the story





6. THE STORY: The Hero's Journey Model

ACTIVITY 6 (15 minutes): Write the basis of the Story following the Hero's Journey Model.

	STORY
Exposition (Ordinary World)	
Inciting incident (Call for adventure and possible rejection)	
Midpoint (mentor, threshold...)	
Rising action (allies, enemies, tests... cavern)	
Climax (odyssey, death and resurrection)	




Figure 16. The Hero's journey model template

The tools are available in the appendixes within the workshop's slides. In fact, it shows the different seeds that can be used to build different plots in table 2. And some images from the Storytelling workshop are shown next.



Figure 17. Images from the Storytelling workshop in Barcelona

4 COMMUNITIES WORKSHOP

4.1 Objectives

The aim of the workshop is to provide methodology and tools regarding 2 strategic concepts contained within the **purpose and objectives of the project**. The **purpose** of the project is defined as follows:

*“Building a **community** for the co-creation of games with high impact on innovation, sustainability, social cohesion and growth”.*

On the other hand, the **more specific goals** of the project are:

- To engage video game stakeholders of different abilities, expertise, and disciplines, to contribute, learn, share, and tap into new innovative and economic opportunities.
- To provide a collaborative platform with the tools to co-create mobile and virtual reality games by engaging different users, from different backgrounds and sectors.
- To develop an ethical-design culture in the video game industry.
- To monitor, assess and manage the impact that the video games have on different sectors, especially targeting culture/museums, creative industries, and fashion/textile.
- To help understand why and how online games are positively impacting people, culture and society and help extract the ingredients necessary for developing a new generation of games targeted to improve people’s well-being.

Thus, **platform and community are two strategic and essential concepts**. These are 2 different, although closely interrelated, concepts that condition each other.

Beyond the different disciplines, sciences, and areas of knowledge both in the cultural and museum field and in the field of video games that will give content to the project, the purpose of **building and designing solid and sustainable communities** over time constitutes an enormous challenge that requires much more than intuition and programming. It takes strategic thinking, a model, and tools.

Something similar happens with the objective of designing "**a collaborative platform** with the tools to co-create mobile and virtual reality games by **engaging different users, from different backgrounds and sectors**". The phenomenon of the "*platformization of the economy*" that we are experiencing in the last decade goes far beyond the choice of one technology or another and technological development and involves a deep reflection on the value that will be generated and a definition of why and how the members of a community will exchange value in a sustained manner over time.

Conclusion: Creating a platform to co-create is one of the goals, probably the most tangible deliverable of the Project. But we must make sure first that it also serves to create Communities.

To meet not only the pedagogical objectives of the workshop, but also to have all the necessary tools available throughout the project, we have selected two Creative Commons models that respond to the two aforementioned needs: **Platform Design Toolkit** and **Community Canvas**.

During the community building workshop, we had to rate depending on our agreement to the platform vs the community:

A second Game:

Rate your level of agreement with these 2 statements

☐ I built a successful community, so I had to develop a platform. x

☐ A successful platformization initiative involves having built a community. x

Figure 18. The rating when dealing with a community vs a platform (A)

4.2 Learnings

4.2.1 Platform Design Toolkit

It is important to state that we are designing for existing ecosystems. Not creating ecosystems.

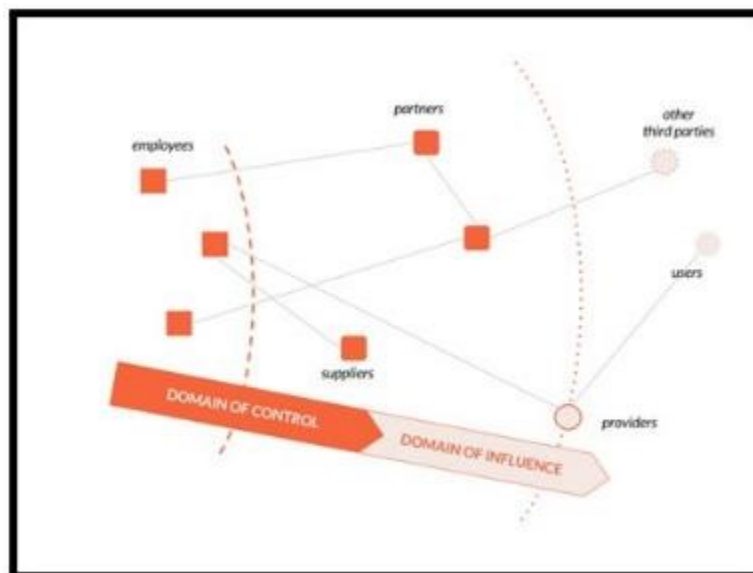


Figure 19. The rating when dealing with a community vs a platform (B)

The most challenging moments always come at the beginning, when the team needs to figure out the scope of application of the methodology. Scoping, setting the point of view and delimiting the opportunity we're addressing with a platform — an ecosystem mobilization strategy — is an extremely challenging task. One of the key points to

understand is that we are designing for ecosystems: that the focus of our design strategy is external, it's IN the Ecosystem, not inside our team, company, or institution. On the other hand, we also need to acknowledge that the difference between inside and outside may be more blurred than in the past: the very effort of trying to set a boundary to a design opportunity doesn't make much sense anymore. Always come to point out to the teams that work with us that there's no more an inside or an outside to a company, organization or a brand, and that strategy must be seen more as boundary-less and as a continuum (inside, at the edge and outside, the blurring context). This enormous, boundary-less potential, on the other hand, must push us to accept that — while the design scope might be wide — we need to begin by prioritizing and focusing on few points of view, and progressively iterate the approach at later times. That's how you can tackle a complex design.

The **Platform Design Toolkit** covers all stages, from Exploration to Strategy Design, Validation and Growth. We understand that the Call for the Project itself implies a prior exploration and identification of strategic needs. Therefore, we can focus on the Strategy Design Tools and their subsequent validation.

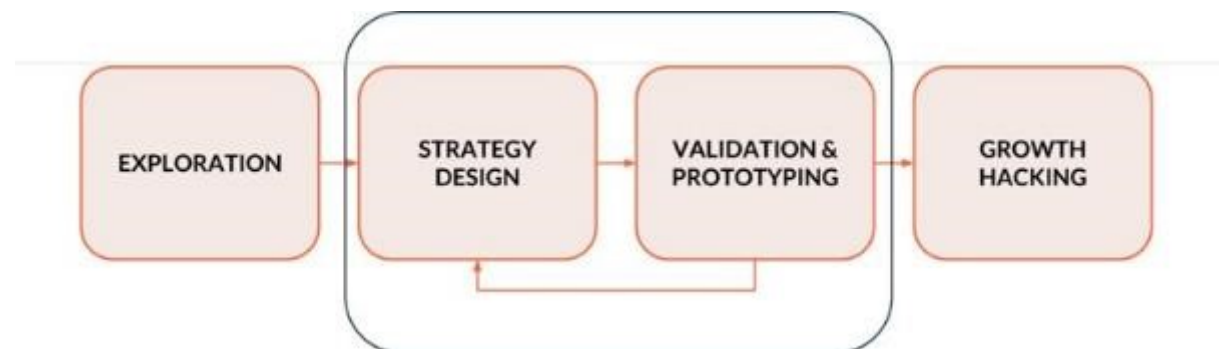


Figure 20. The rating when dealing with a community vs a platform (C)

In our direct experience two typical contexts of innovating business models are recurring and can be framed. The first approach is what we call “**Ecosystem Mobilization**” and is about exploring the market - or more generally the ecosystem - seeking new opportunities that aren't necessarily related to an existing business line, product, or service that the organization provides already. The second that we call “Product and Services Innovation” normally starts by the idea of evolving, extending, and integrating an existing organizational offering that the organization is already strong with.

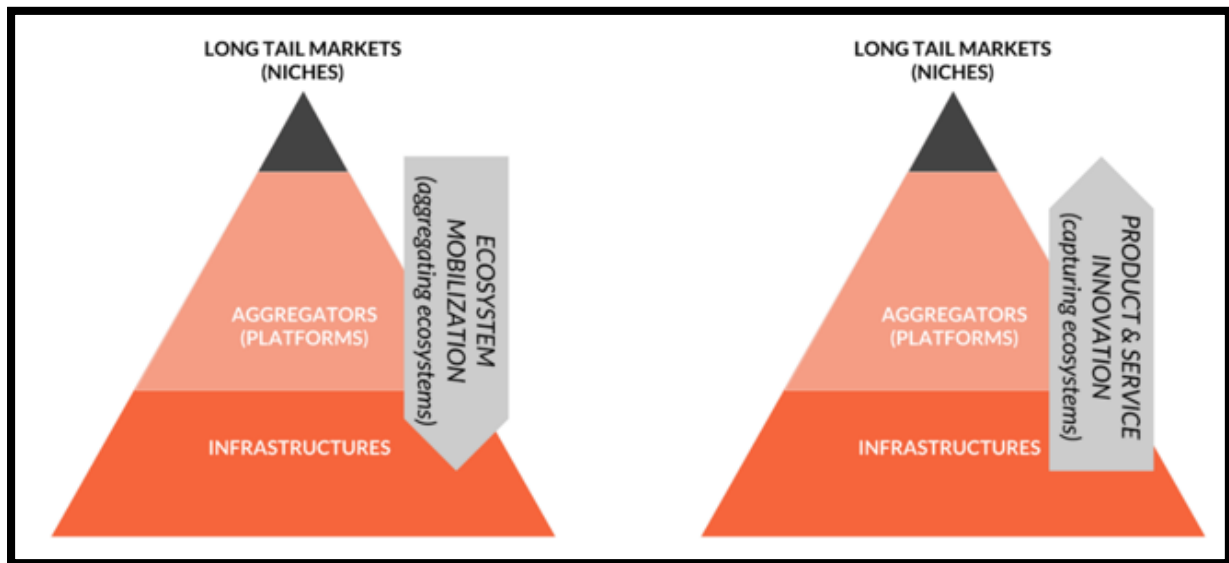


Figure 21. The rating when dealing with a community vs a platform (D)

We agree that our context fits better the first approach: Ecosystem mobilization. In this common context of application of platform thinking the organization is looking to shape and mobilize an existing ecosystem with a new platform strategy. As we often say, Platform Design is heavily rooted in the observation of the emergent: you can't design a strategy for an ecosystem that doesn't exist (where exists = already trying to create and exchange value). The analogy useful to explain the nonsense (i.e. design a new ecosystem), if you're familiar with the lean thinking approach, would be designing a solution for an inexistent problem: who would do that?

This consideration is at the core of this first context of applicability: if you see that value is being created and traded in a certain Ecosystem, space, or market (or any other social context that you don't normally call like that, can be for example your organization or your space of impact, in a non-profit context); if you see producers and consumers of value that are organizing around value creation, and you think this market (context) is performing below its potential, then this context is perfectly worth organizing through a platform strategy that amplifies its potential. We call this context of application, ecosystem mobilization.

This is a typical approach that we consider as a transformative or radical innovation approach in traditional strategic terms as the organization is trying to create a new set of products and services to mobilize customers in a market that it normally doesn't serve. In this context the aim of the organization -as we'll see below - is to leverage on existing assets and capabilities to gain advantage and provide relevant services to an existing ecosystem that - most likely and hopefully - has not been mobilized yet by any other platform shaper. This is normally the context of most of the traditional marketplace "start-up" initiatives; but we are in this case even where the organization is leveraging its assets and capabilities to explore other markets.

When developing a platform strategy, one needs to address, mobilize, and support an Ecosystem. To make it easier for platform designers to confront the complexity of designing for ecosystems, we've created a simple framework to frame the entities

involved in a platform strategy.

We differentiate entities into three groups: Impact, Demand and Supply entities.

IMPACT Entities	Impact related entities, Owners/Shapers, and External Stakeholders are not involved in the continuous interactions happening in the ecosystem.	Larger entities, mostly interested, interacting and impacted by the whole system dynamics, not by the punctual interactions.
	<ul style="list-style-type: none"> Platform Owners/Shapers [PO] External Stakeholders [ES] 	
DEMAND Entities	Entities that are interested in "consuming" the value produced in the ecosystem.	Normally Individuals or small-medium organizations that behave as a single, identifiable entity with a specific interest and identifiable objectives that the Platform's Value Proposition should meet.
	<ul style="list-style-type: none"> Peer Consumers [PC] 	
SUPPLY Entities	Entities that are interested in "producing" the value consumed in the ecosystem.	These entities are involved in continuous interactions.
	<ul style="list-style-type: none"> Partners [PA] Peer Producers [PP] 	

Figure 22. The rating when dealing with a community vs a platform (E)

Normally, the strategic connection with the platform strategy grows as much as you get closer to the owners/shapers. Demand players (consumers) are less strategically linked as they can leave the ecosystem easily, with little impact. Producers are more tightly connected, with Partners investing a lot of energy and time to become the best, and therefore being concerned about developing a strong connection with the owners.



Figure 23. The rating when dealing with a community vs a platform (F)

The relevant entities are:



- **IMPACT ENTITIES:**

Platform Owners: is the entity who owns the vision behind the realization of the market and ensures that the platform strategy exists, evolves, and thrives. It can be a team, an organization or sometimes is a set of teams throughout different organizations in a form of committee or a consortium.

This category refers to the “owners” of the Platform. Owners are those ultimately responsible to ensure that the platform strategy exists and evolves. Normally we are talking about the firms - whether Start-ups or Scale-ups or corporate firms - that own the platform, but nothing prevents this from being a non-profit organization, a foundation, or even a cooperative structure that is open to the participants.

In the latter, peers or partners could also be owners of the platform in some ways: as an example, in the Bitcoin Block chain ecosystem, peers collaboratively own the infrastructure that makes the platform. Sometimes, and increasingly, we see the potential to separate owners from shapers. One player can design a strategy with the objective to craft a sustainable business model that is not necessarily related to owning the infrastructure of the strategy. This potential separation is reflected by several trends in the evolution of platforms, their governance, and the increasing type of players that can develop or influence the future of platform strategies.

External stakeholders: Stakeholders are entities that have a specific interest in platform success or failure, in controlling platform externalities and outcomes, in regulating it or in exercising rights in the platform governance.

This category normally includes, for example, all the actors dealing with the regulation and control of platform strategy on a local basis. It can also include the representatives of the plurality of peers and partners involved in the value creation, or any pre-existing institutions that can help the platform thrive. Additionally, this can include entities that can help distribute the strategy and help it grow. Normally, we’re talking about entities that are hit by the positive or negative externalities of the platform.

- **DEMAND ENTITIES:**

Peer Consumers: Peer Consumers (PC) who we may also call users, are entities interested in consuming, utilizing, accessing the value that is created through and on the platform.

They are individuals but can also be small/medium business and single representatives or teams in bigger organizations. Eventually, in some cases, they may evolve into peer producers when they realize that beyond fulfilling a need, they can seek evolutionary opportunities to produce.

- **SUPPLY ENTITIES:**

Peer Producers: Peer Producers (PP) who we may also call producers, prosumers, and providers, are entities – most of the times individuals – interested in providing value on the supply side of the ecosystem/marketplace, usually seeking for opportunities to improve their professionalism, and honing their capabilities towards a better performance.

Typically, these players produce value occasionally and not systematically. Often the same peer may behave as both consumer and producer in different phases of its relationship

with the brand-platform. Like in the case of a traveller that also rents her house when she's not at home, such a user may sometimes contribute to the value and other times consume it, depending on lifetime phases, contexts and more. Peer producers can as well be SMBs or individuals.

- **PARTNERS:** Partners (PA) are professional entities – individuals and SMBs, most of the time – that seek to create additional professional value and to collaborate with platform owners on a stronger level of relationship.

Typically, partners are professional value creators that tend to specialize in a niche or advanced/premium product/service and become better and better within time. Partners sometimes also facilitate, cater, and enhance the value production by acting as brokers, facilitators, connectors. In particularly polarized platforms, where you substantially have two sides (supply and demand) the partner could be an evolution of the peer producer into a more professionalized role. This evolution is typically well received from the platform since partners drive more value than peer producers and can pull many other players towards a better overall platform experience.

We just presented a possible way to classify entities in your ecosystem. It's highly possible that the ecosystem we need to build doesn't feature a "full" picture: it may not, for example, have any peer producers (often the case in Business-to-Business ecosystems). Sometimes it is also hard to figure out who is a partner or peer producer, but we normally don't care much about the difference. The reason for introducing the Partner and Peer Producer differentiation is to stress the point that - most of the time - real platform strategies mobilize wide ecosystems, involving producers of different types: some more strategic, professional, commercial (partners), some more informal (peer producers).

Any platform strategy is based on the creation of **two essential engines of value creation**. As a Platform Owner (or shaper), designing, building, and evolving these two engines — and finding a sustainable model to do so — is the most critical challenge.

