CATASTROVIA PROPOSAL

TABLE OF CONTENTS

ELEVATOR PITCH

In 2021, 49 percent of adults reported having three or fewer friends, compared to about 27 percent in 1990, per the report. For young people ages 15 to 24, time spent in-person with friends fell from about 150 minutes per day in 2003 to 40 minutes per day in 2020. Yet there are no major physical experiences in the entertainment industry that are designed to emphasize making new connections in person. Catastrovia is like an RPG world come to life. Our physical immersive experience creates affordable opportunities for people to build connections and friendships with those around them through the continuous story and quests for consumers to be involved in.

IDENTIFIABLE PROBLEM

- Adults don't have adequate public places for interactive play.
  - Play is seen as something geared towards children.
  - Theme parks like Universal Studios and Disneyland that could be geared towards an older audience with rides typically have an expensive ticket range, making it unaffordable.
- It's more difficult for adults to make friends.
  - There aren't many collective spaces that people return to repeatedly to allow them to familiarize themselves with those who also go there regularly. Interacting with strangers can be discomforting and awkward.
- The price of tickets for many experiences may dissuade those who want to go.
  - People have a limited amount of money they spend every month for entertainment. Theme parks, interactive experiences, and escape rooms all have set prices that may not fit into someone's budget.

MISSION STATEMENT

Making a space that fosters problem-solving, challenge, and reward when one engages in the activities. Allows consumers to keep returning again and again with an affordable entry fee, and continuous story and quests for consumers to be involved in.

VALUE PROPOSITION

Catastrovia has many ways to bring people together and eliminate loneliness. When our customers visit the park, they contribute to this effort automatically. Certain missions require players to help each other in order to get the reward, creating a good ice breaker for people to communicate.

POSITIONING

Positioning statement

Catastrovia's pricing strategy is offering the consumers a wide range of options to choose from in terms of venue size. Depending on the venue size, the amount of physical build inside the park/space, the ticket price can range from ($15-$80). Catastrovia will offer the player to choose which venue they want to attend based on their budget. As a result, overall Catastrovia will be in the middle range of physical build with leaning towards extensive, and average pricing with potential to be premium or accessible.

Positioning chart
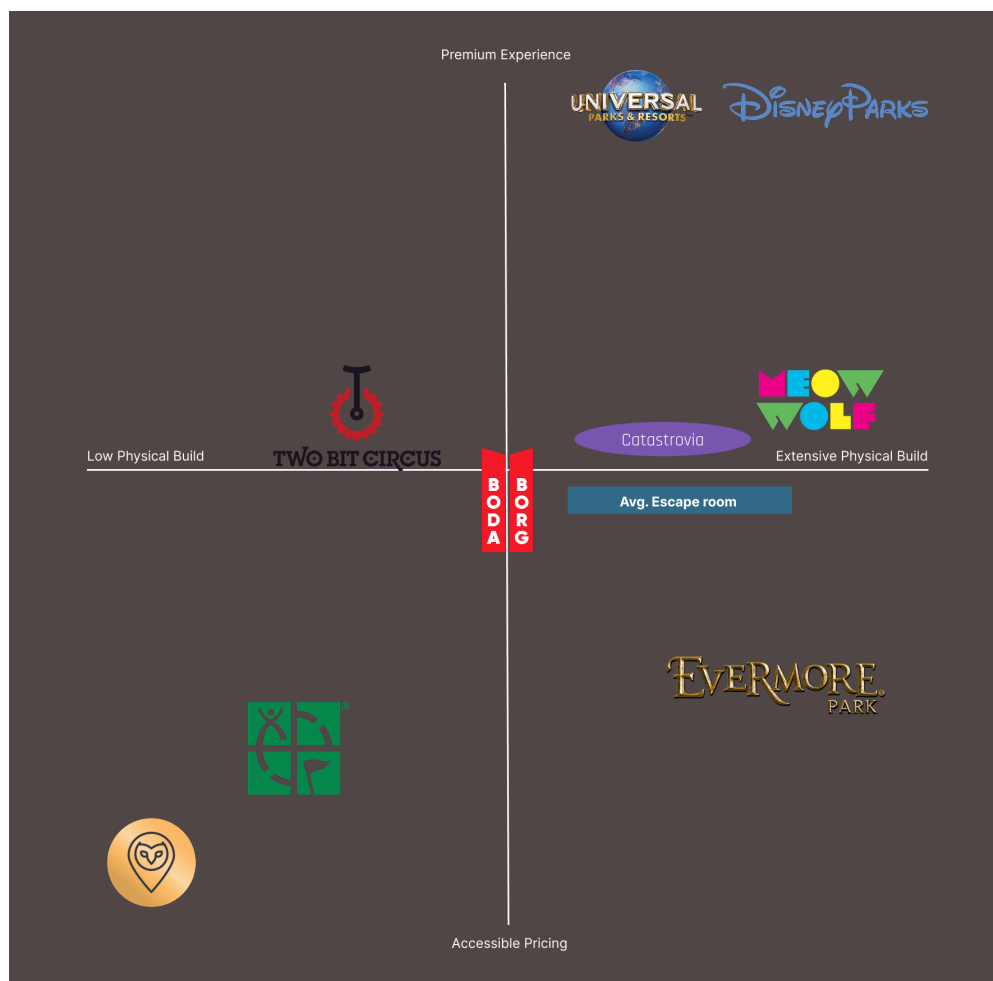
In this positioning chart, the two axes illustrate different variables.

The X axis describes the amount of physically built elements that are present, which means the amount of extensive construction, such as interactive features, props, and set design. It ranges from little to none (just the regular environment) to heavy immersive sets (theme parks).

The Y axis describes the price of the experience, ranging from free to premium admission costs.

MARKET SEGMENTATION

Target Market
- Older teens - Adults
  - Not tourists but local residents (repeat visits)
- In California
- Likes socializing with others
- Likes game/gamified challenges
- Likes interactive experiences
- Consumers who prefer lower or moderate price range ($15-$50)

Primary Market
Older teens to young adult audience living in California. Have pre-existing interest in video games, exploration, escape rooms, and theme parks. Customers that like outdoor activities or visiting exhibits.

Secondary Market
Adults with less experience in gaming or gamified experiences. Children who may be accompanying their young adults parents.

How big is your market?
In terms of scale, Catastrovia's design would be like a theme park.
Globally: "Global amusement parks market was valued at USD 48.80 billion in 2021 and is expected to reach USD 71.94 billion by 2029"
National: "The Amusement and Theme Parks market in the U.S. is estimated at US$15 Billion in the year 2022."
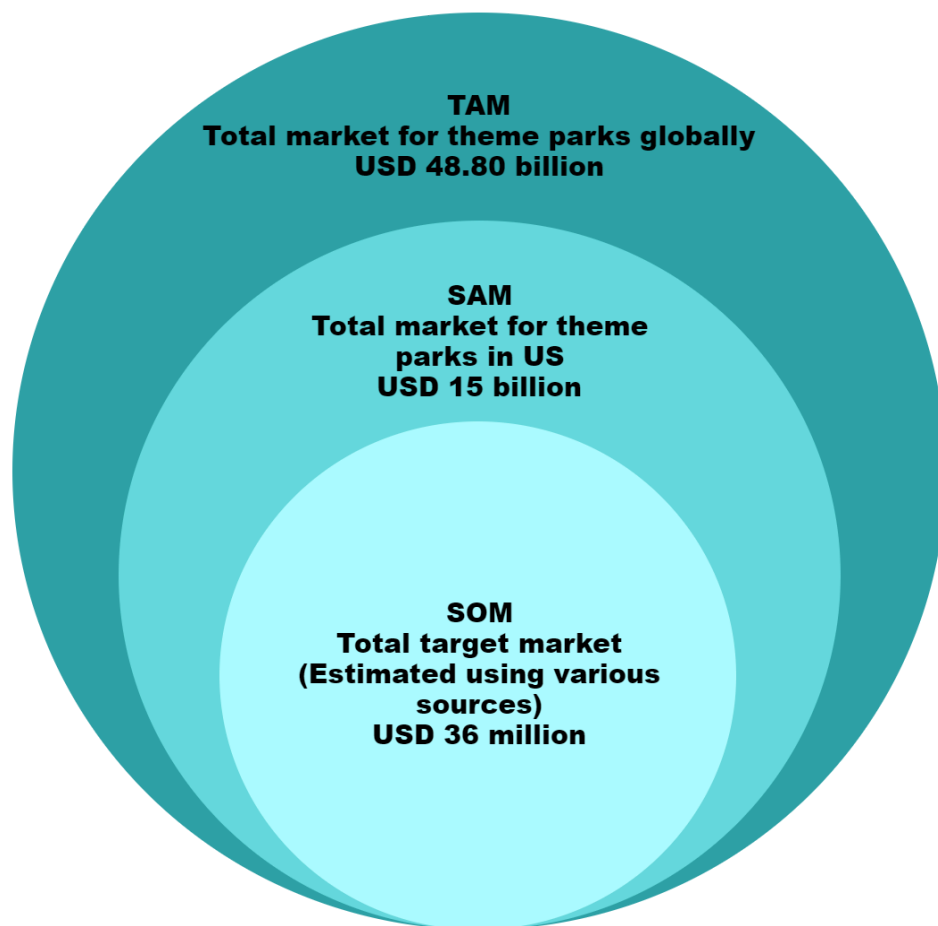
How large is the audience?

Total target market: Target market in California (Estimated using various sources):

Amusement/theme parks: "In California from 2012 to 2017, with a forecast to 2024. It is projected that the revenue of amusement and theme parks in California will amount to approximately 8.052,0 million U.S. Dollars by 2024."

Age group 15-35 years old in California - 10,061,238 people

"In that year, 29.59 percent of respondents aged 18 to 29 years stated that they visited a theme park in the last 12 months" - 3,018,371 people

If tickets were $30 entry, based on our own data collected, around 42.9% people would visit the location at the price point -1,207,348 people

USD 36 million

TAM
Total market for theme parks globally
USD 48.80 billion

SAM
Total market for theme parks in US
USD 15 billion

SOM
Total target market
(Estimated using various sources)
USD 36 million

How many do you think you can capture?
Around 50,000 average visitors year one.

Primary Audience Personas

Persona Profile
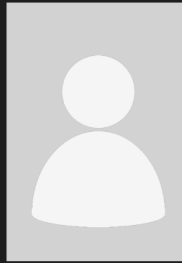
Ari Miriam

Age: 22

Location: LA, California

Occupation: Customer Service

BIO

Ari is a recent graduate out of university, and is currently working as customer service at a tech company. Due to the nature of her job, she often spends long hours sitting behind a desk. She does occasionally hangout with friends and co-workers. Her budget is quite limited, she spends around $30-50 per month on entertainment.

MOTIVATIONS

- Ari wants to find more friends, but she realizes it's rather difficult ever since she graduated from university
- She wants to find like-minded people who share hobbies and interests she has. She has tried meeting random people in local bars and parks but never became friends with them because they didn't have much in common

GOALS

- Save up to go to Disneyland
- Travel to another country
- Join a community book club

HOBBIES

- Going to art museums
- Going to escape rooms
- Reading
- Attending DND sessions
- Going to movies
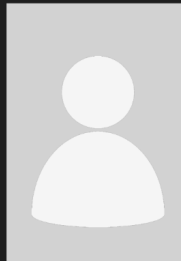- Playing games (On Nintendo Switch and Mobile)

Persona Profile

Ryan Davis

Age: 21

Location: LA, California

Occupation: Student

BIO

Ryan is a college student studying psychology. He works part time as a freelance coder. He loves all types digital entertainment and have characters he gets attached to. He enjoys crafting his own costumes or props to cosplay with to attend gaming or anime conventions. In his spare time, Ryan often spends a lot of time at home gaming with his friends.

MOTIVATIONS

- Ryan loves competition, he wants to be the best in any game he plays. When he goes to conventions, he wants his cosplay to be recognized
- Ryan likes being able to create his own story and character and customize the look and feel of the experience.

GOALS

- Win a cosplay contest
- Climb to the top of the global leaderboard in the game he plays

HOBBIES

- Competitive video games
- Going to Comic-con
- Gacha games
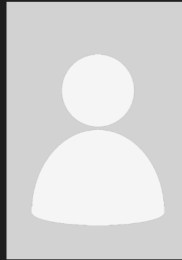- 3D printing/modeling
- Coding
- Cosplay

Secondary Audience Personas

Persona Profile

Cora Newman

Age: 37

Location: Sacramento, California

Occupation: Engineer

BIO

Cora is a working parent with two younger children around 8-10 years old. As a parent, she often tries to find interesting activities for her children to participate in so they won't have to be staring at a screen all day at home. Cora does not personally have a lot of experience with video games, but has been to theme parks and escape rooms occasionally

MOTIVATIONS

- Looking for new experiences to bond with her family on the weekends and creating memorable memories
- Finding age appropriate activities for kids that would engage their interest
- Convenient locations that are closer to her home

GOALS

- Save up for her kids' college tuition
- Create a custom photo book for her family

HOBBIES

- Photography
- DIY crafts
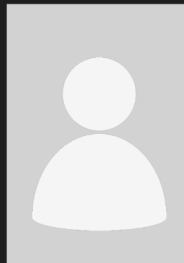- Watching movies/tv shows
- Food (cooking/baking)

Persona Profile

Patrick Fletcher

Age: 12

Location: LA, California

Occupation: Middle school student

BIO

Patrick lives with his mom, dad and 10 year old sister. Both of his parents work full time, but take time on weekends to take Patrick out to activities such as paintball or laser tag. Patrick has a very imaginative mind and spends a lot of time listening to music and imagining himself as a hero.

MOTIVATIONS

- Immersing himself in an adventure. Patrick would love to go on a real adventure
- Complete a goal, Patrick loves the feeling of achievement and the satisfaction of hard work paying off

GOALS

- Explore cool places
- Finish building the city in his minecraft world
- Reach a new high score in laser tag

HOBBIES

- Laser tag
- Paintball
- Puzzles
- Scavenger hunts
- Playing video games
- Playing VR games
- Following music/bands

FROG Research Personas

Meet The Explorer: Bryant

A 27 year old who works in the tech industry with fast past deadlines and long work hours, has minimal time to plan outings and prefers spontaneously looking up locations near his house to find entertainment. He enjoys looking for secrets and is very observant of small details. Being adventurous and

curious, he is drawn to Catastrovia since there are no reservations needed to go, and enjoys the non-linear explorative nature of the immersive experience.

Meet The Socializer: Graham
A 21 year old college student studying psychology. He has many friends and loves going outside to hang out with them. He also enjoys meeting new people, attending local events and conventions for his hobbies of gaming and concerts for music. He is drawn to Catastrovia for the group activities and the potential to meet new people.

Meet The Striver: Winona
A 24 year old sales associate who wants her entertainment to give her a break from her 9 to 5 routine. She likes tasks and activities with clear goals and structure. She is drawn to Catastrovia for its challenges, to earn more badges and clear puzzles on her character profile. She likes that each time she goes, the difficulty level increases alongside her skill level, creating a sense of engagement.

USER JOURNEY

Graham comes home from college classes at 5:00pm on Friday and opens his phone. His friends are all busy with school and other commitments and he wants to go out and socialize and meet new people.

He searches on local map applications(Yelp, google maps etc.) and sees a new immersive game experience near him. Its description includes that solo players will be able to form new connections and make friends. He decides to download the app linked on the location page and make an account.