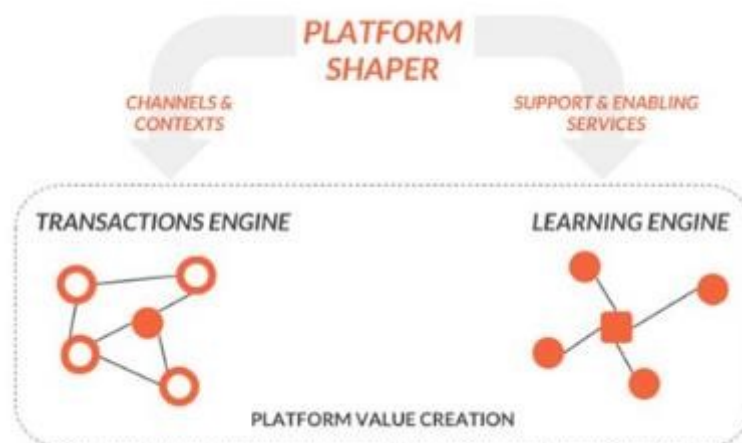


Figure 24. The rating when dealing with a community vs a platform (G)

The **transactions engine** is the set of channels and contexts specifically designed to facilitate interactions and exchanges between entities-roles. Transactions are—at least partially—already happening even before we deploy our strategy, however, the more a channel is designed to reduce the coordination/transaction cost, the more easily transactions can

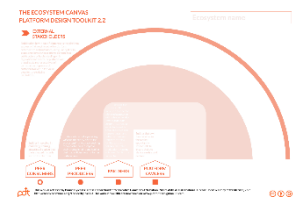
happen. It is important to create and improve channels to reduce transactions cost (allowing more niche interactions). By making interactions easier, faster, reducing the cost of interaction between value producers and value consumers, platforms that aggregate and facilitate interaction make it easier to interact in smaller niches: if the cost (as a producer) of coordinating with your consumer is lower, it will be easier to create a solution that fits exactly with the niche expectations. A Key Question to ask is “How is my strategy reducing the cost of interaction and improving the possibility to interact in the context I’m willing to shape and organize?”

The **learning engine** is the set of support services and contexts that the platform shaper provides and maintains for the participants so that they can learn, improve and evolve. It’s the way the platform shaper helps entities-roles to cope with and adapt to the complexity of the networked age. It is mandatory because we need it to create a learning engine to help ecosystems face VUCA. As we live through a Volatile, Uncertain, Complex and Ambiguous World, platforms offer a huge promise of accelerated learning, ways to find new opportunities and hone new capabilities. The promise of a platform strategy is, essentially, that learning will happen faster by being “inside” than by staying “outside”. And the Key Question to ask: “What incremental process is available for the entities of my reference ecosystem to evolve? Am I offering radical opportunities for improvement?”

The **Step-by-Step Platform Design Process** is outlined next:

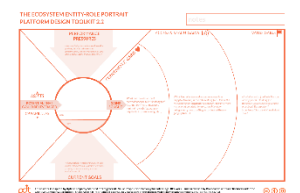
- **Mapping the Ecosystem**

First, by using the Ecosystem Canvas you will reflect on the ecosystem you’re looking to shape and organize with your platform strategy. You will map the entities present in this ecosystem and you will then understand what roles they might play, clustering them if necessary.



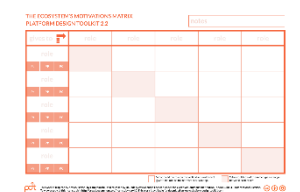
- **Portraying Ecosystem’s Entities-Roles**

With the Ecosystem Entity-Role Portrait, you will make a consistent deep picture of each entities-roles’: what’s their context, what they’re trying to achieve, with whom and how they’re trying to connect, what potential they can express. This will make you better understand what kind of “experience gains” they’re looking for—and that you therefore should provide—as a platform shaper.



- **Analysing the potential to Exchange Value**

With the Ecosystem’s Motivation Matrix, you will then analyse their potential to exchange flows of value: in other words, you will map what kind of value exchanges the entities are performing already (or trying to), and what additional type of value they might exchange if properly enabled.

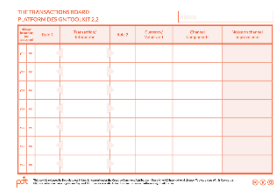


- **Choosing the core relationships you want to Focus on**

At this point in the design process, it’s important that the shaper identifies the focus: what are the entities in the ecosystem we want to focus on? What relationships are going to be the core of our design work (at least for this iteration?).

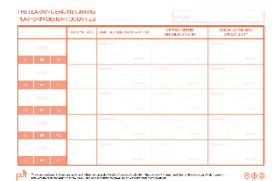
- **Identifying the Elementary Transactions**

With the Transactions Board you will map how your ecosystem is currently exchanging value (focusing on the entities and the relationships you decided to prioritize), and you envision how your platform strategy can help them transact value in an easier, cheaper, and faster way by providing, and curating channels and contexts that will make interactions and transactions more likely to happen.



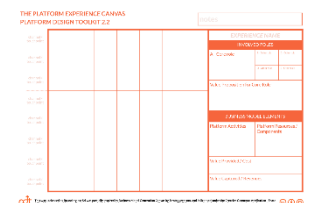
- **Designing the Learning Engine**

With Learning Engine Canvas you will design a step-by-step process made of support/enabling services that will help your entities embrace your platform strategy. These services will help them evolve, emerge from the crowd, become better producers and consumers, and ultimately to undergo a radical evolution that will have them explore new opportunities, and behaviours not intended initially.



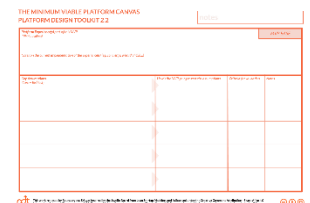
- **Assembling the Platform Experiences**

With the Platform Experience Canvas, you craft an experience that synthesizes the core value proposition(s) arising from the Strategic Design phase and that - more than others - you consider essential for your platform strategy. With this canvas you will assemble the elements emerged from the Transactions Board(s) and the ones emerged from Learning Engine Canvas. You will then reflect around the sustainability model of this experience, thus covering the basic elements of Business Modelling, you will think at what resources and components you will have to set in place and manage to deliver this experience, and how you will extract value from it.



- **Setting up the Minimum Viable Platform**

With the Minimum Viable Platform Canvas, you finally move out of the building to test in the real world if all your design assumptions have a future or not. By looking at your design outputs, especially the Platform Experience Canvas(-es) you have compiled, you'll extract the riskiest assumptions in your strategy, and you'll set experiments and metrics to validate them with your ecosystem.



4.2.2 Community Canvas

It is the framework that will help you build and run a new community or analyse and improve an existing community. It identifies the fundamental themes to cover and helps you ask the right questions. “Community” means something different to every person. This tool has been developed in the hope of supporting anyone who runs an organization that brings people together and makes them feel like they belong, no matter if it's an alumni organization, a sports club, or an HR department.



Figure 25. The rating when dealing with a community vs a platform (H)

The Community Canvas has **3 Sections: Identity, Experience, Structure** which in turn are divided into 17 Themes.

The first part of the Canvas focuses Themes on questions of belief. Strong communities have a clear and explicit sense of who they are, why they exist and what they stand for.

These aspects of the community are less tangible than the points covered in later parts of the Canvas. And as a result, they often get passed over. However, we believe that a confident sense of identity builds the very core of a successful community and informs all other elements around it. That's why in our Canvas, the Identity is the beating heart at the centre of everything else, giving meaning and life to the rest of the organization.

The Identity section itself is layered like an onion. At its core are two elements: the community's purpose and the identity of its members. The questions why and who are quintessential and then inform the other elements of identity: the organization's values, its definition of success and its brand.

An authentic **culture** is one of the most valuable elements of any community, but also a very abstract concept to act upon. The elements covered under Identity are key ingredients towards a thriving community culture. The **themes**:

- **Purpose:** Why does the community exist?
- **Member:** Identity Who is the community for?
- **Values:** What is important to us as a community?
- **Success Definition:** How does the community define success?
- **Brand:** How does the community express itself?

In the **second part** of the Canvas, we explore the community from the perspective of the members: what does actually happen in the community and how does it translate its purpose into activities that create tangible value for the members?

Every community experience starts with a member joining and at some point - consciously or not – a member leaving. Successful communities design these transition moments between the outside and the inside world as part of a larger journey. A significant part of the Canvas is dedicated to two elements: **Shared Experiences** bring members together and fundamentally



deepen the bonds among them. **Rituals and traditions** are individual and recurring experiences that have a strong symbolic character.

The community's content strategy contributes to the overall experience. Communities who tell the stories of their members and share relevant content strengthen the bond among members and increase the overall value. Every member is different and evolves over time. Smart communities provide different roles catering to different needs throughout the experience. Lastly, we have found communities to work best when they have clear rules set in advance, so people know what their rights and expected responsibilities are. The **themes**:

- **Selection:** How do people join the community?
- **Transition:** How do members leave the community?
- **Shared Experiences:** What experiences do members share?
- **Rituals:** What rituals happen regularly?
- **Content:** What content creates value for members?
- **Rules:** What are the community's rules?
- **Roles:** What roles can members play?

The **third part** of the Canvas focuses on the operational elements of running a community. While many communities evolve organically over time, only few survive in the long-term. Organizational aspects are often neglected, and the necessary structures aren't in place to deal with challenging situations, as they eventually and often suddenly come up. This area goes beyond good management and processes but presents a tremendous opportunity: most communities become more valuable the longer they exist, as trust both among the members and into the overall brand increases. Consistency is key.

Visionary communities will put structures in place that will optimize for long-term stability. Leadership deserves special attention in a community, as many are partially or fully volunteer run. But what does that mean for incentive models, job descriptions and knowledge transfers?

Decision making is best clarified in advance and helps avoid and address conflicts, a surprisingly common sight within many communities. Many communities fail because they do not figure out how to become financially sustainable. We highlight different models. Most successful communities exist both in the offline and the online world and the choice of the right platforms matter. Lastly, the members' data is among the communities most valuable assets, and it deserves thoughtful management. The **themes**:

Organization: Who runs the community?

- **Governance:** How are decisions made in the community?
- **Financing:** What is the community's plan to be financially sustainable?
- **Channels & Platforms:** What channels does the community use to communicate and gather?
- **Data Management:** How does the community manage the data of its members?

Some photographs related to the Community Building workshop are shown next:



Figure 26. Images from the Community building workshop in Barcelona

4.3 Tools

Both the Platform Design Kit and the Community Canvas as described before.



Figure 27. The logos of the 2 tools recommended for Community building in the i-Game project
The appendix contains the slides used during the workshop.

5 CONCLUSIONS

The i-Game project seeks the construction of a co-creation platform for different stakeholders to co-design Serious Games for museums. When dealing with co-creation activities (activities where different people with different roles and backgrounds participate to share their experiences and define an innovative new service or product), these activate the creative potential of various interested parties to co-create resources, thus actively participate in the learning process. In there, participants are confronted with a specific question to be solved in balanced teams, different profiles, and develop a piece that will contribute to this solution.

This co-creation processes can have a constrained time frame, and not only programming plus artistic or business developments can emerge from the chosen methodology, and therefore both digital and analogue implementations can apply. The jamToday network that arose from the jamToday EU project that has been mentioned before in this document, demonstrated that the principles of motivational design do not just create useful and meaningful games, but also help explaining and designing the context in which games can be most effectively implemented and used, e.g. Edugames (games for education) to be used in museums.

This methodology helps turning professionals into educational designers with the help of game design knowledge and practice. In fact, our participants can be treated as game-based thinkers, and therefore user-centred design is guaranteed because they gain the ability to express themselves within this medium. We aim to provide a bridge between the different disciplines (art, technology, psychology, design, production, and textile-fabric) to guarantee the successful uptake of the next generation of games for museums and their application to offer the structure, guidance, and support that the discipline deserves.

Co-creation processes will allow the i-Game project to start in the desired direction and the implied stakeholders will be diverse. Therefore, the social complexity of our co-creation events can be remarkable. One can evaluate too, i.e. by measuring performance and success of these events, with selected KPI.

The connection between co-creation workshops and Serious Games happens to be when the methodology shows that memorable experiences are best suited for tackling problems related to perception and motivation of the stakeholder. The design and creation process is iterative and requires time to take the stakeholder through different steps of the process. The team roles should be defined clearly, and the teams need to be balanced, as the experience consists of the product development in a multidisciplinary team from different disciplines.

Thanks to the co-creation, we will bring truly needed human motivators to the experience by means of intrinsic feelings that can be developed via technology, psychology, art, and storytelling. And from them to a real “learning by discovery” memorable experience in our textile museums, as it is shown in the next figure.

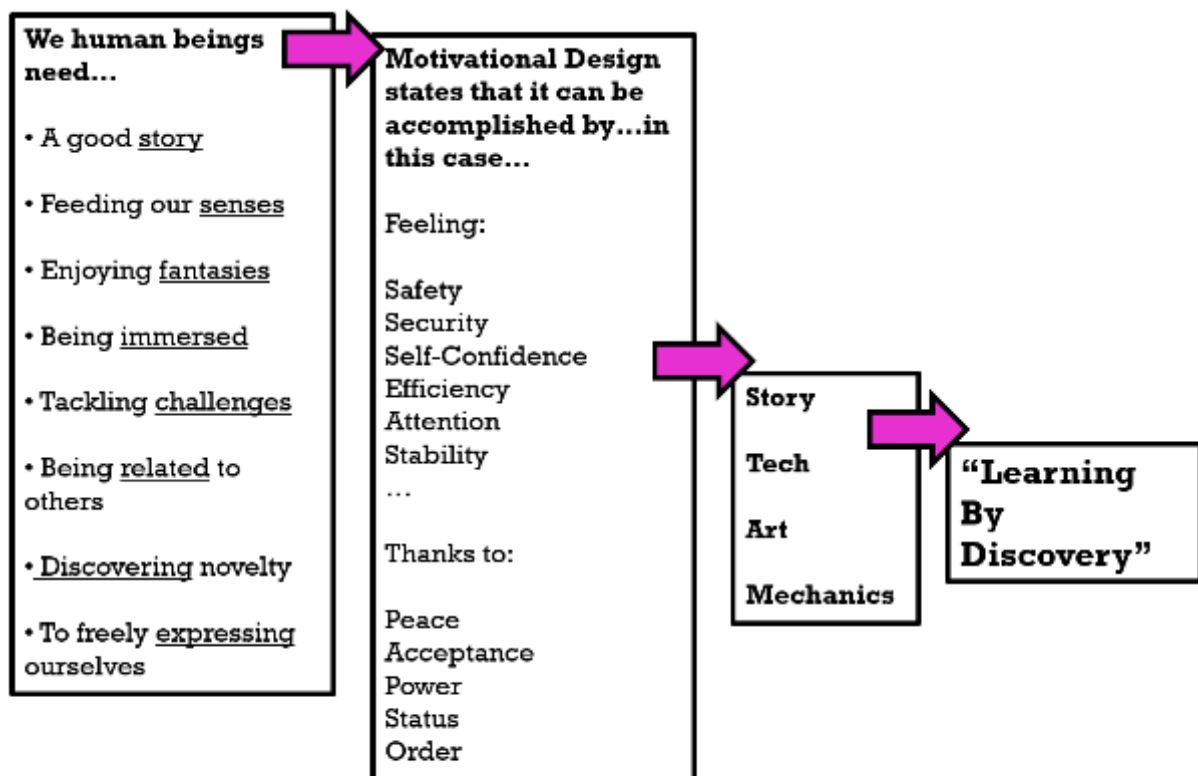


Figure 28. Intrinsic motivators that lead to an Educational Serious Game for museums thanks to all the sciences

The model in the figure takes several factors into account, as described before in this document. Designing a Serious Game for a museum is not about technology only, but several key aspects:

- The **story** that emotionally impacts the audience while mapping knowledge within their mind-sets. Rational argumentation can be supported by non-fiction narrative, if needed. Empathy and metaphor can be present for the sake of understanding, keeping a perfect balance between both parts.
- The **technology** that leads to a transmedia plan. The final implementation can be placed in several platforms, if we understand that every audience niche resides in a different set of vehicles (such as cinema, comic, books, music, social media, apps, just to cite a few) to deploy and increase the number of impacts on the target and, therefore, amplify the reading of the message. As a result, probability of success is maximized.
- **Aesthetics** need to be considered too, since interest happens when we like what we see only. It is inherent to human beings that attraction responds to beauty.
- The **mechanics** that guide the gamification design. Game elements ensure fun and pleasure, since they are key elements to achieve engagement, behaviour change and knowledge transfer amongst the targets.
- Finally, a **community** surrounding the project to ensure sufficient and diverse roles for the stakeholders to co-create the Serious Games based cultural solutions.

Once we have exposed our intentions and foundations in terms of experience design, we believe that these can be extracted and summarized in our innovative approach for the motivational design:

- The assimilation of the content must occur in a **natural** way, never forcing the final user.
- Our practitioners should act as **facilitators** of the process, not just as mere transmitters of knowledge.
- The **mix** of different profiles helps improving the final outcomes, attending to the co-creation's phases in our project.
- The description of the challenges should satisfy the user's **curiosity**, while allowing them to match their **preferences** and thereby strengthening their motivation.
- It is important to count on a **flexible**, creative, and specific working set of platforms that our users can feel as theirs. This will increase the overall performance of the whole community.
- The **Learning by Doing** methodologies allow for a better assimilation of knowledge and practice than traditional methodologies. Experience must be designed on the top of the best content.
- **Validating** projects and products with the help of all the stakeholders provides with valuable information that serves as incredible feedback.
- The **learning and adherence curve** can increase if facing challenges that relate several subjects, formats, and interests.
- Our users should see the **applicability** of the learning in their real world; therefore, we should stimulate the **simulation** of real, disruptive, interesting, and fun situation without losing rigor. **Rigor** does not imply that the experience must be boring.
- The **motivation** of the practitioners and professionals needs to be maximized too. They should also experiment and perceive the pleasures list on their whole.

Let the i-Game project continue then.