When looking through the app, he sees a list of locations that each have different prices from $15-$60. He chooses the cheapest option just to try it out. He purchases a ticket on the app for tomorrow (Saturday), and goes to sleep.

The next day, he opens the app and goes to the location of the experience. He scans his digital ticket with the receptionist and enters a small building. Inside the building are a few other people who are playing an arcade-like cabinet. Inside the cabinet is a puzzle, his app buzzes with instructions on

how to play. He greets the other players who invite him to help them since the more people solving it means they can finish it faster and earn more rewards in the app. They eventually solve the puzzle and they earn XP and in-game currency in the app. The app then prompts them to add each other as friends inside the game's friend list.

The next time he goes to the experience, he finds the same cabinet now has a different puzzle difficulty unlocked for him since he completed the previous level. He also sees some of the people he has met previously. He grows closer to the players, exchanging personal contact information as they decide to go out for a drink after the game.

Graham starts bringing his friends from school to play, since he can earn exclusive in-game items for introducing new players to download and purchase their first ticket. His in-game and school friends start to become friends, as well as being introduced to new people each time he visits the location.

When Graham finishes the levels in Catastrovia, he stops coming to the park for a while. However, his phone alerts him to a seasonal event launching in a few days, and he buys another ticket to check out the new content being added.

RESEARCH

Primary Research

1. Industry Experts
   - Asking for information from experts in the escape room industry
   - Analysis of data and drawing conclusions
2. Quick and Dirty prototyping
   - Create a prototype version of the physical aspect of the park: small scale, using pre-existing environment
   - Scavenger hunt/puzzle that updates every week, for 3 weeks
3. Paper prototyping
   - Create a digital version of the app's UI mockup: this tests the features that should be included in the prototype, readability, and understanding of the functionality of the app

- ○ Create a discord server that mimics some of the app's functionality: this tests how the specific functions in the app will work, as well as how it can affect the physical aspects of the park
4. Survey and questionnaire
    - ○ Create a survey for those are participating in the games
    - ○ Analysis of data and revisions
5. Error analysis
    - ○ Think of all possible issues that may arise from the park
    - ○ Analyze on how to mitigate and prevent the design from causing issues

Secondary Research

1. Competition
    - ○ Analysis of competition in physical games and gamified spaces
2. Positioning
    - ○ Positioning of company and business relative to other competitors
3. Test with Users
    - ○ Test prototype with players
4. Demographic
    - ○ Research specific demographics for target market
5. Fly on the wall
    - ○ When testing, there will be no interference with player game experience. Act only as the system not as a guide.
    - ○ Observe player behavior and analyze them

Business Article Research - Escape room industry

https://crackeditnc.com/blog/how-to-open-an-escape-room-business-copyright-infringement
- ● Many escape rooms in the industry make references to IPs but manage to avoid copyright infringement by not directing using names or terms associated with a brand

https://www.vondranlegal.com/understanding-the-copyright-and-trademark-issues-with-escape-rooms
- ● Elements of an escape room that can be copyrighted include: the room itself (the look can be copyrighted as a photo), blueprints of the room, trailers,

props, advertisement, music, website, software used to create lighting effects/sound
- ● Trade Dress could be relevant if the room has unique look and feel
- ● Music used in the room itself should be properly licensed

https://strebecklaw.com/starting-an-escape-room-business/
- ● Things that can be trademarked: name of the room, company name, slogan, logo, company logo
- ● Make clearance search for name

Research: Interview method questions - Escape room industry

What is your role in creating the escape room, and what responsibilities did you have?

How did you secure funding? (Investors, loans, grants, sponsorships, crowdfunding etc.)

What were some legal and business issues you had to handle when starting up? (permits, insurance, regulations etc.)

How did you decide on the location for your escape room?

How large is the space you operate? How did you acquire it (rent, lease, buy etc.) and what was that process like?

Who built the physical structure of the escape room (in house, outsourced, both)?

How much did it cost to build it, what was your budget?

How much does it cost monthly or annually to continue to run the room?

How many employees do you have, and what are their roles/responsibilities?

How is maintenance done? (in house, outsourced etc)

How did you market your escape room? What were the primary and secondary methods? What was most effective?

How did you determine ticket pricing for your escape room?

If you had to start over today with the experience you have now, what would you do differently?

I interviewed a local escape room founder and immersive experience designer based in Los Angeles. Due to industry competition, his name has been kept anonymous as per his request.

History of escape rooms in LA
When escape rooms first came to LA, they did not have permanent spaces. They were in ballrooms that travelled around the country. They had escape room styled puzzles that were done with objects and paper, where around 30 groups of people would sit around a table, with each group given a set of puzzles inside an envelope and a location inside the ballroom where each group had to visit to use the materials inside. This was a way for early escape room testers to test their concepts without investing in a brick and mortar physical space.

Professional experiences
When he had first gotten into the industry, he was under mentorship of another escape room designer, who had established games in other states but needed someone to run games locally. They looked around downtown LA for spaces (around Echo Park), and began researching building and safety, permits etc. His mentor at the time told him he would sell his business eventually, and also wanted him to sign a restrictive contract.

Mentor experience
His mentor's strategy was to be the first to market, the quality was not a main priority since there were no escape rooms in the area at the time. He would open up a game as cheaply as possible with minimal maintenance for a few thousands dollars. Using tools such as Loopnet and other real estate listing sites, he would find businesses that are in the same buildings such as climbing gyms or other similar entertainment based activities. He would send his staff member out to sign a lease for the space, and within three days the game would be open. They had a list of props they would purchase at a thrift store, items they bring from their home state, hire and train staff as soon as possible and the game would be open almost immediately.

He made a significant amount of cash flow from it, however his ultimate goal was to sell the business, and every month the business wasn't purchased, he would lower the price for it. Some that could not be sold he would give the

business away, and ask for a royalty on ticket sales around 5-10% per ticket. Since the game already existed, was on the news, and people were visiting, it gave people looking to be entrepreneurs the incentive to purchase the business since it has already been launched without figuring out details such as hiring employees, finding a space etc.

Another crucial strategy he utilized was an email list. He found out who would be his biggest target audience, which was people who had just recently played an escape room already. Since this audience had already had a list of escape rooms they wanted to visit, his escape room would be another addition on their list. The more escape rooms he started, the bigger audience he was able to attract as this list of people kept growing.

Finding escape room location
After he parted ways with his mentor, he and his business partner came into the industry with no business or escape room experiences. One crucial point they wanted to minimize was their overhead costs for starting and sustaining their escape room. The cost of rent was something that they had to take into consideration.

Triple net leases meant that not only are they renting the space, the landlord would not be covering costs such as leaking, AC units, power outages, cleaning, maintenance etc. Most commercial leasing spaces put this cost and responsibility on the renter. Larger businesses like Walmart or Walgreens tend to sign triple net leases, while smaller businesses tend not to do so. After their research, he and his business partner decided they did not want to sign a triple net lease. As a result, when searching for a space for their business, not only did they need to consider a space that would be accessible to their customers, but also had a landlord that would work with them in terms of repairs so they could keep expenses low.

From his experience, most escape rooms in the industry that have closed were because they could not keep making rent. In his experience, an escape room space being in an area with good foot traffic, such as a shopping mall, was not necessarily something crucial. These areas would have a significantly higher cost, but due to the structure of escape rooms, this was not essential. Since the model of the game was that there was only a limited amount of people playing at a time, through selling tickets, and cannot drive sales

through players spontaneously browsing for entertainment, the space for the games could be more unconventional. This means spaces such as a basement, an attic etc. that would have less foot traffic but better rent. They looked through real estate websites for days in Koreatown LA, and eventually found a space that was less known, with a landlord that wanted to work with them, and with a previous business still within it. They agreed to clean up work for the space in the process of rehabiting it. The deal was, the landlord would give them 6 months free rent to clean it up.
Another element of leases to take note of is exit clauses, so that if the escape room can't open, is there any cost of insurance to the landlord.

Their room is around 1400 sqft of useful space, when they got the space, the rent was $3000 per month (2014), now the rent is $5000 per month. This is because they got a good deal early on with minimal increases each year that was guaranteed. They had a 10 year lease with 3% increase to plan their budget out. The lease being long term and not year to year is crucial as there is a higher likelihood of rent being raised per year.

Repairs, set up, maintenance
The space was in bad condition when they got it. They had to do wall repairs, electrical and more. They utilized calling in favors from previous connections they've had with handymen to help them as well as teach them. They brought in experts and watched them, learning how to fix the space through their guidance. They saved their money for experts and basic things like painting, putting up wallpaper etc. they would do it themselves. Even though he was not good at the task at first, he took up the complicated tasks first so that if he made mistakes he could fix it. Through running their game personally, they know which aspects of their games would wear out more easily, what elements they would need extras of, how to fix it etc.

Task delegation
They split the work between them, with whoever was available to work on the space to go do it. He mainly took care of the puzzle work while his business partner did narrative and story writing. Eventually, his business partner became the manager of the space while he stepped away from the business. Initially, they did not hire any employees, with only them being the ones to run every game for 6-7 months.

<u>Staffing and training</u>
When they hired their first employee, he shadowed them for two weeks, where he only watched them operate the games. Then they had him operate the games, while one of them watched to make sure he could do it correctly. Once he had it down, this employee became their main operator. Eventually, this employee became the manager. Then they began hiring more staff, at this moment, they have 3 employees on staff who have worked for them for 4 years. They had employee incentive programs and paid above average for companies in their industry, they paid them $25 per hour. They gave bonuses to employees if customer reviews complimented them. Each employee also had discount codes, which meant if they brought in a group to play, they would get a cut of the money from the group they brought in. They paid them for suggestions on how to improve the game. Every month, they would take their staff to go play other games, to be knowledgeable and passionate about escape rooms.

If an escape room has actors, consistency is important. If players visit on different days and find their experience diminished, this could cause issues with player satisfaction and game reputation. The actors need to be trained so that players will have the same quality of experience every time. This is why escape rooms with actors often only have weekends open or specific time slots available. If no one books a game all day, how staff is delegated needs to be clear. If staff are just sitting there doing nothing due to no one coming in, then they still need to be paid. Then that is a loss on profits since no one is booking a ticket. Another option is to have an on-call rate that can be lower, where staff is at home waiting until they need to be in the room to operate.

<u>Scheduling</u>
They closed on Mondays and Tuesdays, being the dark days of the week for entertainment similar to how theatres or escape rooms were closed on the same days. Every other day of the week, their game was open. As their game became more and more popular, this started to eat at their time. This meant there would be days from 10AM to midnight, they would continuously run games every 2 hours.

As a business owner, being the backup manager to a game is something that is essential. If something happens with employee scheduling that creates a void that needs to be filled, the business owner needs to be present to fill that

space. Alternatively, games could be canceled and refunded back to players, but that causes other issues such as bad reviews. Especially with unique entertainment spaces, your players could have travelled very far to visit the location, and not being able to play as intended could give the business a very bad reputation.

Some considerations on booking are when to close ticket sales. Some games close 2 hours in advance for a slot while others let you book the minute before the game starts. Escape rooms prefer people to reschedule rather than refund because of credit card sales.

Testing
He did the most basic and rudimentary versions of his puzzles through photoshop and printed it out on paper, then he would put it on the walls of the room. They would then bring testers over and see how they would move around the space for a space study. Each time they brought a new group of people over, he would have more puzzles made of paper and cardboard they would use to test the puzzles. They would sit and observe how players interacted with the puzzle. They would make little improvements and tweaks based on their experiences, changing the puzzles, lighting, and sound to enhance the experience. This would last 3-4 days of the week, testing and improving the puzzles.

Funding and financials
Personal savings ($10,000 from him, $20,000 from business partner), friends ($10,000) and family ($20,000), money on credit cards(not recommended), they did not consider loans since the rates were not ideal and they did not want to deal with the complicated process. He mentions that first time business owners underestimate the cost for a room, and would recommend loans after some insights and personal experience in the industry. Initially, they estimated their costs to be around $20,000 to $30,000, but in the end it was around $70,000 to $80,000 (2014/2015 not counting inflation). Within 6 months, they were able to pay back people they borrowed from and the credit cards. Since they've opened, they've made 2.2 million in gross profits.

Marketing
The main form of marketing for escape rooms is word of mouth. The player's experience is essential for an escape room's success. When a player walks out

of a game complimenting it versus criticizing it, this can determine whether or not more players will come and play. When they started their escape room, they needed to find a way to get the word out about their room. They had a soft launch where they would find early adopters and people who liked trying out new escape rooms. They would go on Yelp to look at newly released escape rooms and find people who were playing them. After they made their initial tweaks with those tests, they blocked off a Friday, Saturday, and Sunday, where they invited anyone they could that were press. They invited bloggers, influencers, and gave them time slots for free. They told the press they got a free game, and they could bring as many people as they wanted. They ran around 15 games for free, and 10 of those games got them articles and blog posts about it. They also incentivized people to write reviews for Yelp or google maps. They brought in mommy bloggers, even though the game was not meant for kids, they thought this audience might want time for themselves. One came and wrote about the experience on her blog which brought them a huge amount of foot traffic. He has tried google/instagram/yelp Ads before, but based on their cost and effectiveness, he believes that the organic word of mouth type advertising is much more powerful. For the very first year of his escape room, he would look up to people like celebrities, influencers, other escape room owners with large followings, to come and play the game. For example, Metacritic recommended them because he invited someone who was friends with the person running their social media. As a result, he believes giving out free tickets is a part of the marketing strategy.

Ticket pricing

When escape rooms first started in the United States, ticket prices were around $15-30. Some had sliding scales where the more people you had, the price was cheaper. It's a balance between minimum and maximum people playing the game per time frame. Initially they charged $30 per ticket. Their average booking player size was 5-6 players.

Unexpected issues

A company in Echo Park had rented a space, knocked walls down to combine 3 store fronts. They ran into a series of issues such as the neighborhood having a dispute over the room being built there, thinking that games would attract dangerous and undesirable people to their neighborhood. They filed a complaint to the chief of police and the owners of the room had to meet with

the neighborhood council to discuss and convince them the business was not going to be detrimental to the neighborhood. When they were ready to open, fire safety became another major issue. They had fire sprinklers but because it was 3 separate units, they had to make sure there was enough coverage if the sprinklers went off. The fire inspector came in and told them the water pressure was not high enough. The people they hired to connect the pipes together did not verify there was enough water pressure to pump water through the 3 store fronts they combined. They found that the issue was that the connection pipe to the city of LA's water supply was not big enough, so they had to have the street dug up, that pipe needs to be replaced and they need to pay the city of LA to do that. They needed to pay all the cost of construction as well as shut down the street and since it's a public street, they needed permission from the whole neighborhood. In the end, it cost them $100,000 and 6 months of time.

Another example is an escape room where they had 4 games in the space, with a maximum of 6 people per game. The owners had calculated that there would be a maximum of 30 cars that need a parking space for their room. After they get the lease, and the city tells them since an escape room is categorized as entertainment, they must have 60 spaces. As a result, the owners had to file an appeal and do a traffic study that cost them around $30,000 dollars to prove they needed 30 spaces and not 60.

Other insights
A game similar to my experience I could reference is https://www.intriguex.com/ they did something similar where players could wander into the space and multiple games could happen simultaneously as players utilize different props in the space. This was in the middle of a shopping mall with foot traffic, but in this case it was helpful since they could draw in a large audience of people to play at the same time.