6 REFERENCES

- Aldrich, C. 2004. "The four slates of educational experiences", *On the Horizon*, 12(1), p.14-17.
- Balló and Pérez, La semilla inmortal: 198 (Argumentos) Tapa blanda – 18 abril 2006 de Jordi Balló (Autor), Joaquín Jordá (Traductor).
- Baxter, R. J., Holderness, K., & Wood, D. A. 2016. "The effects of gamification on corporate compliance training: A field experiment of True Office anti-corruption training programs", Available at SSRN 2766683.
- De-Marcos, L., Domínguez, A., Saenz-de-Navarrete, J., & Pagés, C. 2014. "An empirical study comparing gamification and social networking on e-learning", *Computers & education*, 75, p. 82-91.
- Garcia, O., Serra, J., Membrives, J., & Juarez, J. J. 2016, September. "Waypass: a gamified self-knowledge quest for teenagers", In 2016 8th International Conference on Games and Virtual Worlds for Serious Applications (VS-GAMES), p. 1-4
- Garcia-Panella, O., Badia-Corróns, A., Labrador-Ruiz, E., & Fonseca-Escudero, D. 2012. "Pleasant learning experiences: augmenting knowledge through games and interaction", In *Educational Stages and Interactive Learning: From Kindergarten to Workplace Training*, p. 369-386.
- Hunicke, R., LeBlanc, M., & Zubek, R. 2004, July. "MDA: A formal approach to game design and game research", In *Proceedings of the AAAI Workshop on Challenges in Game AI*, 4 (1), p. 1722.
- Pivec, M., McDonald, B., & Garcia-Panella, O. 2016, October. "Effective Learning through Disruption-Guidelines for Creation of Applied Game Jams and Games", In *European Conference on Games Based Learning*, p. 529.
- Marczewski, A. 2015. "User Types. In *Even Ninja Monkeys Like to Play: Gamification, Game Thinking and Motivational Design*" p. 65-80, CreateSpace Independent Publishing Platform.
- García, O., Navarro, H., Rodríguez, A., Fernández, D., & Freixes, D. 2017, October. "Dealing with transformation in a VUCA world: A competence-based development project applying transmedia storytelling and gamification for an international corporation", In *European Conference on Games Based Learning*, p. 919-925.
- Quintana, Y. and García, O. (2017) *Serious Games for Health: Mejora tu salud jugando*, Gedisa Editorial, Barcelona.
- Regueras, L. M., Verdú, E., Verdú, M. J., Pérez, M. Á., de Castro, J. P., & Muñoz, M. F. 2008. "Motivating students through on-line competition: An analysis of satisfaction and learning styles", In *Advances in Web Based Learning-ICWL 2008: 7th International Conference*, Jinhua, China, August 20-22, 2008. *Proceedings* 7, p. 167-177.
- Schell, J. 2008. "The art of game design", Morgan Kaufmann Publisher, Burlington.
- Sheldon, L. 2011. "The Multiplayer Classroom: Designing Coursework as a Game", Cengage Learning, Boston.
- The JamToday EU Project and framework. 2014. Available at: <https://cookiebox.es/en/cookie-box-miembro-de-la-jamtodayeu/>



Weinstein, M. 2011. *“Learning with video games: A revolution in education and training?”*, online], SharpBrains, <https://sharpbrains.com/blog/2011/07/29/learning-with-video-games-a-revolution-in-education-and-training>.

And some additional resources:

- The platform design toolkit: <https://boundaryless.io/pdt-toolkit/>
- The community canvas: <https://community-canvas.org/>
- Player types taxonomy by Marczewski: <https://www.gamified.uk/>
- Player types taxonomy by Amy Jo Kim: <https://amyjokim.com/>
- The MDA motivational model: MDA: A Formal Approach to Game Design and Game Research by Robin Hunicke, Marc LeBlanc, Robert Zubek available in <https://users.cs.northwestern.edu/~hunicke/MDA.pdf>
- A book on storytelling: The immortal seed (La semilla inmortal), Pérez y Ballo available in <https://www.amazon.es/semilla-inmortal-Argumentos-Jordi-Ballo%C3%B3/dp/8433905481>
- A book on storytelling: 20 Master Plots: And How to Build Them, Ronald Tobias available in <https://www.amazon.com/20-Master-Plots-Build-Them/dp/1582972397>
- Jung’s Archetypes: https://en.wikipedia.org/wiki/Jungian_archetypes
- Hero’s Journey Archetypes (Joseph Campbell): https://en.wikipedia.org/wiki/Hero%27s_journey

Besides the presentations of the technical meeting, the recordings of the sessions are available at:

<https://drive.google.com/drive/folders/1EySX2S0LkzHWyMhlesGIDhTasATx6Sh8?usp=sharing>

A Appendix

A.1. Participants list

The participants attended the 1st consortium Technical Meeting in Barcelona both hybrid and online formats. And they were:

Table 1. The participant's list in the technical meeting

Name	Partner Organisation
Sotiris Diplaris	CERTH
Makrina Kosti	CERTH
Alexandros Kokkalas	CERTH
Nefeli Georgakopoulou	CERTH
Eleftheria Lagiokapa	CERTH
Orestis Sarakatsanos	CERTH
Stelina Rizou	CERTH
Eva de Lera	RtF
Diana Fehr	MuseoSpace
Angeliki Barakli	KEPA
Poppy Oikonomou	KEPA
Nikos Rovatsos	KEPA
Maro Magoula	UniSystems
Agnes Aljas	ENM
Pille Runnel	ENM
Otilia Kocsis	RtF
Holger Kuerten	NURO
Yash Shekhawat	NURO
Camilla Marini	TMP
Christian Martínez	NURO
Enrico Sabatini	OI
Giulio Asta	OI
Anais Di Bella	TMP

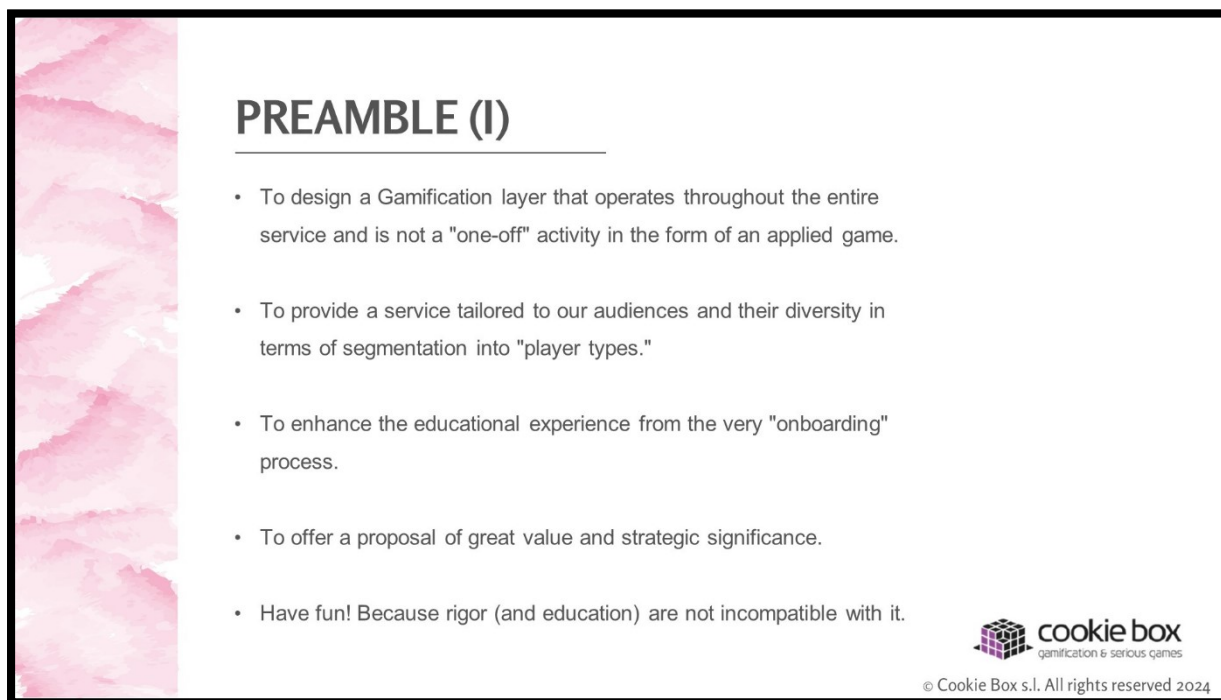




Francesco Bolli	TMP
Noémie Krack	KUL
Jozefien Vanherpe	KUL
Agni Pagouni	KEPA
Ylenia Orfanidou	KEPA
Laura Fiesoli	TMP
Filippo Guarini	TMP
Oscar García Pañella	CB
Roman Zabal	CB
Carlos Andreu	CB


A.2. Gamification Workshop Slides

The workshop started with a preamble:

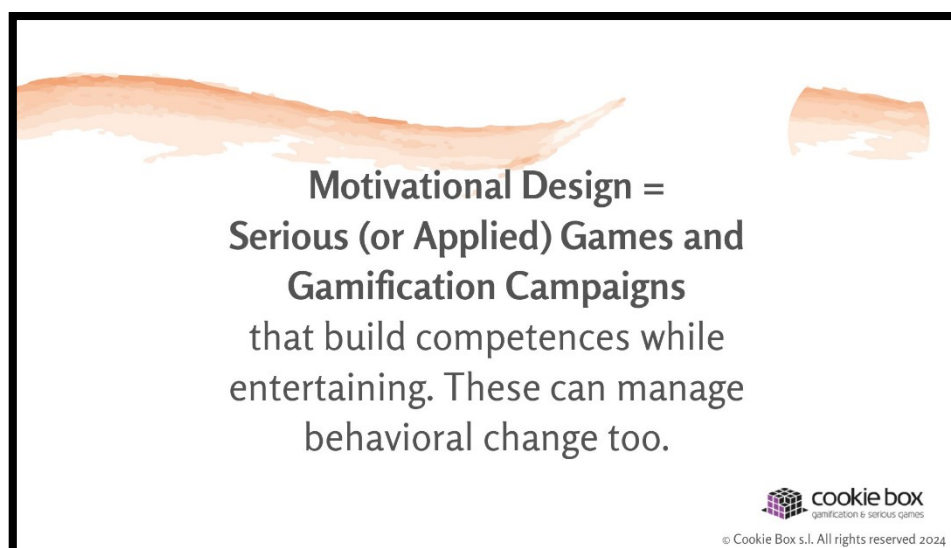


PREAMBLE (I)

- To design a Gamification layer that operates throughout the entire service and is not a "one-off" activity in the form of an applied game.
- To provide a service tailored to our audiences and their diversity in terms of segmentation into "player types."
- To enhance the educational experience from the very "onboarding" process.
- To offer a proposal of great value and strategic significance.
- Have fun! Because rigor (and education) are not incompatible with it.


 **cookie box**
gamification & serious games
© Cookie Box s.l. All rights reserved 2024

Because there are five reasons behind our Motivational Design approach. And from there, the definition of Motivational Design:



Motivational Design = Serious (or Applied) Games and Gamification Campaigns

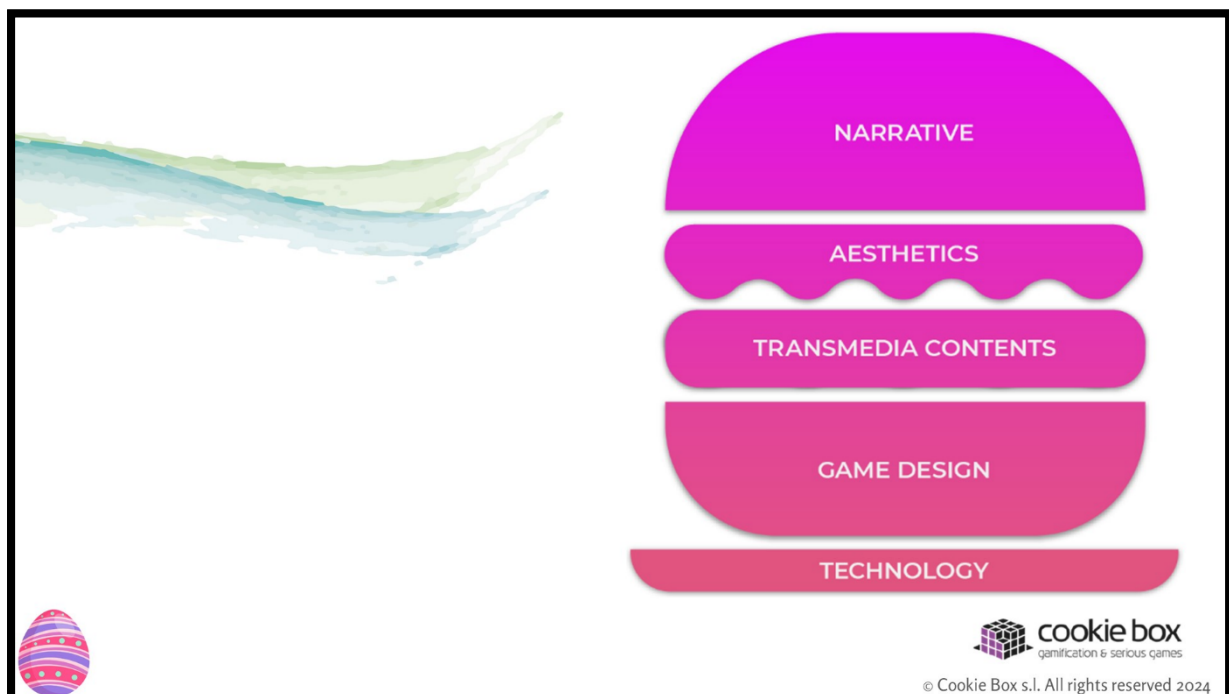
that build competences while
entertaining. These can manage
behavioral change too.

 **cookie box**
gamification & serious games
© Cookie Box s.l. All rights reserved 2024

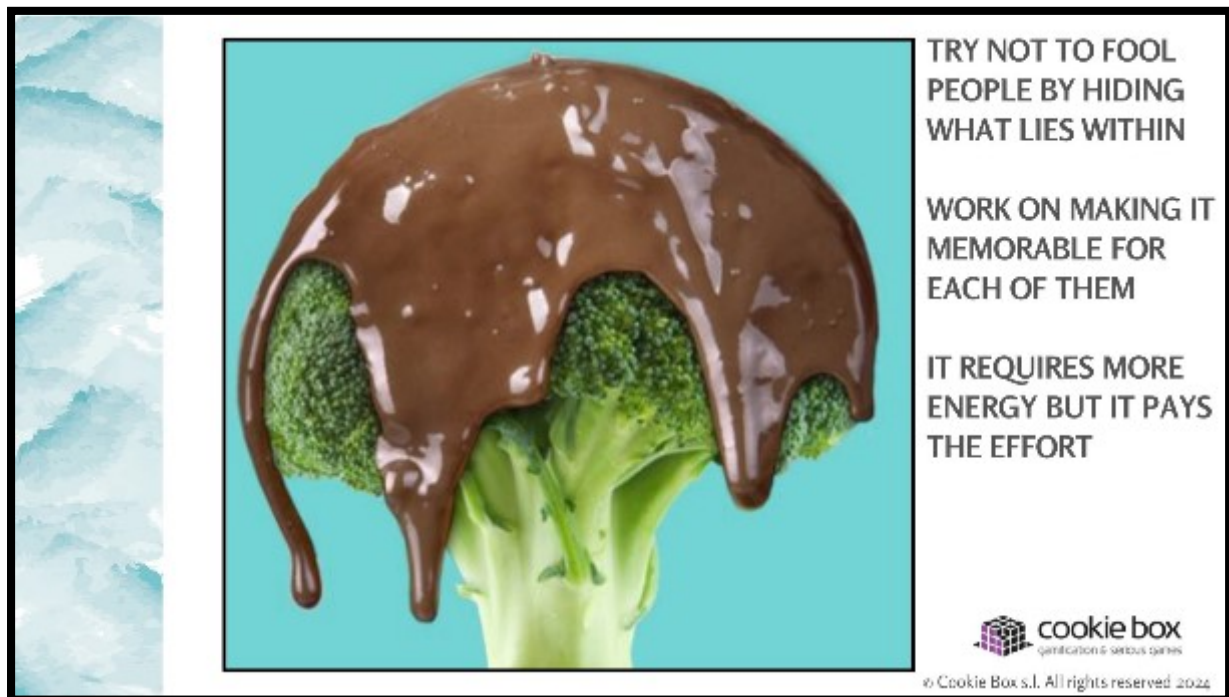
From the definition of Motivational Design, we defined immersion as the key component within any gamified system:



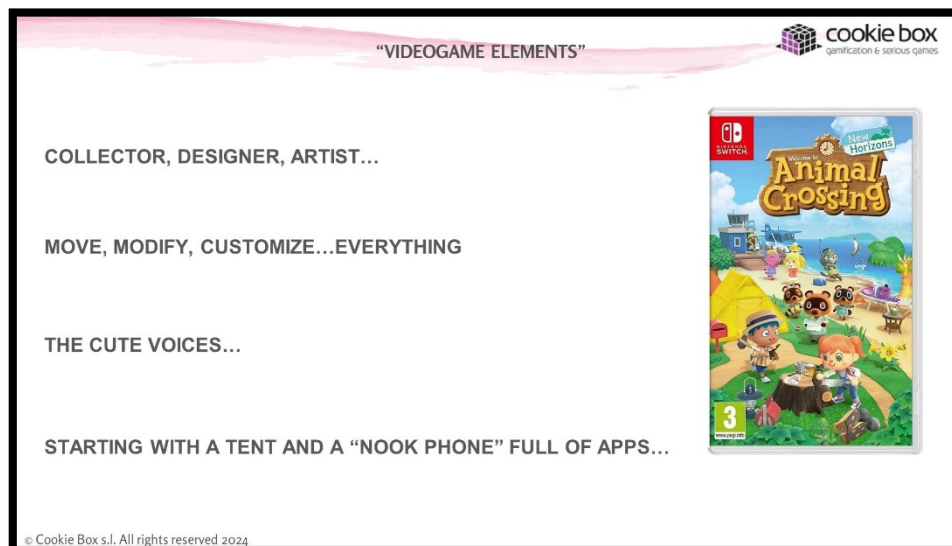
The “hamburger” Serious Game Model by CB was presented to the workshop’s participants. Technology helps driving the experience but the narrative and storytelling, aesthetics and audio-visuals, tailored content, and psychology (game design) are the nuclear ingredients for the Serious Game to be applied in the museums:




It is mandatory to apply the gamification scheme as from the first moment, taking into consideration the whole design and not just a set of isolated moments:



And the “broccoli covered of chocolate” effect was presented as to mention the importance to invest in nuclear Gamification. In the workshop we learned to evaluate game elements from commercial videogames because it is a great way to gather interesting ideas to be applied within our own designs. Good examples are customization elements, role plays, crafting abilities, avatars, or cooperative missions, etc. That is game mechanics that can be taken from a commercial videogame (Animal Crossing from Nintendo):






“VIDEOGAME ELEMENTS”

“RECIPES” TO CREATE TOOLS AND FURNITURE...