Research: Interview method questions - App industry

I interviewed Daniel Gruici who was the lead android developer for Geocaching. He managed the group of android developers initially before eventually managing the entire mobile team and became the mobile engineering lead.

Geocaching was older than when he joined the team, but he has insight on how they started. Geocaching was established in 2000 when GPS technology was first introduced to the world. They started off as web developers that made a game out of the GPS technology. The first thing they ever tracked as a bucket in Oregon/Southern Washington. When players found the item, they got a can of beans. As more and more people found the item, the developers thought they could expand upon this game mode and hide more items around the area.

Target audience
The target audience for this app is players who like travelling. A majority of their player base are retirees who are travelling around the world and looking for something to do while they're in the area. They have a large user base in Europe.

Financing
For their initial financing, they bootstrapped everything. To make money, they sold T-shirts as well as creating "Charter Members" roles for funders.

Application Infrastructure
For tools and programs used to develop the application, they used Native. One element they emphasized was the app working as smoothly as possible. With GPS they can only get 3 meters of accuracy, as a result, cross-platform infrastructure would make this focus on peak performance difficult. For Geocaching, Both IOS and android have their own native applications that use their own mapping libraries, Apple and Google respectively. For tracking and analytics, they used Firebase to monitor crashes. Firebase is also used for certificates. They used Azure for their messaging system, such as push notifications. They used Launchdarkly to do A/B testing, to test specific feature rollouts, and different variations of their features.

For the website they are backed by a couple of large SQL databases, including React.

For their other app Adventures, they are using React Native. This is because they don't need the GPS feature as much, but it is a similar concept of location based entertainment.

They also used open street maps for their mapping feature. This is because Google and Apple's mapping features lacked details such as topography which would be essential for players that are hiking. As a result, they have a premium trails map where they used this program to build.

For payment, they use in-app purchases as they found their users trusted the app stores to pay for it. So they made it a subscription based payment in the application itself rather than sending users to an external website. For purchases on the website they are using Stripe to process payments. Pulling out user receipts between these 2 separate payment methods can also have some complications.

Team/Staffing
The mobile team started off small. Nowadays there are 3 IOS developers, 3 android developers, a manager for both teams, a product owner, and a product designer. This is the standard team for a mobile app.

The IT team managed most of the budgeting and costs. They were a development operations team and IT team. Most of the costs are in data storage/management(geocaches, puzzles, tools for volunteers, images, scripts).

For distribution, their community team was around 80 people. They handled the volunteer work, outreach, and some parts of tech support as well.

The most important role for Geocaching however, was their volunteers.

Community
Geochachers are an adamant community that has an emphasis on things working on time. Due to the nature and rules of the cache, there is a certain radius the caches must be apart. The volunteers for Geocaching act as local knowledge bases for the company. They provide information to help guide where the placement of the caches should be and ensure the rules are being followed.

Without this team, and the local volunteers, geocaching would be without any resources or means to manage the placement of the caches, which are

essential to the core experience since the placements determine how fun the game is.

When starting up, this group of volunteers was organically built. The company's start up was needs based until they eventually decided to make a formal company. GPS technology being novel at the time, allowed them to draw in a natural audience that was interested in using the technology.

Every year multiple different events are held by the users, and the company supports their efforts. For example, they can send suits of their mascot Signal for people to wear at the events. They also encourage their employees to go to these events by paying for them. They wear special Geocaching HQ shirts there and the community loves to engage with the developers. They give the employees 200 trackables to give out to the players.

App day-to-day management
It is mostly straight development work. For each platform, they look at the priorities list (one for IOS, one for android), they have separate boards because they have different technical implementations for their mapping systems.

For updates and releases, their schedule is every 2 weeks. They use agile development, the core idea being constantly developing small elements and delivering them. The advantages of this strategy is that when elements fail, they fail fast and they can quickly iterate upon them or scrap it to move on to a different feature. This is better than SRS development because each change needs to be documented and signed off by various parties, however, this meant small changes needed signatures as well, which slowed down the development cycle. '

The reason why they chose a 2 week cadence is because they wanted to fix bugs, even if major features cannot be released yet, they update every 2 weeks in order to maintain the app. They updated the minor number when they made bug fixes and the major number when they released new features.

User metrics
The user metrics are funnel based since the company is focused on selling premium memberships to the users. The analytics are about getting the user

into a flow or pathway to purchase the premium subscription. They track how much fall off or click through rate to get to the purchase section.

Other analytics include feature specific tests, such as A/B testing. Crash analytics, as in what the user's journey was before the app crashed. They track elements like how many finds of Geocaching there are in a year, average finds per user, how many people retain and keep playing. They had a dashboard that was constantly updated and displayed so everyone could see where the company was at.

User Retention
User retention was seasonal based since they are more popular in the summer months where users are often outside, versus winter months where users are mostly indoors. Holidays are also when Geocaching is popular, such as easter. They see these numbers increase by monitoring sign ups. They have a souvenir system for each state, country, and events that players can collect. This gives players the incentive to return for achievement and bragging rights based play value.

Users have also made up their own games using the in-game systems, creating emergent play. For example, one type of game they made up is fizzy grid, where players try to find all combinations of difficulty caches and terrain. They can do this challenge multiple times and brag with other players.

Production Timeline
The first step is the product team does an analysis on the data monitored by the backend, such as user funnels etc. this turns into a one page that is presented to the entire production team. They then discuss and determine whether a feature is relevant and needed, sometimes other managers including mobile developers are called in to determine the feasibility of producing it (if it's going to take too long or if it's impossible with the infrastructure they have)

Then production and design start to figure out exactly what they want. They design the user journey, UI/UX, and any other necessary experience details. They create some hand drawn examples to explain their thinking and what their expectations for the user's experience to be.

The next step is project kickoff, where the entire team gets to look at the new proposal, not just senior managers or lead developers. During this phase they do story mapping to figure out what is the minimal product they need to deliver. They use post it notes to cut up the user's journey into different slices and figure out what they need to test their assumptions. Slice 1 is the minimum required, slice 2 is elements they can follow up on depending on user feedback when slice 1 is released, and slice 3 are stretch goals that aren't necessary if they cannot be included and are used to show future planning and iteration.

After this phase, the necessary features are turned into tickets on Jira. The product team and the lead mobile developer spend time writing out the specifications of the tickets, it is not technical based and rather something that can be understood even by the CEO who is not directly involved with the development. It makes it easily understandable and also gives the developers the freedom to decide how they want to implement the feature technically. Then the tickets go through ticket refinement before being scheduled into a sprint.

After that, the feature is developed before being reviewed by team members. When it passes review, they create builds for the QA team. They use if, when, then structures to test the features. It's a good test plan and builds out the user experience.

Monetization strategy
Initially, their app was a one-time purchase but eventually moved towards a monthly/annually subscription based financial model. They have a paywall on the app that is different from their website. Their website they can track geocaches for free, whereas on the application certain cache types are blocked by the paywall. This includes special caches, caches are above difficulty 2 (based on terrain and other factors, the caches' difficulties range from 1-5), building lists of caches to find for easier management(website and app), and user statistical tracking (website and app). The premium membership's main selling point is ease of use.

Users can also mark their own caches to be premium only, usually for caches that are more intricate that they made for other paid users in the community to experience.

One of the main convergent points from free to paid users was asking if users wanted to buy a premium membership after signing up.

They sell merchandise. There is a summer promotion where they sell trackables (part of a cache to show that you found it). There is also the sale of data, with the partnership of an app Cachly, who want to build their own app. There are also other companies that can buy data from Geocaching to run data analysis on. There are also a lot of business to business transactions, such as national parks that have their own caches that they've negotiated with the company.

Some partnerships they've had include NASA, Magic the Gathering, Planet of the Apes (Warner Brothers), and other exploration related companies.

Challenges with Outdoor location
Some elements they keep behind the premium paywall is also to ensure users who are new to the game can board properly. For example, one cache is a small magnet hidden in a bolt on a wall. This is very difficult to find for new players who are not familiar with how to play. This is also an element of the design itself that they need to focus on, with the presence of community guides being essential to the experience.

With proper onboarding, players can learn how to play without becoming confused or frustrated when they get to a location. Trying to describe to players what to do through a phone app when they don't know what they need to find is difficult. For example, for an older player, they might get to a location and log it on the app thinking that is all they needed to do. However, the cache owners would delete their finds because in reality they needed to find the cache and write their username on the sheet of paper. Since this element is described in detail, it can be frustrating for users who don't know how to play.

Other challenges
Stakeholder management since their biggest players are hardcore and as a result the company needs to make a decision on what features they should include when they have a large variety of ideas. They needed to explain to

their users why they could or could not include certain features and what to prioritize.

Sustainability
Most of their partnerships are science/eco based. They are interested in taking care of the environment because it is essential to their business. They have special caches that are given/found for collecting trash in a location or removing invasive species. These are events that can be made for free and have people participate in. The incentive is that due to it being a special cache, users want that on their profile.

Scalability
There has not been significant efforts made to the infrastructure for Geocaching to scale. I asked Daniel what he would do differently to create a scalable app. He mentioned looking into AWS structures with closer server databases mirrored to different locations or licensing/paying another company for this part to be done. This helps other locations that are international such as Europe, Asia, etc. and have servers there so that locations outside of the US the app would run more smoothly.

Legal & Safety
For Geocaching, a lot of the legality is user based. When Geocaches are placed, there is a review process that it must pass. Some laws that are relevant include trespassing, but this isn't something the company is managing, and rather for users who are placing the caches. They heavily rely on the reviewers to tell users what is legal. When a cache is in a place that it isn't allowed to be in, it is also easy to get in contact with the company to get it removed.

When they first sign up, there is a warning message to users disclaiming the potential dangers of participating in the app.

Advice for location apps starting up today
- Find distinct mission statement
- Tougher competition (Geocaching was first to market, lived through Pokemon go)
- Some advantage in time (Geocaching) or marketability (Pokemon go)

- How it looks (location based things in real life can be boring), enjoying surroundings or some other element needs to add to experience

Safety Research

How to ensure the safety of visitors with considerations made for both young and old audiences.

- Code of conduct posted online, in-app, and in-park
  - Outlines what can players do/not do
  - Outlines what players can bring or not bring
- Security scanning before entering the park
  - Items like bags are scanned for dangerous items using baggage/body scanner
- Waiver
  - Players must read the terms and conditions before creating an account or purchasing tickets
  - Warning about safety
- Security personnel
  - Act as the "Temporal Order" in universe, but is actual security that blends in to monitor player behavior. No closed off/dark spaces without security roaming that will step in as soon as needed.
  - Camera/surveillance system in place that monitors the park
- Badges
  - Attached to guests who are under 18 versus over 18. Visible color coding attached to clothing or wristbands
  - Allows easy identification for staff to monitor situation
- Blacklist for people who violated the rules
  - Banned from the park permanently if violated code of conduct
- Entry
  - Those who are under 16 must enter with a parent or guardian
- App
  - Age verification needed to unlock certain quest lines (need ID to verify profile). The scannable code generated for underage users is different than adults, which means they cannot participate in certain missions
  - Message logs are kept and monitored

- Report button in app that can report both users online, as well as in person

PRODUCTION PHASES

Phase 0

Goal: Test app concept and validate idea as proof of concept, figure out issues with basic relationship set up between physical and digital aspects of design

Basic prototype testing at ArtCenter

Iteration based on feedback, refining details with logistics and making revisions

By the end of the term, figure out what worked and what didn't

Begin preparations for the next stage

Phase 1

Goal: Expand audience and test features with larger audience, scale project

First 6 months:

Temporary pop-up events in convention centers in Pasadena that lasts a day

Collaborations with other community events

Test financial feasibility with tickets, cost, revenue etc.

App is downloaded at the venue and used there

Next 6 months:

Expansion to larger convention centers in LA

Event times are expanded to 2-3 days

App is downloaded beforehand, and remains with the audience for the duration of the event

Phase 2

Goal: Test financial and operational models for a more permanent location

Roll out semi-permanent space, with a seasonal pop-up location (lasting around 1 month)

Experimentation with venue size, number, locations, cost, and marketing

Financial testing with season passes

App development will focus more on keeping player engagement over extended period of time, building a player journey by creating progression

Phase 3

Goal: Launch full experience in permanent location(s)

Open permanent location(s) based on revisions and conclusions from previous phases

Create more entertainment content and introduce more advanced technology

Expand features inside of app to adapt to permanent structure

PRODUCT DETAILS

Rewards
With each task and game players complete inside of Catastrovia, they earn different rewards.
1. Player level - when players complete games, they earn XP, which allows them to level up. As players level up, they gain access to harder quests and games that earn them more rewards
2. Credits - in game currency. With this currency, players can redeem prizes inside the experience (similar to how you can redeem prizes at a carnival)
3. Badges - Specific game modes grant players "skills". For example, the scavenger game mode grants player "Lumen" badges. The more

players participate in the game mode, the higher their badge would be (Novice,Trainee, Expert, Master, Elder)

Game Modes

Puzzle exploration (PVE)
- Players are given digital clues on their phone that indicate they must go to a location to solve it
- Observe physical elements to solve clues inside of puzzle (for example, what is number written on the red pencil)
- Time-limited (1 hour), encourages players to work alongside others to solve the puzzle
- Set amount inside of experience, when players solve all puzzles, they get a special achievement
- Updated every 2 months to include new puzzles

Arcade machine (PVE)
- Co-op video game machines require the player to play with others (2-4 players)
- Players scan their player ID to generate game for based on their player level
- Cooperative game mode and competitive game mode, each level is 5 minutes
- Players stand on four sides of the machine, and each player has a different task
  - Ex. player 1 must tap rhythm to match the game screen, player 2 must be dropping digital balls into a bucket etc. If each player fails their task, they lose progress on the machine
- Scalable with more difficult levels unlocked as players pass each one

Scavenger hunt (PVP & PVE)
- Time based (1 hour)
- Scan stuff around the park for completion (ex. Find a plant, find a specific neon sign etc.)
- Encourages players to play alongside others (competitive and cooperative)
  - If cooperative mode: Having a larger party find all the required items faster, which means more rewards

- ○ If competitive mode: Having a larger party means more competition, the winner gets a better reward
- Grants skill badges that appear on player profile in-app when players complete more hunts and is granted physical badge in park

Laser tag (PVP)
- Time-based (15 minutes)
- Similar to normal laser tag, except players get modifiers on their laser gun.
  - ○ For example, a shot gun deals more damage but has less range. A rifle has more range but less damage
  - ○ Players have an in-game health bar that is located on their laser tag vest. When players "die", they respawn and the health bar refills.
  - ○ Scoring is based on how many players the player eliminates during time limit
  - ○ Players can create their own "builds", by selecting ammo and modifiers on the weapon (splash damage, healing). They scan this information into the gun using their app's profile code
- Players can earn and purchase loot boxes to get different modifiers to equip their gun. As they play more games, they earn loot points that go towards redeeming a loot box.
- Competitive and Cooperative game modes (around 10-20 people per round)
  - ○ Cooperative: Work with your team to cooperate attacks
  - ○ Competitive: Free-for-all game mode where players try to eliminate as many others as possible

Tower defense game (PVE)
- Round-based
- Players work alongside others to set up "defenses" by moving physical elements around (blocks, shields, etc.)
- Each round after players finish setting up, monsters (programmed) will move to attack the items
- Players try to survive as many rounds as possible.
- Replayable as players will try different strategies each time.