FIND MATERIALS AND CRAFT STUFF IN THE WORKBENCH...

USING THE FURNITURE WHERE YOU PREFER,
FOLLOWING YOUR STYLE...

SELL YOUR UNUSED MATERIALS AND EARN “MILES”
(VIRTUAL CURRENCY)...



© Cookie Box s.l. All rights reserved 2024




“VIDEOGAME ELEMENTS”

ACQUIRE EXPERIENCES AND MATERIALS WITH THE
VIRTUAL CURRENCY...


HUNT BUGS, PLANT FLOWERS, CREATE A GARDEN, GO FISHING...

IF YOU NOURISH YOURSELF, YOU WILL BE ABLE TO DO THINGS
BETTER AND FASTER

THE SCENARIO CHANGES WITH THE TIME AND THE WEATHER



© Cookie Box s.l. All rights reserved 2024




“VIDEOGAME ELEMENTS”

THE CREATURES YOU ENCOUNTER CHANGE

4-PLAYER COOPERATIVE IN THE SAME PLACE

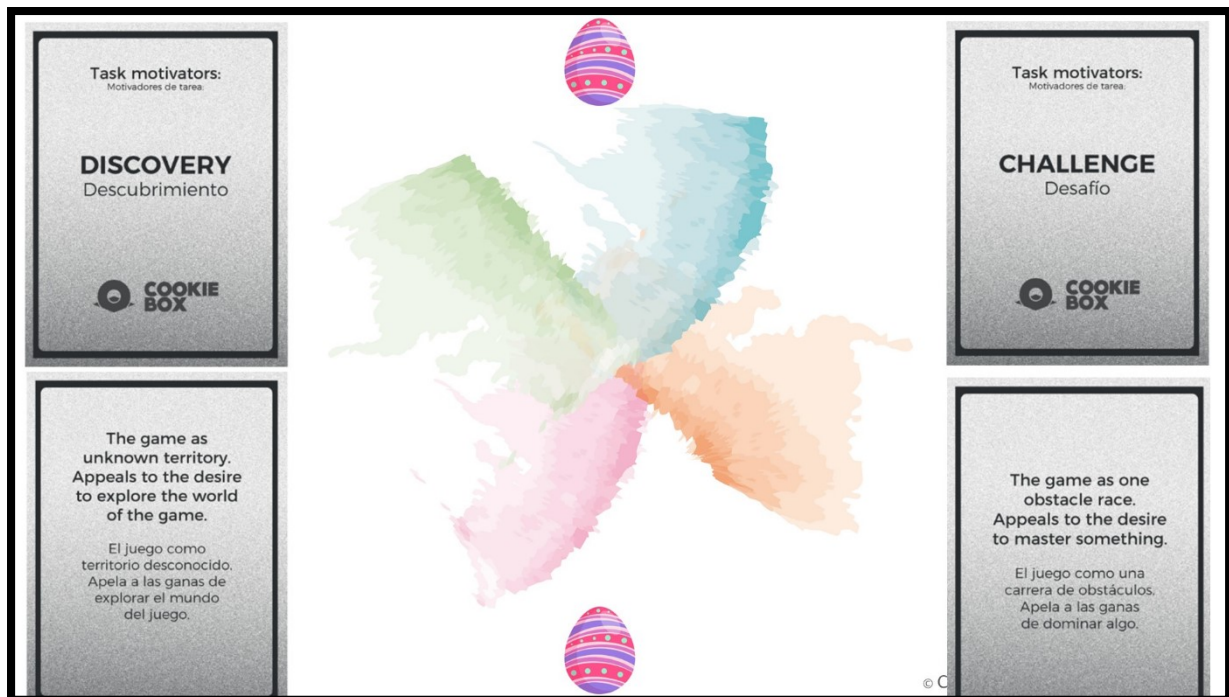
TAKE PHOTOS TOGETHER



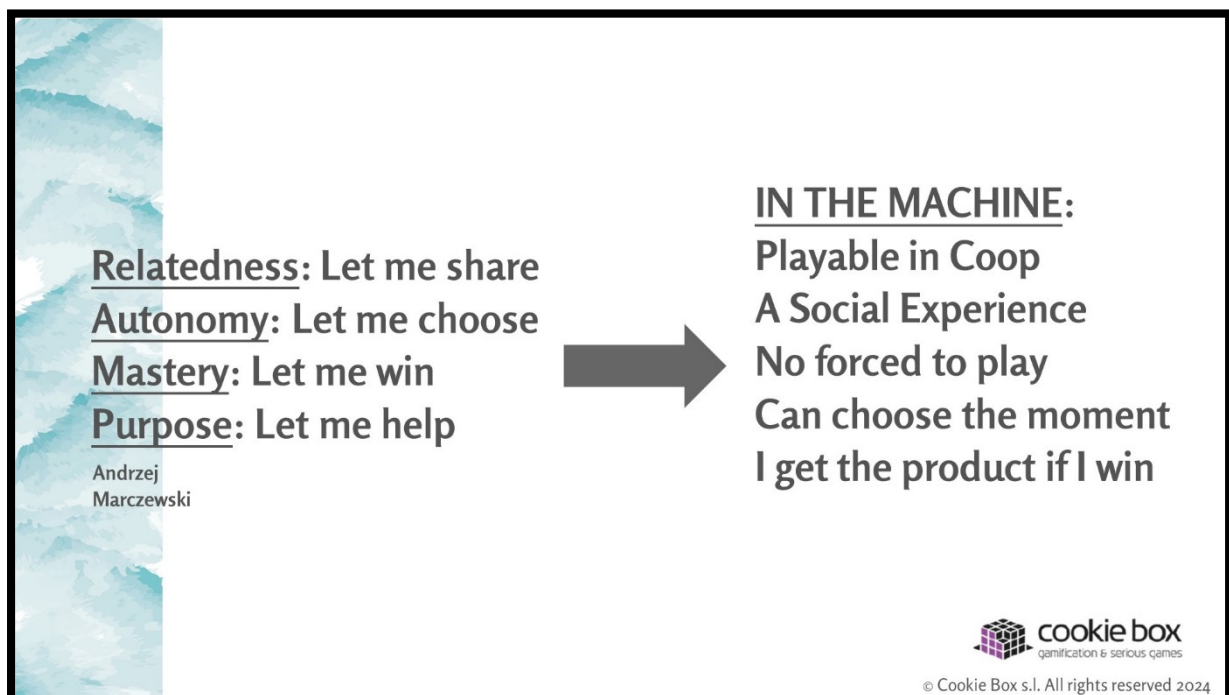
© Cookie Box s.l. All rights reserved 2024

We also presented 2 additional motivators. The challenge, to solve complex but balanced

obstacles, and the discovery, to find thanks to the exploration. These are important intrinsic motivators behind the Serious Game for any museum:



These are intrinsic motivators related to the emotional design of the Serious Game. Several authors and their motivator's schemes and metrics were presented along the workshop. These are important because can be related to the emotional needs of the participants to design an experience that has a strong significance for them:



It is the case of the RAMP model by A. Marczewski (2013)¹ or the MDA model by Hunicke et al. (2004).



17 The Lens of Pleasure

To use this lens, think about the kinds of pleasure your game does and does not provide. Ask yourself these questions:

- What pleasures does my game give to players? Can these be improved?
- What pleasures are missing from my game's experience? Why? Can they be added?

<http://www.jesseschell.com/>

IN THE MACHINE...



Sensation



Fantasy



Story



Immersion



Social



Challenge



Discovery



Expression

THE MDA MODEL



© Cookie Box s.l. All rights reserved 2024

And we also conducted some analysis on how to design rewards. These can be expected or unexpected, tangible, or intangible, intrinsic, or extrinsic, and more:

IN THE MACHINE:

Status: As a “Celebrity”

Access: To an Experience

Power: To Choose

Stuff: The Reward

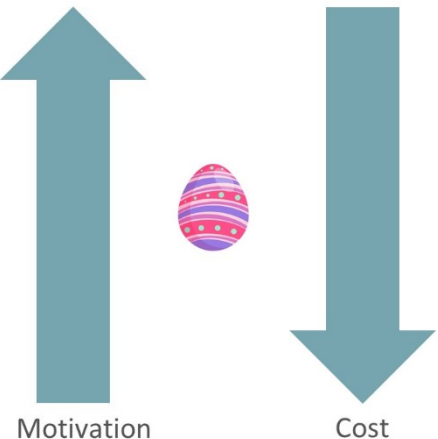
S.A.P.S

Status

Access

Power


Stuff



Motivation

Cost

Gabe Zichermann

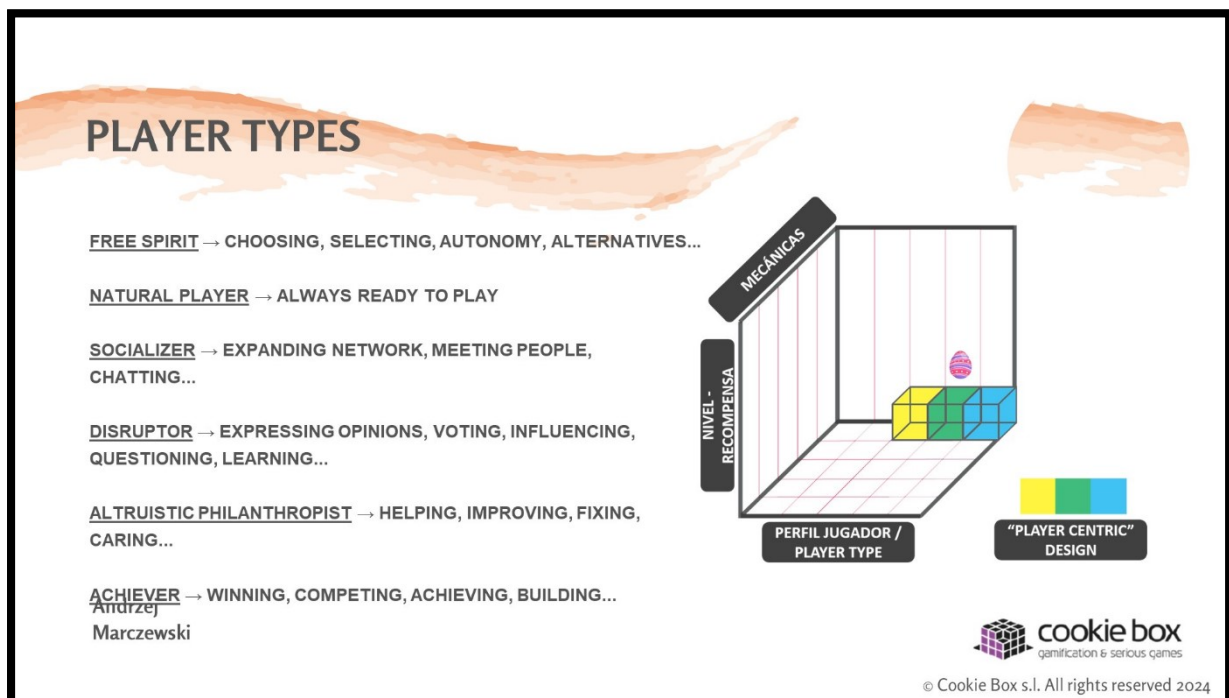


© Cookie Box s.l. All rights reserved 2024

¹ Marczewski, Andrzej. "The intrinsic motivation RAMP." *Gamified UK* Available at (2013).

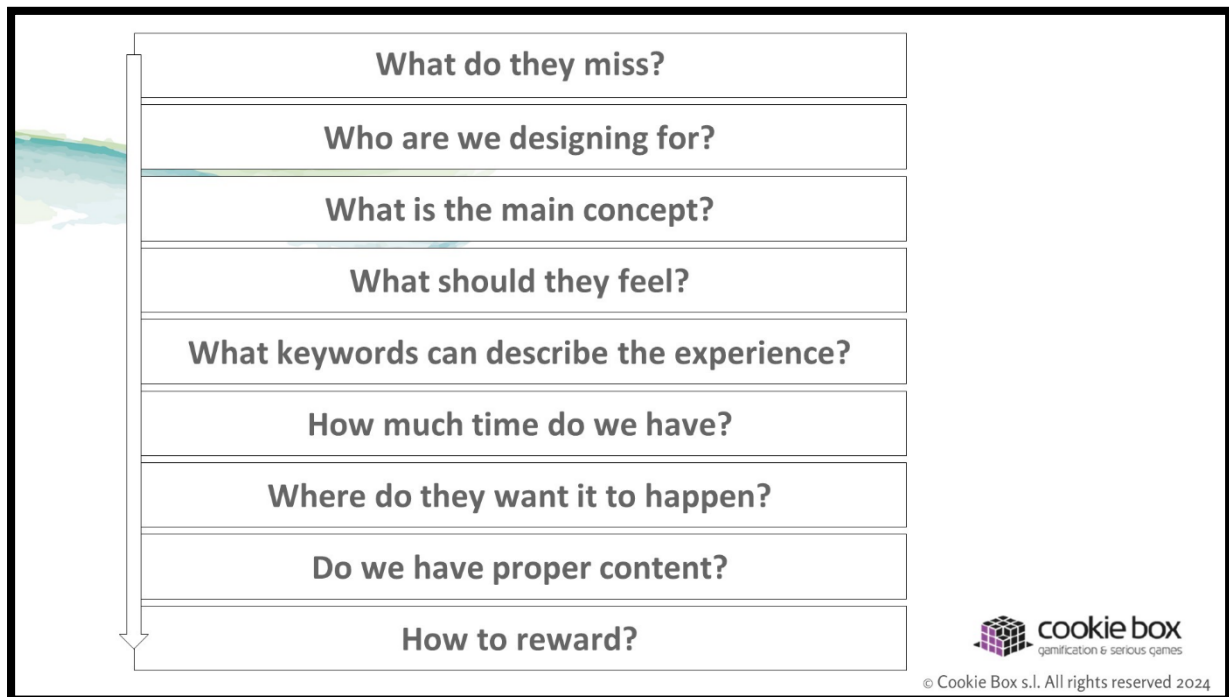
The SAPS (status, access, power, and stuff) model to design rewarding systems by Zichermann² (2011) states that Status is of much more importance than stuff.

There are different “player types” or motivational profiles, we could say. And depending on each, different motivators are needed to attract a person. Every participant will be strong in at least one or two of them and the gameful experiences should be designed so that several are fed for everybody to enjoy. It is the total guest experience concept as defined by Walt Disney for their theme parks a while ago:

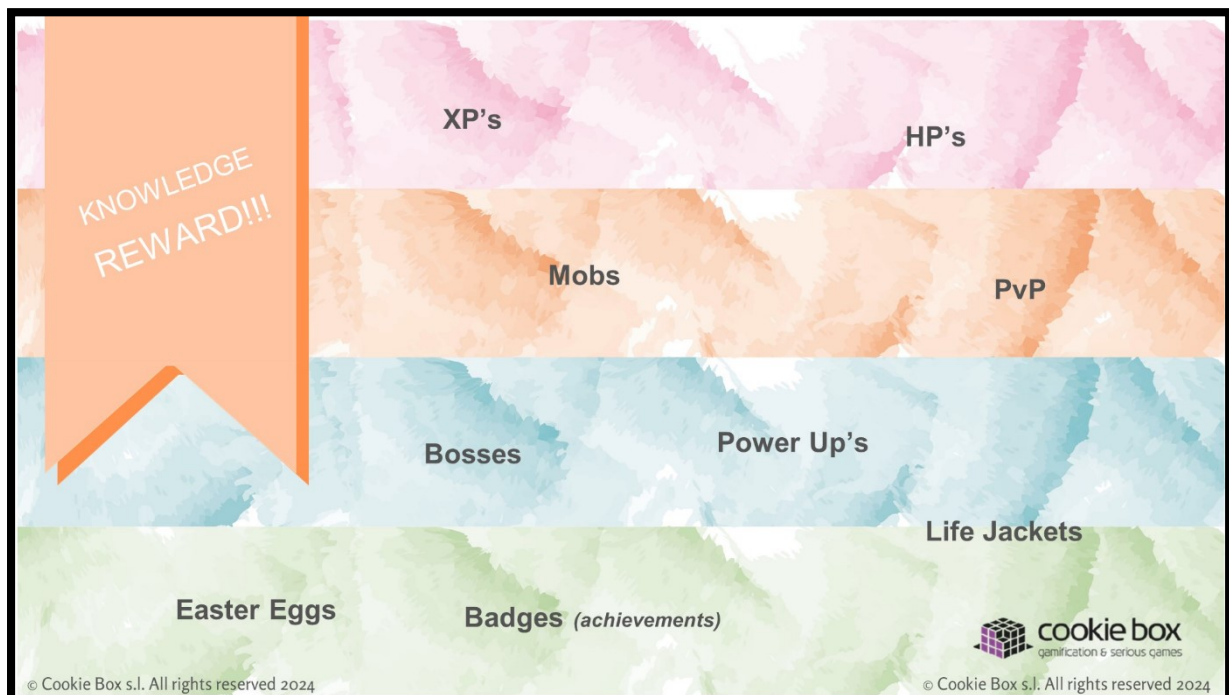


The player types by A. Marczewski (2013) were presented as the different motivational categories for our participants in the museum. We reviewed the “important questions” to be asked and answered when starting the design of a Serious Game for museums. These can lead the briefing stage:

² Zichermann, Gabe, and Christopher Cunningham. *Gamification by design: Implementing game*




It was also important to understand some of the terms that are used among the videogame community to build empathic bridges between disciplines:



Everything gets documents when designing a Serious Game. And the Game Design Document is the format used in this industry:

THE DOCUMENT



Number (identifier): Unique identifier per challenge.

Title: Name of the challenge. It can describe it and at the same time, be motivating and interesting.

Participation: Number of participants needed to complete the challenge.


Difficulty: Degree of complexity of the challenge.

Aspiration(s): Specific connection with different types of aspirations or player types.

Keywords (describing it): Words that classify the challenge according to its characteristics.


Description (in text): Introductory description of the challenge.

Conditions: how to win, how to lose.



© Cookie Box s.l. All rights reserved 2024

THE DOCUMENT



Ruleset: the dynamics of operation as the rules.

Parameters: available time, number of attempts, existence of hints, etc.


Game elements/Game mechanics: behaviors, motivators and actions behind the challenge.

Storytelling: Connection with the storyline (if any).

Platform(s): Physical, analog, or digital locations where it takes place.

Reward: specific bonus for winning this game.

Progress: mechanisms such as associated badges to be collected as unlockables.



© Cookie Box s.l. All rights reserved 2024

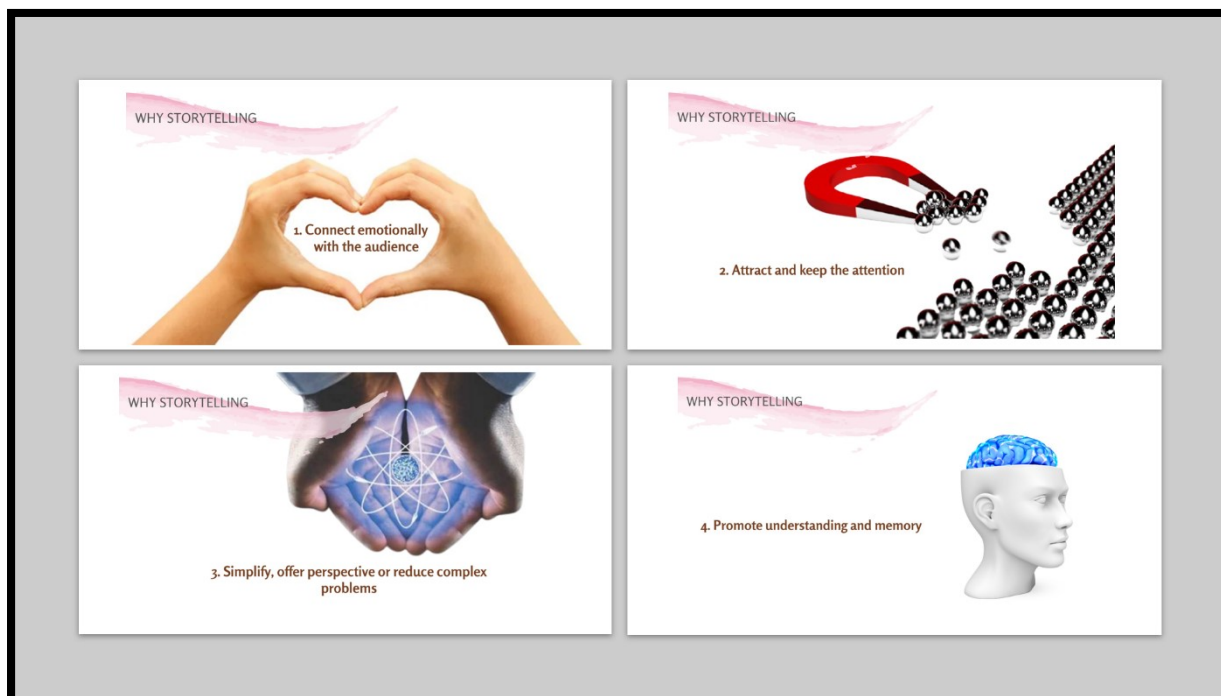
This list of sections in a Game Design Document can be used to describe a Serious Game.

Several additional questions were presented as a conclusion. We used the “Game Scope” card game that was created under the jamToday EU Research project (2013-2016) to do so. These questions in the cards help reviewing a gameful experience:

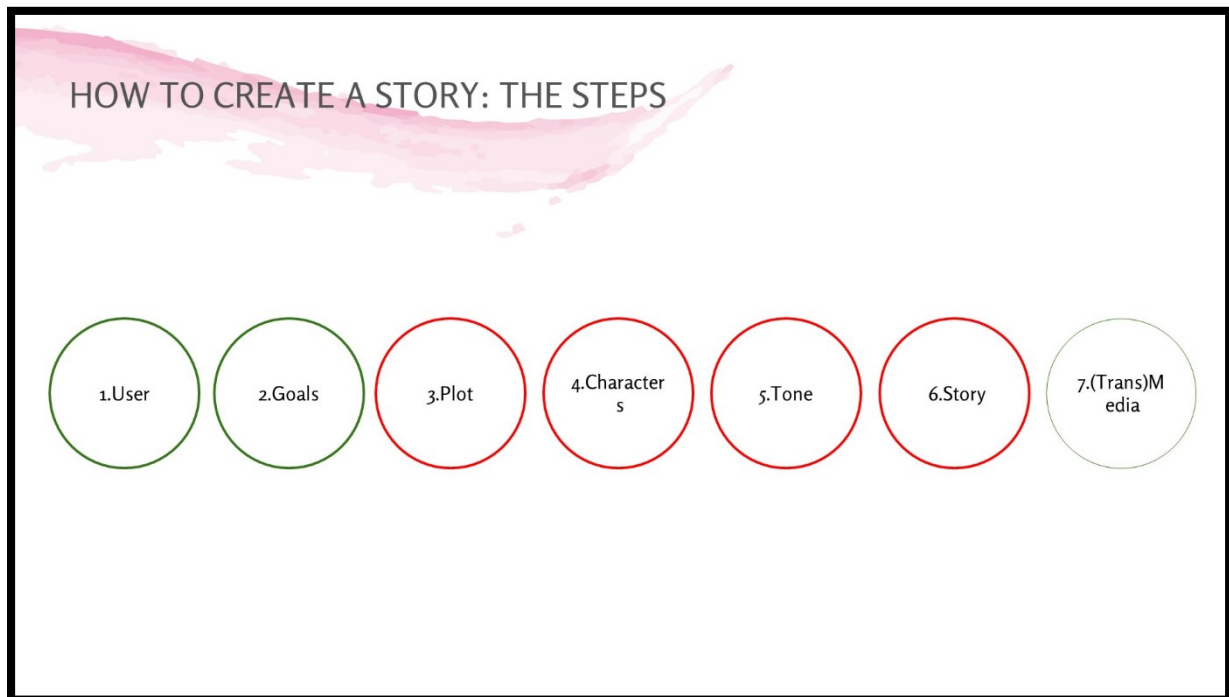


A.3. Storytelling Workshop Slides

The Storytelling workshop started with the reasoning around the need of Narrative itself:



Because Storytelling connects emotionally, attracts, and keeps the attention, simplifies challenges and theories, and promotes understanding. And the 7 steps to be followed when designing it were carefully shown and explained:




We need to describe the users, our participants, to create a Narrative that really suits them:


1. THE USER

- * Who is he/she?
- * What does he/she think and feel?
- * What does he/she hear?
- * What does he/she see?
- * What does he/she say and do?

- * What motivates him/her?
- * What frustrates him/her?

- * What channels does he/she use?



 **cookie box**
gamification & serious games

As the 1st step in Storytelling design: the user's description. Once we know who we are designing for, we need to establish clear goals. These are related to the reasons for doing so, the behavioural that we seek and the main aims:

2. THE GOALS

- * Why am I telling a story to these users?
- * What behaviours do I want to foster?
- * What do I want them to do?
- * What am I aiming in explaining this story?



Which is a 2nd step in Storytelling design: the goals behind a story. The 3rd step consists of developing a plot that must make sense and interest our participants in the museum's experience:

3. THE PLOT

- * What plot makes sense for my goals and user?
- * How can I find the plot of my story?



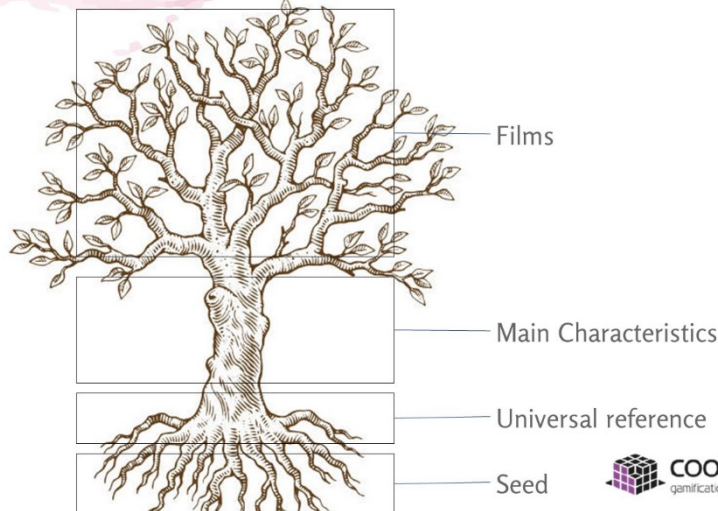
We analysed the “immortal seed” model to develop plots for our stories, a model by Balló and Pérez:

3. THE PLOT

The immortal seed (La semilla inmortal), Balló y Pérez

According to Balló and Pérez, the universal arguments in the cinematography are various adaptations of a handful of universal archetypes present in the classical tales.

They recognize **21 Universal patterns**, taking main references from the theatrical, mythical or literary work that come with every topic.



The model includes a list of 16 potential plots that can be reused and/or mixed to develop our owns:

3. THE PLOT

The immortal seed (La semilla inmortal): 16 seeds



IN SEARCH OF TREASURE

A mission that leads to a journey where the hero will face duels, unexpected aids, escapes... and will return victorious to the place of origin, with material and spiritual treasures.

James Bond, 2001, Euphoria, The Umbrella Academy, Game of Thrones



THE RETURN TO HOME

A journey of identity recovery during which the tension between obligation and the desire for freedom manifests; between home and the pleasure of the journey; between memory and forgetfulness.

Taxi Driver, Rambo, Gladiator, Game of Thrones



THE FOUNDATION OF A NEW HOMELAND

The search for the promised land by a leader with individual desires and collective duties, surrounded by a vulnerable community.

Westerns, Battlestar Galactica, Game of Thrones



THE BENEFACITOR INTRUDER

A human group at a standstill and in crisis faces a transformative, traumatic, and liberating experience triggered by the arrival of a messianic leader.

ET, Spartacus, Schindler's List, Robocop

1. Jason and the Argonauts (Golden Fleece) / 2. The Odyssey / 3. The Eneida / 4. Any messianic literature

3. THE PLOT

The immortal seed (La semilla inmortal): 16 seeds



THE DESTRUCTIVE INTRUDER

A tale of the emergence of the forces of darkness that sparks the revelation of heroes amid a full internal cataclysm within the community.

Dracula, Nosferatu, The Birds, Jaws, Alien, Stranger Things



THE OLD AND THE NEW

The decline of a world adrift in the sea of progress. Time becomes an enemy that consumes everything, both the good and the bad.

The Man Who Shot Liberty Valance, The Sopranos, The Kominsky Method, American Gods, Watchmen



ASCENSION THROUGH LOVE

A happy and constructive love signifies entry into the ideal world, as a reward for a virtuous and sacrificial life.

Pretty Woman, Working Girl, Cable Girls, Mozart in the Jungle



SELF-KNOWLEDGE

The protagonist ultimately discovers the most terrible secret within themselves: the culprit they've been searching for, having committed the most detestable action, is... themselves!

Total Recall, Planet of the Apes, Memento, The Wire, Fleabag, Euphoria, The Umbrella Academy



5. Narratives of the evil / 6. The Cherry Orchard / 7. Cinderella / 8. Oedipus

3. THE PLOT

The immortal seed (La semilla inmortal): 16 seeds



WITHIN THE LABYRINTH

A lone man faces a universal, opaque, and immovable structure that causes disorientation and the total abolition of the concept of home (the world as an alien space).

The Wrong Man, North by Northwest, The Fugitive, Chernobyl



THE SPLIT SELF

Manifestation of the troubled human psyche, unleashing its evil inclinations and endangering civilized society.

Psycho, The Boston Strangler, The Great Dictator, The Leftovers, Mindhunter



THE PACT WITH THE DEVIL

The temptation of conquering totality, of immortality, in a journey that befalls an idealistic spirit confronting its conscience and evil.

Strangers on a Train, Phantom of the Paradise, Moby Dick, Black Mirror



THE DESCENT INTO HELL

The descent into the underworld to rescue the loved one.

Frantic, After Hours, Blue Velvet, Chernobyl, Euphoria



9. The Castle / 10. Dr. Jekyll and Mr. Hyde / 11. Fausto / 12. Orpheus

3. THE PLOT

The immortal seed (La semilla inmortal): 16 seeds



THE MARTYR AND THE TYRANT

The conflict between the defender of the innocent (the martyr) and the tyrant who represses him, responding to the will to build a civilization on harsh, written laws (without divine mercy).

The Passion of Joan of Arc, Twelve Angry Men, Paths of Glory, The Man in the High Castle, Succession, Chernobyl



REDEEMING LOVE

The restoration, through love, of the possibility of a relationship that physically seems impossible. Rejection by an intolerant community and contrast between a beautiful inner world and a monstrous exteriorization.

Beauty and the Beast, Nosferatu, King Kong, Freaks, Dracula, Edward Scissorhands, This Is Us, Sex Education



THE THIRST FOR POWER

Beings thirsty for power, willing to do anything to obtain it, reach the summit of ambition only to approach the abyss of loneliness and descent.

Rebecca, Working Girl, Pretty Woman, House of Cards, Narcos, Peaky Blinders



THE CREATION OF ARTIFICIAL LIFE

Embodiment of the great human aspiration to create life without sexual generation, through intelligent and technological intervention, thus becoming like gods.

Frankenstein, Metropolis, Blade Runner, 2001: A Space Odyssey, Edward Scissorhands, My Fair Lady, Vertigo, Westworld



13. Antigone / 14. Beauty and the Beast / 15. Macbeth / 16. Pygmalion

During the workshop, we also learned from the master plots theory where there are 2 categories: action and character plots. These are shown next:

3. THE PLOT

20 Master Plots: And How to Build Them, Ronald Tobias

ACTION PLOTS

- Adventure Plot:** The protagonist leaves home in search of fortune or to fulfill a mission, encountering various incidents along the way, with the journey and heroic actions of the protagonist forming the essence of the plot. For example, "Raiders of the Lost Ark."
- Pursuit Plot:** One person pursues another, focusing on the chase and physical action involved. Sometimes the protagonist pursues the antagonist, as in "The Hunted" (2002), or vice versa, as in "Duel" (1972).
- Rescue Plot:** The protagonist intervenes to rescue a victim from an antagonist who has kidnapped or abducted them, typically involving phases of separation, pursuit, and confrontation. For example, "The Searchers" (1956).
- Escape Plot:** The protagonist seeks to evade unjust confinement, involving phases of detention, challenges within the confinement, and eventual escape. For example, "Stalag 17" (1953) and "The Great Escape" (1963).
- Rivalry Plot:** Two characters of comparable strength compete for the same goal or object, such as a job, sports title, kingdom, or land. For example, the rivalry between Ben-Hur and Messala in "Ben-Hur" (1959).
- Underdog Plot:** Similar to rivalry, but the protagonist is physically weaker, younger, older, less experienced, or has fewer resources, often facing a stronger antagonist.
- Revenge Plot:** The protagonist seeks retribution for an injustice committed against themselves or their loved ones, often involving pursuing the antagonist. For example, "Death Wish" (1974).
- Enigma Plot:** Typical in mystery and detective films, where the protagonist must uncover a killer, thief, or solve an extraordinary event. Examples include Agatha Christie adaptations and films like "Gothika" (2003) and "The Bone Collector" (1999).



3. THE PLOT

20 Master Plots: And How to Build Them, Ronald Tobias

CHARACTER PLOTS

1. **Search Plot:** The protagonist searches for a person, place, or thing, with the focus on character transformation during the search. For example, "Raiders of the Lost Ark" (1981).
2. **Discovery Plot:** The protagonist seeks to understand themselves or the world, leading to greater knowledge of humanity and nature. For example, biopics about scientists like "Gorillas in the Mist" (1988).
3. **Metamorphosis Plot:** The protagonist or object undergoes a curse and is transformed into an animal or terrible creature until love or death breaks the spell.
4. **Transformation Plot:** Positive psychological change occurs in the protagonist, such as gaining self-confidence or overcoming addiction. For example, "My Fair Lady" (1964).
5. **Coming-of-Age Plot:** The protagonist transitions from childhood or adolescence to adulthood, often symbolized metaphorically. For example, Pinocchio's journey from puppet to real boy.
6. **Rise Plot:** A character of humble origins ascends to the top of society, as seen in "The Elephant Man" (1980) and "All About Eve" (1950).
7. **Fall Plot:** A noble, rich, or powerful protagonist falls to the lowest point, as seen in "Citizen Kane" (1940).
8. **Temptation Plot:** The protagonist is tempted to do something immoral or forbidden, as in the myth of Faust.
9. **Price of Excess Plot:** The protagonist leads a dissolute life or succumbs to a passion, paying the price for their actions, as in "The Lost Weekend" (1945).
10. **Sacrifice Plot:** The protagonist fulfills their duty despite personal loss, even at the cost of their life, as in "Casablanca" (1943) and "High Noon" (1952).
11. **Love Plot:** Two people face obstacles to their relationship, such as illness, rival suitors, or differing life goals, as in "It Happened One Night" (1934).
12. **Forbidden Love Plot:** Similar to love plots, but with social taboos as obstacles, such as interracial, class, or same-sex relationships, as seen in "Romeo and Juliet."