Mafia game (PVP)

- People are given different roles (good and evil)
- Evil players' goal is to eliminate good players without the other players noticing. They do so by clicking on in-app on who they wish to eliminate (they can only eliminate 1 players per round)
- Good players' goal is to find all evil players or complete all of their tasks
- After evil player's, good players have the opportunity to discuss who is suspicious and vote them out
- Through deduction and clues, players will figure out each other's roles
- Unique to Catastrovia is that players interact with physical space and can walk around. Good players have to complete minigames inside the space while evil players can pretend to be doing the minigames to act innocent. Evil players can also find advantages inside the space.
- Replayable as players will play with different people and also have different roles

Traversal challenges
- Traverse through actual physical obstacles, similar to children's play area in malls, trampoline parks, rock climbing, and other physical indoor activities
  - There is foam and other materials protecting players from falling
- Lasers or other light up elements that players need to land on or dodge
- Earn skill badges when players complete more traversal challenges

Escape room
- Players can be randomly selected to visit in-game jail when they fail certain challenges
- This acts as an escape room game mode. Players have the option to pay their own bail (in-game currency) or find a way to break themselves out.
- In the jail section, players can work alongside other "inmates" to find a way to escape
- Players can also use their app to message players outside to help break them out (making friends)
- There are emergency exits and employees monitoring the area in case players really need to leave

Daily events
- World boss

- At a certain point in time (ex. 1 pm) the boss will appear and all players are welcome to join and play mini games to attack the boss. Physically, this appears as a 3D model that is displayed at the center of the park. Digitally, this appears as an event inside the app
- Everyone will be assigned a random number if they choose to participate. Players then must team up with the partner they are assigned. They can click the shuffle button if they don't want to team up with a certain player (since others might be shuffling too)
- During the team-up, players must complete a game or task with their partner (previously mentioned game modes) to earn extra in-game rewards
- Music concerts
  - Fictional characters in Catastrovia will put on live performance shows
  - These occur at set times during the day

Seasonal events

- Occurs during holidays or seasons (halloween, christmas, spring, summer etc.)
- Exclusive quests that last for a limited amount of time (1-2 months)
- Players earn time-limited rewards that grant them cosmetics, in-game equipment, and other merchandise that is themed after the season
- Additional narrative will be told through the event story

COMPANY TEAM RESEARCH

Phase 1 team

Base team

- Founder/Creative Director (me)
- App Developer
- Game designer (physical and digital)
- Operations coordinator
- Financial Manager

Outsource

- Graphic Designer (promotional materials, app UI, other graphics needed for props in event)
- Builders (event set up, fabrication, physical props)
- Event staff (managing game flow, customer service)
- Legal consultant (event permit, registration)

Phase 2 team

Base team expansion

- Operations Manager (For each location)
- Marketing strategists
- Builder/Set designer
- Customer Experience/Service
- Sponsorship and partnership manager

Outsource expansion

- Technical support and maintenance
- Social media manager
- Quality control
- Accountant

Phase 3 team

Base team expansion

- HR
- Customer support
- Facilities manager

Outsource expansion

- Actors, musicians, bands
- Special/custom tech development

BUSINESS MODEL

Current BMC

Key partners

School contacts (students/professors), local event organizers and venues, freelance tech developers

Key activities

Prototyping basic game modes, app layout and functionality planning, testing out relationship between physical and digital aspects through playtesting

Key resources

Small team with emphasis on app development, game ideation, prop design/set up, all to create player engagement in event set up.

Value propositions

Gamified escape room and theme park hybrid, focusing on letting players make friends in real life with the assistance of interesting icebreaker challenges and technology. Emphasis on short term progression and task completion.

Customer relationships

- Direct (through discord)
- In-person (for events)

Channels

- Directly reaching out to consumers/word of mouth
- Social media (website, discord, local forums, advertisements etc.)

Customer Segments

- Students
- Young adults
- Early adopters of technology
- Local community
- Interested in gaming and immersive experiences.

Cost structure

- Early app prototype
- Time (I act as the system)
- Event costs

Revenue streams

- Ticket sales
- Pop-up event collaboration contracts
- Crowdfunding

In 5 Years BMC

Key partners

Corporate sponsors, investors, city organizers, entertainment industry partners (theme parks, escape rooms, gaming companies etc.)

Key activities

Park operations, maintenance, event roll out, staff training, expansion

Key resources

Fully realized team with financial and technical experts and full time staff. Many locations and spaces with developed experiences. Well developed and expanding story IP that can be utilized in a variety of ways.

Value propositions

Fully immersive gamified experience that seamlessly combines digital and physical elements, with several locations and variety of price points to choose from. Player focuses on long term progression, with new experiences occurring each time they visit.

Customer relationships

- Managed by customer service department
- Community (through app)

Channels

- Social media (advertisements)
- Collaborations (with other brands/businesses)
- Influencers

Customer Segments

- Families (older/younger audience)
- Tourists/casual audience
- People with less experience with immersive or gaming experiences

- Repeat customers (long term player experience)

Cost structure

- Fixed costs for permanent location
- Employees
- Unique technology
- Marketing
- Maintenance

Revenue streams

- Ticket sales (single entry or season pass)
- Merchandise (based on IP characters)

Scaling

MMP product or service and one planned extension
- Describe the MMP product or service
    - Pop-up event with minimal physical props, digital integration (website or small application)
    - Price: $20
    - Cost per person: $37
- Describe your Initial target customers (be specific) and the functional benefit your offering provides
    - Young adults, who enjoy physical based entertainment related to escape rooms, theme parks, and other interactive entertainment.
    - Physical entertainment, opportunities for people to leave their house, opportunities to make new friends.
- Describe the first future release
    - After 6 months, expansion to larger convention centers in LA, event times are expanded to 2-3 days, the app is downloaded beforehand, and remains with the audience for the duration of the event.
    - Pricing remains the same, target customer remains the same, but has the opportunity to bring in audiences that also like digital gaming, media, movies, etc.
2. Initial and scaled sales volume - rough estimate

- How many of your offering does your plan assume you will sell in the first year of operation
    - 10,000 attendees with partnership with larger conventions and events
- If you are successful in the offering and in scaling, how many will you sell per year in five to seven years (choose one)
    - 10 times the first year

3. Production – at launch and how it will change if you are highly successful at scaling as per question 2 above
- Initial production
    - Describe how you plan to create / assemble / deliver your product or service in the first year of operation
        - Temporary pop-up events in convention centers in Pasadena that last a day. Production is based on small cheap props such as printed puzzles, using pre-existing environments, website/digital items that can be reused or can be replaced affordably. Partnership with local small events to bring engagement to venues to build an audience.
    - Describe how your initial product design will accommodate anticipated changes to production during scale-up
        - Puzzles can be made into physical items that are manufactured and polished to be printed on mass. Digital elements can be expanded with more programming and larger servers. Number of actors can be expanded by hiring more staff or using code to tell narrative elements.
- Scaled up production
    - Describe the changes you think will be necessary to the product, sourcing, assembly to scale up production
        - Better durability to withstand more players
        - Instead of focus on being able to take down and package into small spaces for ease of transport (for temporary events), more focused on permanence in space
        - Meet safety requirements like building regulations
        - More modular game pieces for ease of repairs, accommodating more players
    - Do you think you can reduce cost per unit produced with larger scale production? Yes

- Bulk material discounts, producing a large amount of materials for the park means a larger order from manufacturers and suppliers, which comes with discounts
- Reduced shipping/transportation costs due to shipping and transporting more materials in bulk

MARKETING

Traditional Methods of Marketing

Social Media: With the target audience being older teens and young adults, social media platforms will be a major source of advertisement. Catastrovia will have accounts on youtube, twitter, facebook, tiktok, instagram, and reddit. In these accounts, Catastrovia will promote gameplay features inside the park, character/world narrative videos, revealing upcoming events, and filming activities inside the park. Offer interactive quizzes and polls to engage the community. Create hashtags and encourage players to use them to share photos, where prizes such as free tickets or in-game rewards will be given for winners.