The 4th step when designing a narrative are the characters. We need to find a main character and the traits that define it. We also need several secondary roles along the story:

4. THE CHARACTERS

- * What is the main character like? What defines it?
- * What is his/her weak point?
- * What does it have to learn during the story
- * What secondary characters appear?
- * What are their roles in the story?
- * Are they memorable?



We can use archetypes to help us finding the characters that we need:

4. THE CHARACTERS: The Archetypes

 <p>THE HEROE</p> <p>A protagonist embarks on a quest, faces challenges, undergoes personal growth, and ultimately achieves victory or transformation.</p>	 <p>THE MENTOR</p> <p>A wise and experienced character who guides and advises the protagonist on their journey.</p>	 <p>THE SHADOW</p> <p>The antagonist or darker aspects of the protagonist's psyche that they must confront and overcome.</p>	 <p>THE THRESHOLD GUARDIAN</p> <p>A character or obstacle that tests the hero's resolve and commitment before they can enter a new world or phase of their journey.</p>
 <p>THE TRICKSTER</p> <p>A mischievous character who disrupts the status quo and challenges authority through wit and cunning.</p>	 <p>THE HERALD</p> <p>A character or event that announces the beginning of the hero's journey and sets them on their path.</p>	 <p>THE ALLIES</p> <p>Supportive characters who assist the hero in achieving their goals and overcoming obstacles.</p>	 <p>THE SHAPESHIFTER</p> <p>A character whose true intentions or allegiances are ambiguous, adding complexity to the story.</p>

4. THE CHARACTERS: The Archetypes

 <p>THE INNOCENT</p> <p>Naive, simple, vulnerable and inexperienced but happy. Wants to be loved and recognized. His/her fear is doing something wrong.</p>	 <p>THE CAREGIVER</p> <p>Paternalistic. It feels performed when you have who to protect. Compassionate and generous, fears the selfishness and ingratitude.</p>	 <p>THE ORPHAN</p> <p>A character who is disconnected from their past or community, seeking belonging and identity.</p>	 <p>THE EXPLORER</p> <p>Can't stand feeling locked up or conformism. Seek freedom and adventure. It's bold, autonomous and ambitious.</p>
 <p>THE REBEL</p> <p>Tends to break the rules and does not recognize authority from no one. Reject the rules group and brand morals.</p>	 <p>THE LOVER</p> <p>Look for something that fills you empty. Love from heart. Believe in union with people and commitment. He is accommodating to others.</p>	 <p>THE CREATOR</p> <p>He is an artist who needs recognition. Usually perfectionist, creative and imaginative. Rejects the mediocrity and search the lasting.</p>	 <p>THE JESTER</p> <p>Brings humor, levity, and spontaneity, often challenging conventions and offering comic relief.</p>

4. THE CHARACTERS: The Archetypes



And the hero/heroine for character definition:

4. THE CHARACTERS: The Hero/Heroine

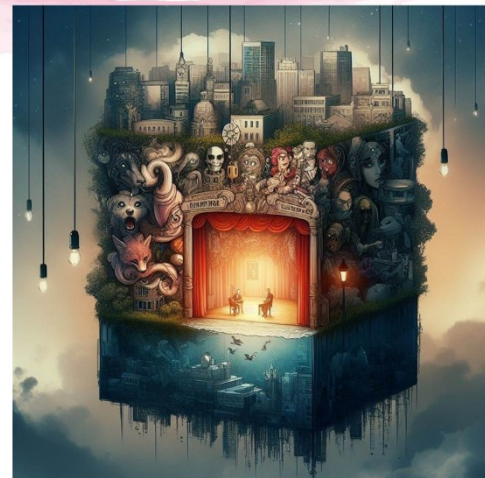
What one thing does the main character need to have?



The next 5th step relates to the tone of the story to be built. How to express and address it depending on the feelings that we are interested in motivating:

5. THE TONE

* What narrative tone do you believe is most suitable for your target audience or project?



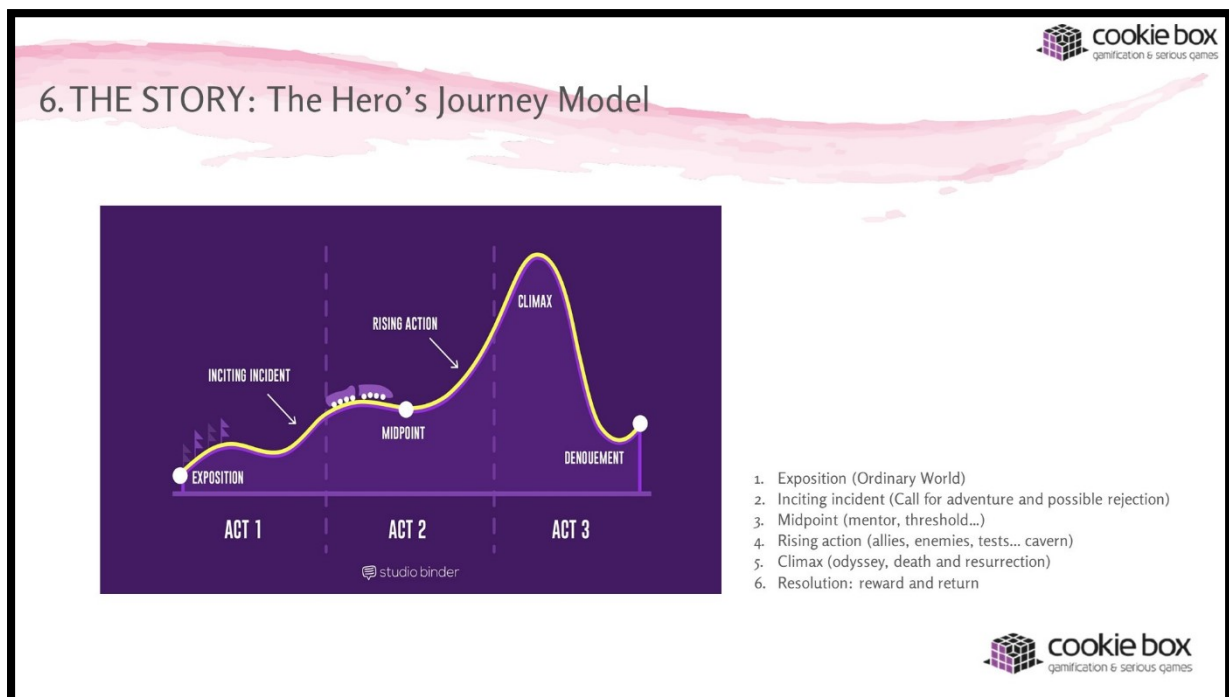
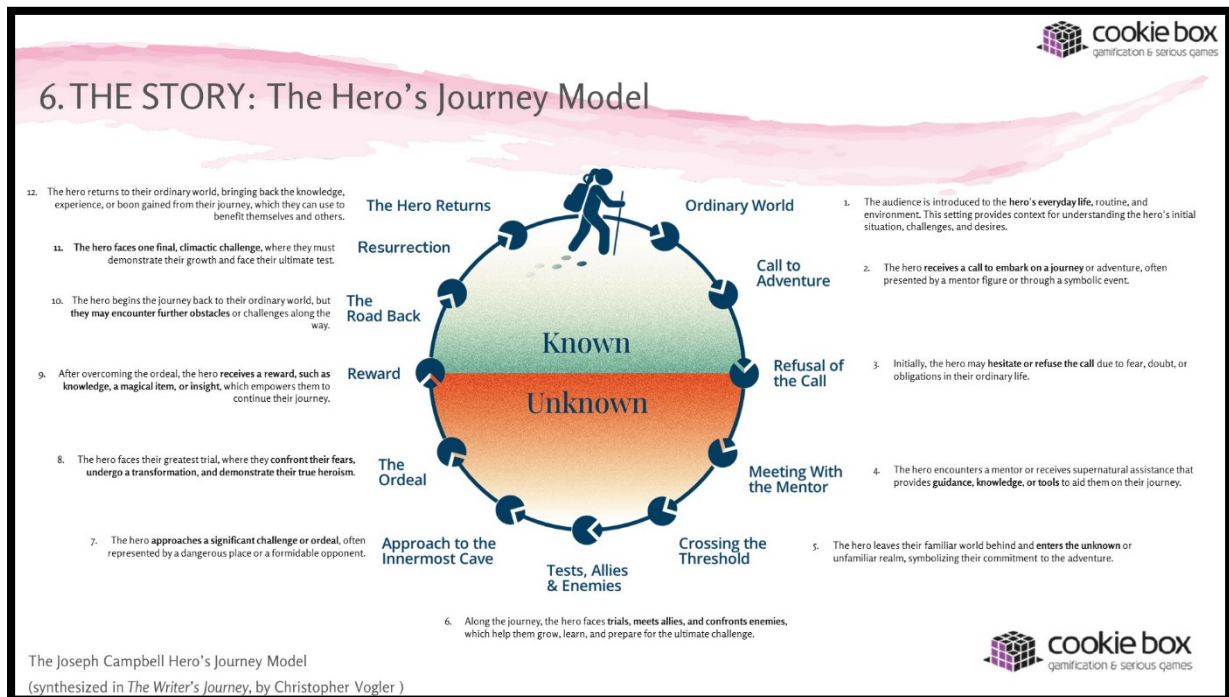
The story should present some form of a conflict to be interesting. It requires dramatic tension and several plot twists to avoid monotony:

6. THE STORY

- * What is the **main conflict** that defines the narrative arc (structure of the Story)?
- * How far is the reality of the main character from it's desire at each moment of the Story?
- * How are you playing the **Dramatic Tension**? Which elements are you using to strengthen it? (time pressure?)
- * Does your story have **plot twists**?
- * What does the Main Character learn after the whole story Journey?



This is the 6th step in Storytelling design: the need of a conflict in the story. The monomyth or the hero's journey by S. Campbell / C. Vogler is a well-known narrative scheme to develop the phases of a complete narrative:



And there are other considerations to consider when developing stories such as the spaces where everything takes place, the objects that appear and their roles, the time and the chronology or the rules that govern the factionary universe.

6. THE STORY: Other Considerations to take into account

- * SPACES: how are the **spaces** where events happen? What **functions** do they play? How do they relate to the main character's journey?
- * OBJECTS: what relevant **objects** appear? What **role** do they play?
- * TIME: in what (historical) **time** does the Story take place? Is the time of the Story **chronological**? Are there any **Time jumps**?
- * RULES OF THE UNIVERSE: What **rules** govern the universe? What is the World like?





A.4. The 21 Narrative Seeds

Here you can find the list of the 21 seeds to explore which one(s) make more sense to your project and start inspiring your story:

Table 2. The narrative seeds

SEEDS	UNIVERSAL REFERENCE	SUMMARY	MAIN CHARACTERISTICS	FILMS/SERIES
IN SEARCH OF TREASURE	Jason and the Argonauts (Apolonio de Rodas)	The classic hero of adventure stories moves in time and space to accomplish a mission.	The mission may contemplate: <ul style="list-style-type: none">• A long and risky journey for the hero's life.• A duel with the owner of the object at the place of arrival.• A victorious return with the treasure object of the trip.	Raiders of the Lost Ark (Indiana Jones), James Bond films, Easy Rider, Fitzcarraldo, Nanuk the Eskimo, The Sheltering Sky, 2001, Solaris. Euphoria, The Umbrella Academy, Game of Thrones
THE RETURN TO HOME	The Odyssey (Homero)	The return of the expatriate.	In this work there are two major plot situations: <ul style="list-style-type: none">• The adventures during the long return trip.• The protagonist's difficulties when he returns to his homeland to regain his lost place.	Alone in the Night, The Best Years of Our Lives, The Visitors, The Return, Taxi Driver, Ivanhoe, Robin Hood, The Burmese Harp, Tales of the Pale Moon, The Return of Martin Guerre, The Searchers, The State of Things, Alice in the Cities, Paris Texas, Rambo, Gladiator Game of Thrones
THE FOUNDATION OF A NEW HOMELAND	The Eneida (Virgilio)	Collective adventure of founding a new homeland.	It explains the difficulties and bravery of those who forged the origins of a community. The pioneers become legendary. Frequent argument in: <ul style="list-style-type: none">• Western• Science Fiction...	The Man Who Killed Liberty Valance, The 10 Commandments, Many Westerns, America, The Grapes of wrath, Aguirre, El dorado. Battlestar Galactica, Game of Thrones
THE BENEFAC-TOR IN-TRUDER	Messianic literature (Gospel)	A Messiah appears in a community in crisis to redeem it.	It is usually characterized by: <ul style="list-style-type: none">• A community that remembers a lost paradise.	Apart from films about the life of Jesus Christ: E.T., Spartacus, Gandhi, Schindler's List, Shane, Captain Blood, The 7 Samurai, Elmer Gantry, Edward Scissorhands, Robocop, Viridiana, Simon of



			<ul style="list-style-type: none"> Prophecies of the appearance of the saviour. Intervention of the messiah and sacrifice of universal scope. 	the Desert, Terminator, Star Wars, Close Encounters of the Third Kind, Ordet, Theorem, Sacrifice, The Silence.
THE DESTRUCTIVE INTRUDER	Narratives of the evil (Genesis)	Intrusion of evil beings into a placid community until that moment.	The evil: <ul style="list-style-type: none"> It will bring misfortunes. It will unite and educate the community. 	Dracula, Nosferatu, War of the Worlds, Invasion of the Body Snatchers, Picnic at Hanging Rock, The Seventh seal, The Birds, Shark, Alien, Rosemary's Baby, M, Psycho, Henry, portrait of a Killer, The Shining, Lulu, The Blue Angel, The 4th Man, Basic Instinct. Stranger Things
THE REVENGE	The Oresteia (Esquilo)	Revenge as an extreme conflict between two states of consciousness: the tribal law of blood against the law of regulated justice and social coexistence.	There is: <ul style="list-style-type: none"> A primal aggression A conflict between individual justice and that of the community A possible forgiveness from the community to the avenger. 	The Black Pirate, The Sea Falcon, The Count of Monte Cristo, Scaramouche, Stagecoach, The Man from Laramie, The Law of Retaliation, The Last Train at Gun Hill, The Ox-Bow Incident, The Return of Frank James, The Bribe, The Godfather, Dirty Harry, Lethal Weapon. The Boys
THE MARTYR AND THE TYRANT	Antigone (Sofocles)	The conflict between the defender of the innocent (the martyr) and the tyrant who represses him.	Political and Metaphysical debate between: <ul style="list-style-type: none"> The religious and transcendent sense. The Dictator's will to build a civilization on hard, written laws (without Divine mercy). 	The Passion of Joan of Arc, Twelve Angry Men, Paths of Glory, The Man in the High Castle, To Kill a Mockingbird, King and Country, Paths of Glory, Johnny Guitar, The Mother, Battleship Potemkin. Succession, Chernobyl
THE OLD AND THE NEW	The Cherry Orchard (Chejov)	A world that is hopelessly shipwrecked in the sea of progress, a process of decomposition that shows a social class that is ending and that	It shows: <ul style="list-style-type: none"> A paradise in loss and an intimate nostalgia. Time as a destructive agent. The conflict between tradition and modernity. 	The Leopard, Gone with the Wind, Citizen Kane, How Green Was My Valley, The Man Who Shot Liberty Valance, Sunset Boulevard, September, The Disenchantment, Cries and Whispers, Strawberry and Chocolate, The Ex-



		gives way to a world of dismantlers without regard or scruples.		terminating Angel, The Discreet Charm of the Bourgeoisie. The Sopranos, The Kominsky Method, American Gods, Watchmen
FICKLE AND CHANGING LOVE	One Night's Dream Summer (Shakespeare)	A Community that suffers from the invasive visit of passion.	Desire as a fundamental agent of dramatic action that: <ul style="list-style-type: none"> It shows a vast network of romantic entanglements (partner changes, impersonations, wrong identities...). It takes place in a nocturnal, dream-like environment, thanks to a magic filter (trigger). It ends with a return to the original order or creation of a new one. 	A Midsummer Night's Sex Comedy, Bringing Up Baby, Horse Feathers, The Philadelphia Story, The Good Fairy, The Green Ray, My Best Friend's Wedding, Belle Époque, The Rules of the Game, Dinner at Eight, Hunch. Big Little Lies
REDEEMING LOVE	Beauty and the Beast (Villeneuve, De Beaumont)	The restitution, thanks to love, of the possibility of a relationship that physically seems impossible.	It shows: <ul style="list-style-type: none"> The rejection of an intolerant community. The contrast between a beautiful inner world and a monstrous externalization. An expiatory journey through which the monster becomes a beloved man. 	Nosferatu, King Kong, The Evil Zaroff, The Beast, Freaks (The Freak Parade), Dracula, Edward Scissorhands. This Is Us, Sex Education, The end of the f***ing world
FORBIDDEN LOVE	Romeo and Juliet (Shakespeare)	A couple cannot love each other due to external factors such as family, social or racial origin.	It shows: <ul style="list-style-type: none"> The tribal and primitive law of prohibition, which unites the two sides in conflict. Inevitable descent towards death and ascent to immortality of lovers. 	Rebel Without a Cause, China Girl, Wuthering Heights, West Side Story, The Tarantulas, Romeo and Juliet. A very English scandal



THE ADULTEROUS WOMAN	Madame Bovary (Flaubert)	Debate between the need to be faithful to the bourgeois order or transgressing it through sexual sin.	It develops a female adultery condemned by the law of men (whose infidelity represents a break with the patriarchal order) usually following these phases: <ul style="list-style-type: none"> • Marriage agreed by family will. • Stable life in a closed interior. • Call of desire and consummation of adultery. • Disappointment, sacrifice and decadence. 	Ryan's Daughter, The Valley of Abraham, The Ballad of Narayama, Charulata, The Piano, Letter from an Unknown Woman, Brief Encounter, A Summer with Monica, I Will Always Love You, A Woman Is a Woman, Last Year at Marienbad, Belle de Jour, In the Realm of the Senses, Red Sorghum I love Dick
THE TIRELESS SEDUCER	Don Juan (Tirso de Molina / Zorrilla)	The adventures and conflicts of an insatiable seducer of women.	It shows: <ul style="list-style-type: none"> • An indiscriminate and constant chain of seductions that force an escape. • Dramatically privileged relationship with one of his wives. • Two forms of atonement: falling in love with a single woman or becoming aware of his faults (and of the emptiness of the adventurous life). 	Fellini's Casanova, The Lover of Love, The Merry Widow, Love in the Afternoon, American Gigolo, Dangerous Liaisons, Valmont Mozart in the jungle
ASCENSION THROUGH LOVE	Cinderella (Basili, Perrault, Hermanos Grimm)	A type of love, fundamentally happy and constructive, that represents a social promotion, an improvement.	It develops: <ul style="list-style-type: none"> • An everyday universe full of hostility. • A fantasy infatuation. • An entry into the ideal world as a reward for a virtuous and sacrificial life. 	Rebecca, Lady for a Day, Angels with Dirty Faces, Platinum Blonde, Lucky Partners, Midnight, 42nd Street, Singin' in the Rain, Working Girl, Pretty Woman, Osaka Elegy, Gion Sisters, The Life of Oharu, Genteel Lady, Nights of Cabiria. Cable Girls, Mozart in the Jungle
THE THIRST FOR POWER	Macbeth (Shakespeare)	Human beings thirsty for power, willing to	It develops:	Throne of Blood, Scarface, The Public Enemy, White Heat, The Asphalt Jungle, The



		do anything to get it, arrive at the summit of ambition to approach the abyss of loneliness and the descent.	<ul style="list-style-type: none"> A progressive isolation of the character, which will end in his fortress. An obsessive tendency to eliminate opponents. A possible remorse and memory of the lost paradise of childhood. 	<p>Godfather, Touch of Evil, Citizen Kane, All About Eve, The Postman Always Rings Twice, Vertigo, Body Heat.</p> <p>House of Cards, Narcos, Peaky Blinders</p>
THE PACT WITH THE DEVIL	Fausto (Marlow, Goethe)	The sale of the soul for cosmogonic power, beyond the limitations of humanity.	<p>It is characterized by:</p> <ul style="list-style-type: none"> The search for the conquest of omnipotence / immortality (in an incomplete existence). The fight against temptation. A blood pact from which it is difficult to escape. Condemnation or overcoming moral ambiguity and redemption. 	<p>The Fall of the Gods, Mephisto, The General of the Rovere, Casablanca, The Servant, Bitter Moon, Strangers on a Train, The American Friend, The Firm, The Spy Who Came in from the Cold, Phantom of the Paradise, Toby Dammit, Moby Dick.</p> <p>The Leftovers, Mindhunter</p>
THE SPLIT SELF	Dr. Jekyll and Mr. Hyde (Stevenson)	The motif of the double that warns us against the certainty of identity and opens cracks in the insecure consciousness of the self.	<p>It develops:</p> <ul style="list-style-type: none"> The difficulty of escaping the shadow. The conflict of double personality and identity. A critical confrontation with conventional social morality. 	<p>The Cat People, The Curse of the Werewolf, Psycho, The Boston Strangler, The Student of Prague, The Double Life of Veronique, Inseparable, The Nutty Professor, Passport to Pimlico, Johnny Eager, Three Nights of Eva, Irma la Douce, Some Like It Hot, The Prisoner of Zenda, Kagemusha, The Great Dictator, To Be or Not to Be, Joker.</p> <p>The Leftovers, Mindhunter</p>
SELF-KNOWLEDGE	Oedipus (Sofocles)	The being who, in his investigation, ends up discovering the most terrible secret within himself.	<p>It is characterized by:</p> <ul style="list-style-type: none"> An uncertain origin and the obsessive search for identity 	<p>Spellbound, Total Recall, Planet of the Apes, The Maltese Falcon, The Big Sleep, Hammett, All the President's Men, In the Line of Fire, The Official Story, The Spider's Stratagem, The Nasty Girl,</p>



			<ul style="list-style-type: none"> An investigation that travels everywhere to return to the starting point. An ambiguous and tragic consciousness of guilt. 	<p>The Unbearable Lightness of Being, Man of Marble, The Enigma of Kaspar Hauser, Memento.</p> <p>The Wire, Fleabag, Euphoria, The Umbrella Academy</p>
WITHIN THE LABYRINTH	The Castle (Kafka)	A man alone faced with a universal, opaque and immobile structure.	<p>It shows:</p> <ul style="list-style-type: none"> The attempt of power to absorb and annul man. An everyday order threatened by dark bureaucratic forces that shake identity. The adventure across the ocean of disorientation, the total abolition of the concept of home and the conversion of the world into a space for strangers. 	<p>The Trial, The Wrong Man, North by Northwest, And the World Goes 'Round, To Live, Modern Times, Playtime, Logan's Run, Sleeper, Brazil, Without Anesthesia, The Story of Qiu Ju, Blow-Up, The Conversation, The Element of Crime, Two-Lane Blacktop, Easy Rider, Point Blank.</p> <p>The Fugitive, Chernobyl</p>
THE CREATION OF ARTIFICIAL LIFE	Prometheus / Pigmalión (Greek Mythology)	Incarnation of the great human aspiration to create life without sexual generation, through an intelligent and technological intervention, to become Gods.	<p>It develops:</p> <ul style="list-style-type: none"> The dangers posed by the aspiration to usurp divine prerogative. The peculiar life of the monster created by man and his tremendous loneliness. In some cases, the search for the creator by the being created by man. 	<p>Frankenstein, Metropolis, Blade Runner, Island of Lost Souls, The Cabinet of Dr. Caligari, Dr. Mabuse, Metropolis, 2001: A Space Odyssey, Forbidden Planet, Edward Scissorhands, My Fair Lady, Laura, Portrait of Jennie, Vertigo, The Collector.</p> <p>Westworld</p>
THE DESCENT INTO HELL	Orfeo y Eurídice (Greek Mythology)	The search for lost love beyond life by an artist, a sorcerer of natural forces.	<p>It develops:</p> <ul style="list-style-type: none"> The descent into hell to rescue the loved one from there. The renunciation of living in the real world and the 	<p>Frantic, After Hours, Desperately Seeking Susan, Something Wild, The Bonfire of the Vanities, Death in Venice, Blue Velvet, Legend, The Fisher King, Vertigo, Monkeybone, 8 ½.</p>

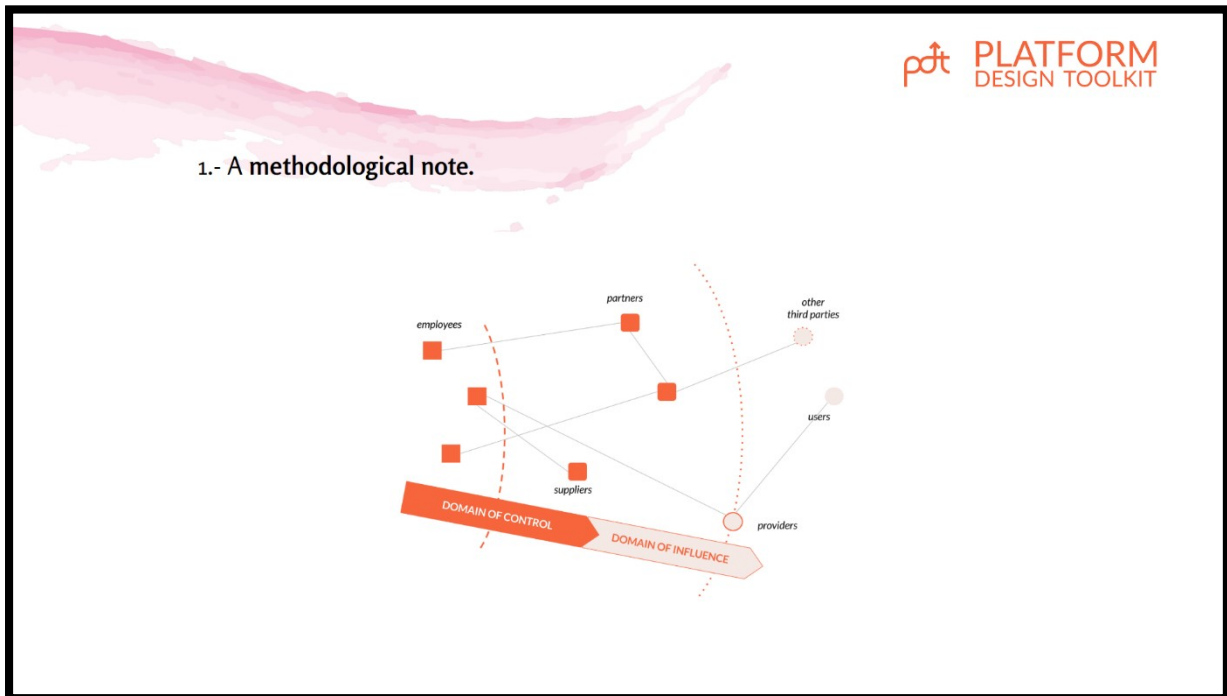


			<p>need to go beyond the mirror.</p> <ul style="list-style-type: none">• The search for beauty in territories close to death and the recovery of creative inspiration.	Chernobyl, Euphoria
--	--	--	--	---------------------

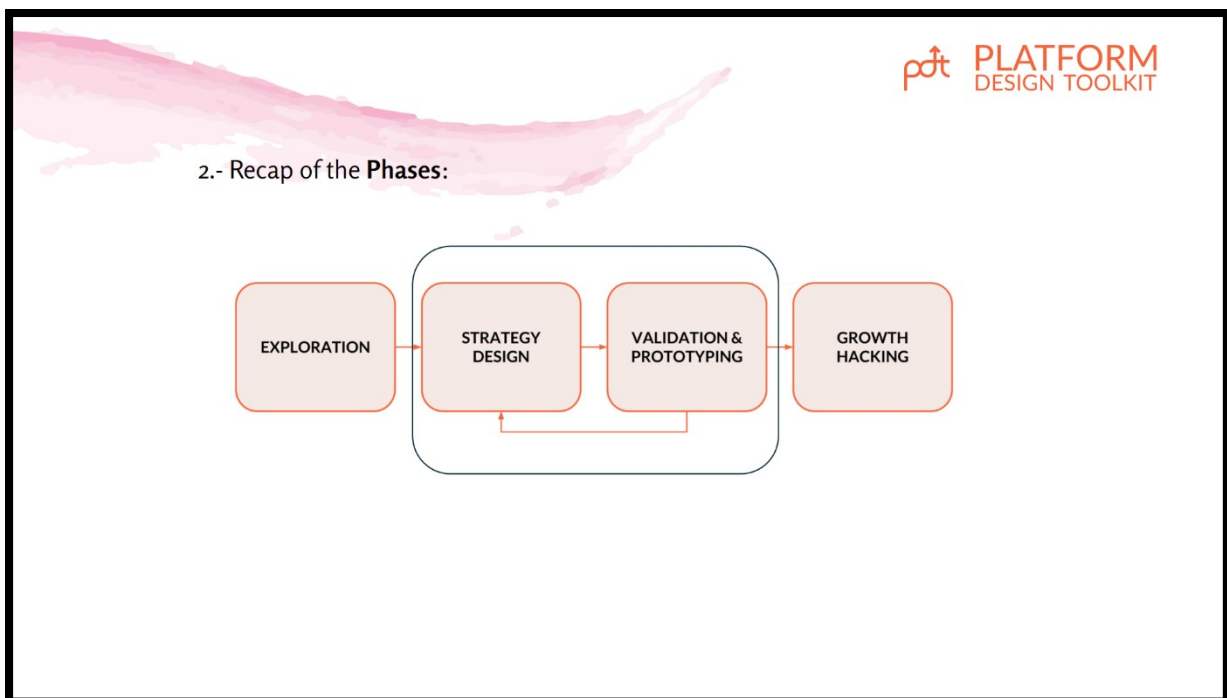
These potential plots that can be reused and/or mixed to develop our own.

A.5. Communities Workshop Slides

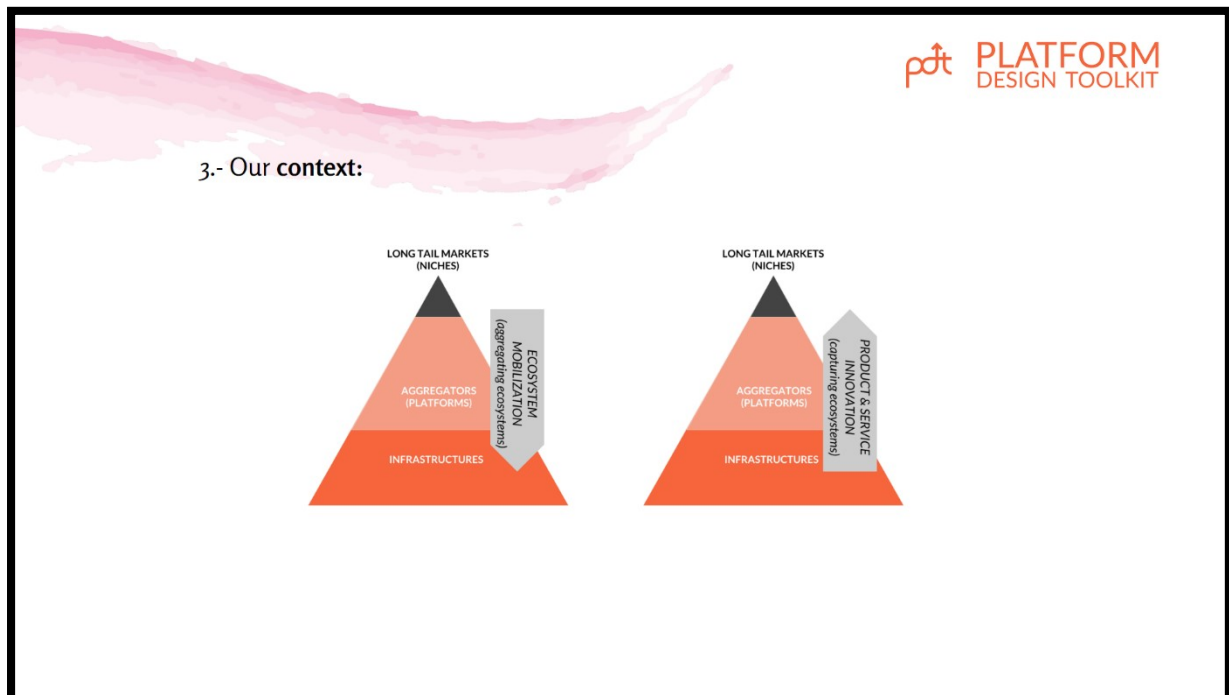
The Communities building process was outlined with slides as shown below:



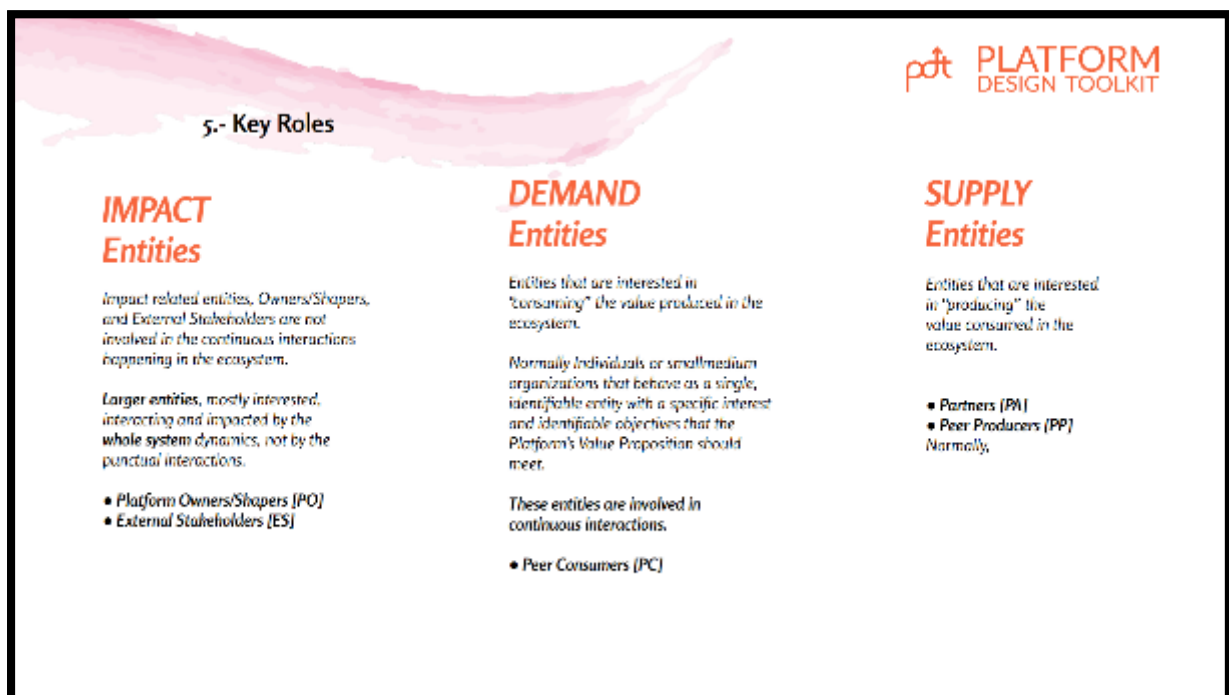
With the methodological note, introducing the concept of designing for ecosystems and the main contexts of Platform Design.



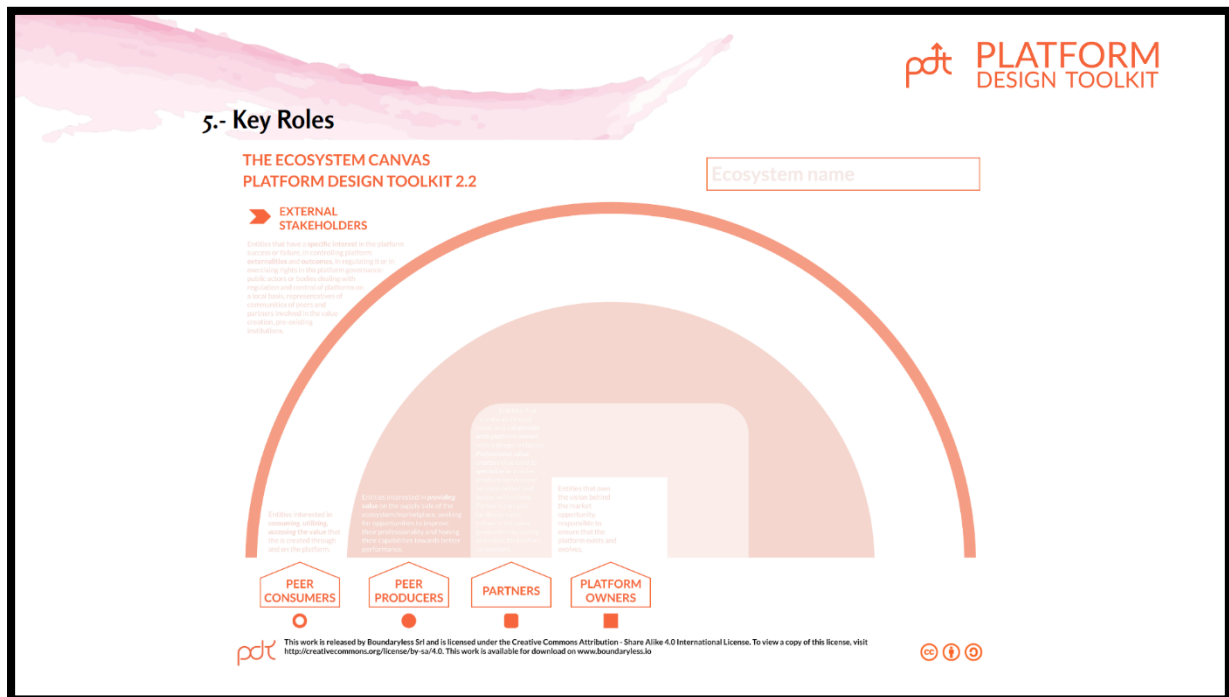
A recap of the phases of the Platform Design process.



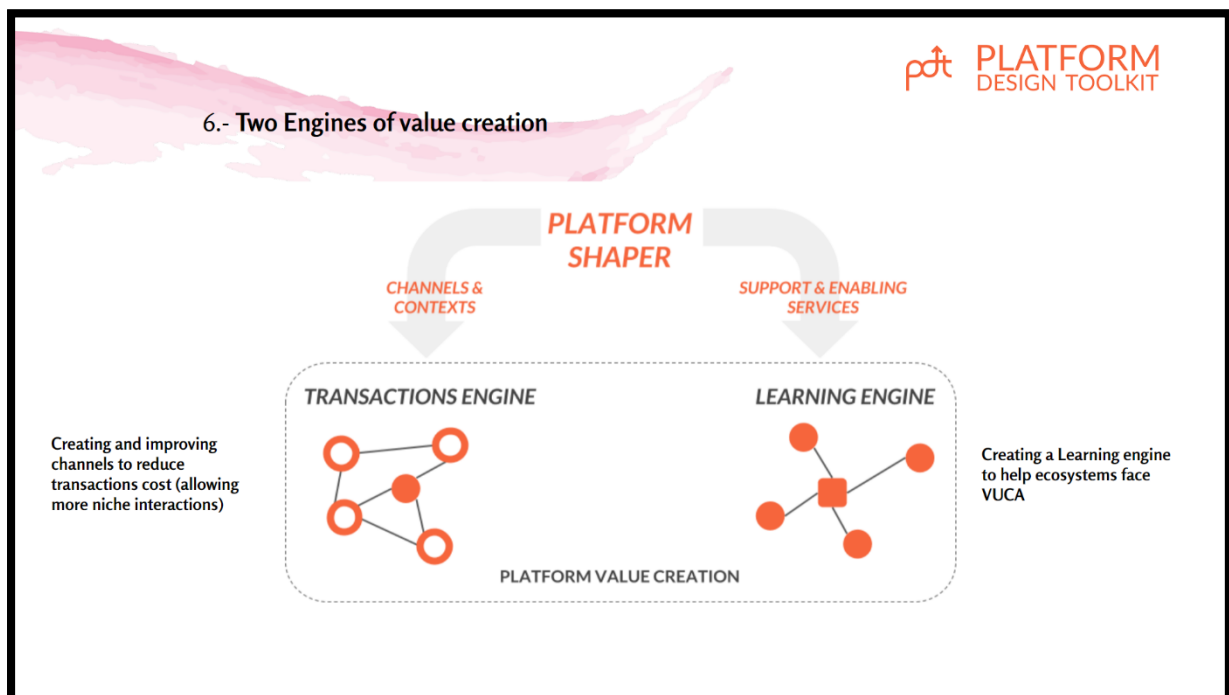
A note on the contexts of Platform Design. The next step corresponded to the Glossary which has its own section in this document.



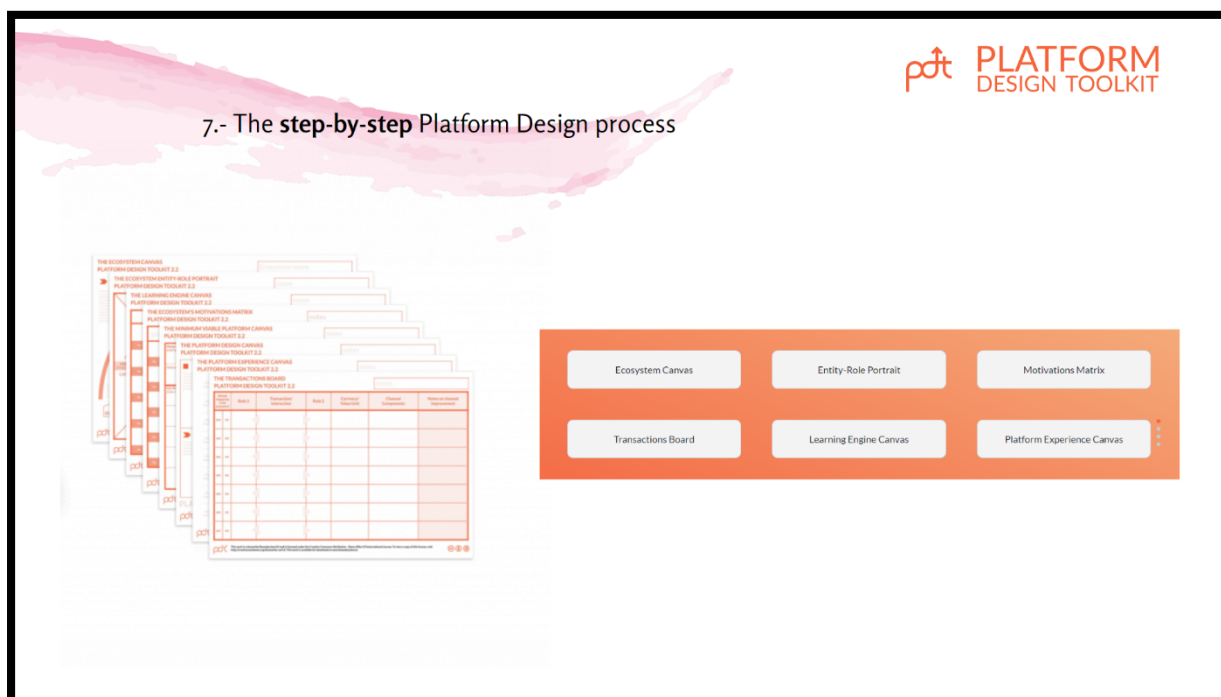
We shared a description of the key roles that we use to model all the entities around Platform Design, part I.



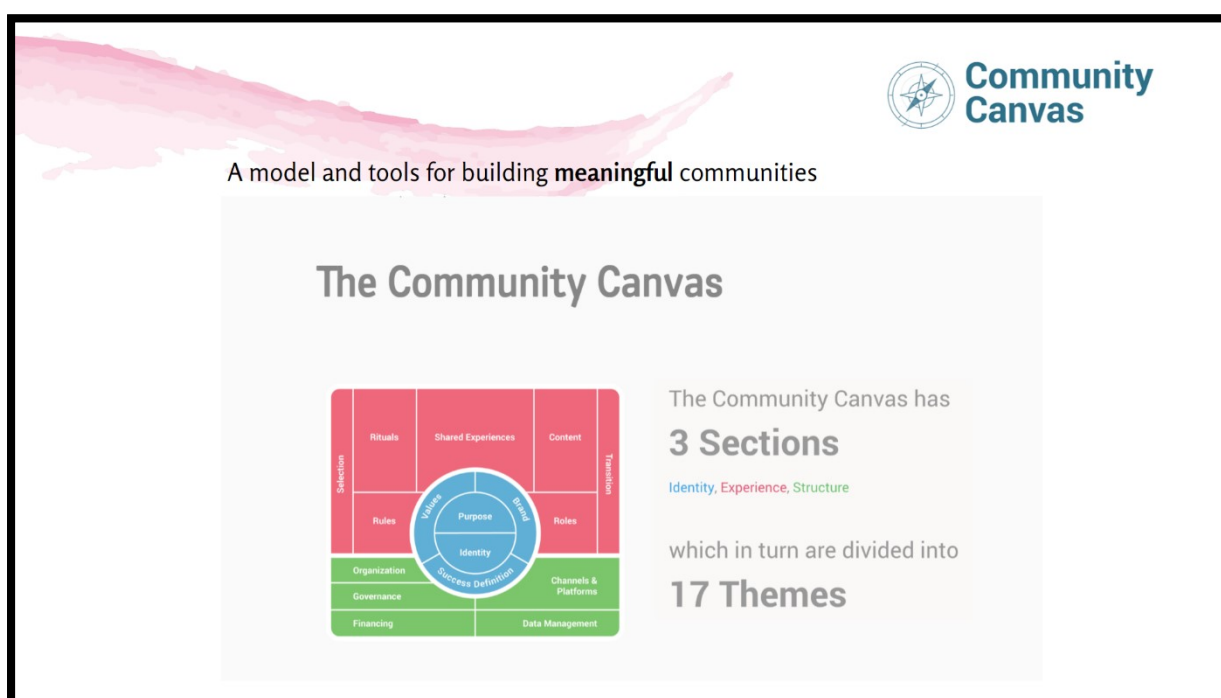
And a description of the key roles that we use to model all the entities around Platform Design, part II.



The description of the two key engines of Platform Design was crucial.



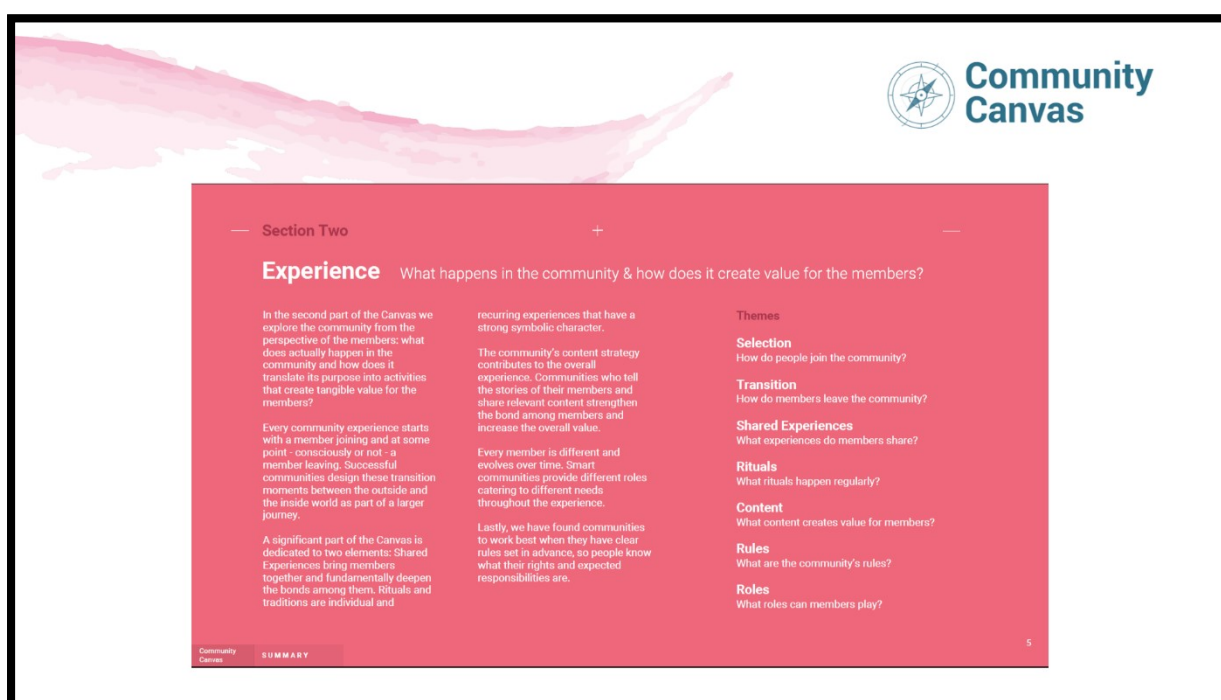
From the Step-by-Step Platform Design Process it was time to carefully present the Community Canvases:



The Community Canvas will be our model in i-Game to create meaningful communities. We start by describing our identity in terms of purpose, values, success definition and branding:



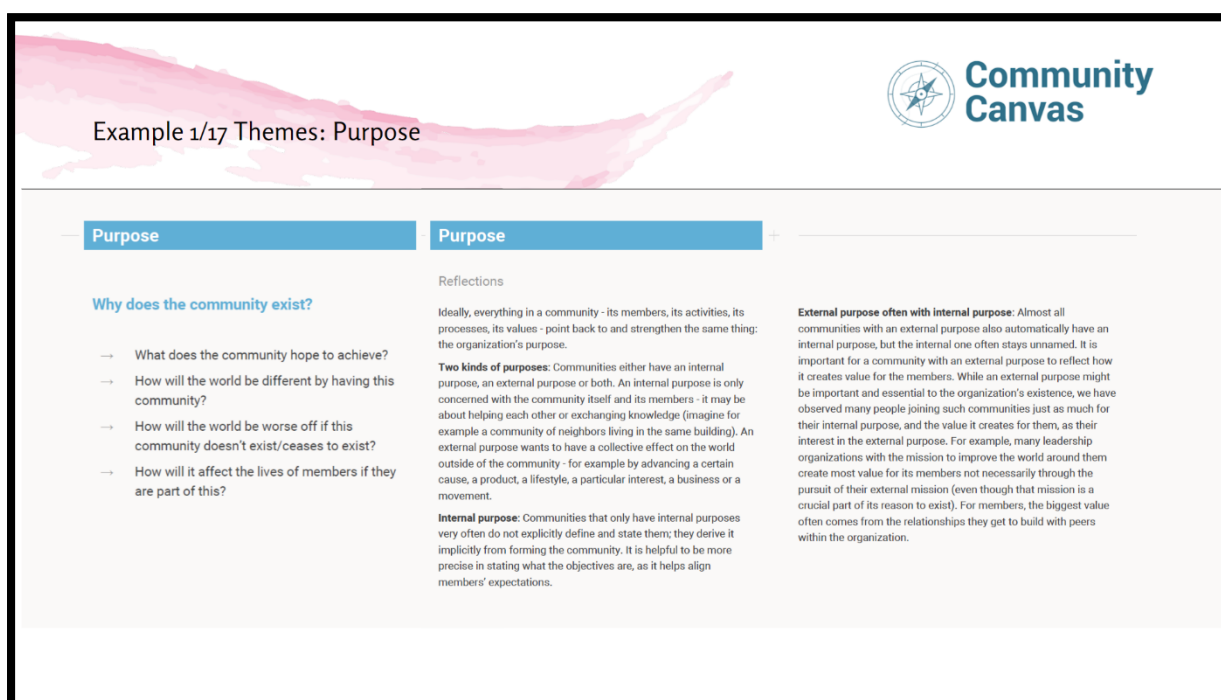
From there we define the experience that we want to offer to our community. We need to decide how to join and to leave it, what to share, the types of content and the rules there:



The structure of the community will make it stable in the long-term. We need to consider who runs it, how to manage the taking of decisions, the plan for the finances, the communication channels and the management of the member's data:



And we end up by analysing some practical examples on the use of the canvas:



April 2024

The CB team for the i-Game project