Influencers: Catastrovia will collaborate with influencers in the escape room and immersive experience space, with a pre-existing audience, the influencer will promote the park by showing their audience first hand what it is like to play and have fun inside the space. Invitations will be sent out to influencers to experience different venues of the park (small/large scale) to show the differences between them.

Word of mouth: Since Catastrovia aims to build community, one aspect that will be its main marketing strategy is to talk to local event spaces, as well as building community presence by showing up in other key events to promote by offering demos of its game mode. Offer sneak-peek pop up events at other conventions to show upcoming game modes and offer exclusive rewards for those who stop by the booth.

Business collaboration: Partnerships with local businesses, such as hotels or tourist agencies, offering package deals for hotel and dining options alongside tickets/passes to Catastrovia. Can offer locals discounts for residents living near the area.

Email marketing: Creating a monthly newsletter and promoting new events and discounts to pre-existing players. Building a relationship with repeat visitors and subscribers by offering updates on new events, game modes, or offers.

Referral with app benefits: Create in-game benefits for inviting new players into the experience. When new players buy tickets and register into the app, the player you referred to can enter your referral code, both of you will receive rewards with in-game currency or other special items.

Creative Marketing Concepts

Art Competition: To promote characters and the story world of Catastrovia, artists and other creators are able to participate in an art competition, where they draw characters or scenes from Catastrovia and submit them via social media. Winners receive cash prizes as well as exclusive in game titles and cosmetics.

Merchandising: Catastrovia will sell merchandising in the form of technology, cool wearables, and other small gadgets that can be worn or used outside of the experience. The items themselves will offer some form of storytelling from its style and functionality, drawing attention from new audiences when a player is wearing/using them outside of the park.

ARG: Periodically, Catastrovia will create ARGs or other web-based events around the internet that allow players to find clues and uncover the overall story before launching new game modes or venues. This allows the community to grow closer together and bring in new potential visitors as they play.

FINANCING

Detailed Financial Charts: 📗 Catastrovia Financials_Final

Financial Chart highlights:

Phase 1 (to 5x return in 5th year)

Phase 2 (to 5x return in 4th year)

Phase 3 (to break even in 3rd year)

Phase 1
Goal: Expand audience and test features with larger audience, scale project. Using pop-up event format and eventual expansion to 1-2 day convention centers. Collaboration with other community events.

Budget Allocation
- **Prototype/development (30%)**: Building out physical props, app development, game modes, and other game related research and resource development to be employed at the event.
- **Marketing (20%)**: Ads, influencer marketing, collaboration with events, word of mouth
- **Venue and operations (30%)**: Renting out venue spaces, sign up/event registration, permits, licenses and other legal costs
- **Staffing + other costs (20%)**: Hiring event staff, performers, organizers at the event, other materials and miscellaneous costs

Financing

- **Revenue-based receivable financing:** Pre-sale/Event tickets (charge for tickets before event begins RVSP), to see potential player count and use revenue for development
- **Partnership with pre-existing events:** Work with local community events, give proposition that Catastrovia game mode will add value and drive consumers to their event, in exchange for some costs being discounted/covered (marketing, venue space etc.)
- **Family and friends:** Using money out of pocket, as well as asking for loans from family and friends
- **Equity financing:** Pitching project to Angel Investors (after project is proven to be successful during small pop-up events), start crowdfunding campaign in exchange for early-access content, behind the scenes development, and exclusive content/goods (Patreon, kickstarter)
  - 5% to angel investor for $15,000, company value at $180,000

Exit Strategy

- Use financial results to prepare for Phase 2 financial strategy
- Buy out angel investors with 5x return, new seed funding for next phase
- Determine total revenue gain and if additional investors are needed, as well as how much is needed

Phase 2

Goal: Test financial and operational models for a semi-permanent location (a month)

Budget Allocation

- **Venue and operational costs (40%):** Finding and signing a contract for a semi-permanent location (renting, leasing etc.), insurance costs, utility costs, maintenance costs. Set pieces, physical components, materials, props.
- **Marketing (20%):** Digital ads, social media, partnerships, promotions
- **App and game development costs (20%):** Adding more functionality to app, such as long-term engagement game modes, achievements, and community features
- **Staffing/Team (10%):** Hiring and paying more permanent in-house staff team, event organizing/operations, customer service
- **Other (10%):** Other miscellaneous funds and back-up in case of emergencies or unexpected issues

Financing
- **Receivable financing:** Continue operations from phase 1, in addition to that add season passes (now with longer time frame for event), sponsorship deals (advertising inside the location or promotion of products of other companies), app monetization (in-app purchases for premium content)
- **Equity financing:** If the project is proven to be successful and scalable, more angel investors can be found to sponsor the project. Potential look into venture-capital opportunities to see if it fits with project financial needs
    - 5% to angel investor for $30,000, value at $600,000

Exit strategy

- In-depth analysis of costs and revenue to determine if business model and financials are sustainable for next phase
- Determine if to scale project or to create first permanent location
- Buy out angel investors at 5x return

Phase 3

Goal: Launch full experience in permanent location(s), most financially demanding phase

Budget Allocation

- **Venue/Construction (35%):** Purchase/leasing permanent location, renovating, construction, insurance, utilities etc.
- **Operations (20%):** Inventory, supplies, maintenance, legal fees, etc.
- **Staffing (15%):** Full time employees, larger in house staff team in all departments
- **App/Tech development (10%)**: More advanced game systems, integration of more technology such as AR, 3D printing etc. App development to include more missions, game modes, and in-app features to tie in to physical games
- **Marketing (15%):** Larger scale advertising campaigns, partnerships with influencers, event/season launch
- **Other Misc (5%):** Other miscellaneous funds and back-up in case of emergencies or unexpected issues

Financing

- **Equity financing:** Venture capital as viable option as the business is proven to be successful, collaborations with large-scale companies both in the immersive space and the alternative reality app market
- **Equity crowdfunding:** Allow fans or early adapters to invest for equity
- **Sponsorships:** Promotion of products, advertisement, and collaborations inside the park to be sponsored by other companies (food, music, products etc.)
- **Revenue:** Portion of ticket sales, season passes, and memberships for funding without equity
- **Receivable financing:** Continue operations from phase 2, introduce new methods of gaining revenue, merch sales, cosmetics, etc.

<u>Exit strategy</u>

- Profit investment: Use the profits gained from the space to determine future operations and expansion. Consider how to create multiple locations, ponder franchising possibilities, or introduce new/different models of operations to test
- Acquisition or merger: If given a suitable/adequate proposal, considerations could be made to sell to larger companies (Meow wolf, Disney, etc.)
- Investor Buyout: Buy out investors where necessary to retain ownership over brand

Funding opportunities & Events

1. Founder Institute: gain guidance/mentorship for physical portion, potentially gain funding
   a. https://fi.co/investors
2. Tech coast angels: can help off set application costs
   a. https://tcaventuregroup.com/apply-for-funding-2/
3. Kickstarter: gain audience for IP, build community

Trade shows/building audiences
1. IAAPA Expo: physical attractions
   a. https://iaapa.org/partners/sponsorships
2. GDC: Can demo game, can enter competition for reward
3. Indiecade: gain audience

REVENUE STREAMS

Phase 1 - Revenue Streams

Other
4.0%

Pre-sale Tickets
16.9%
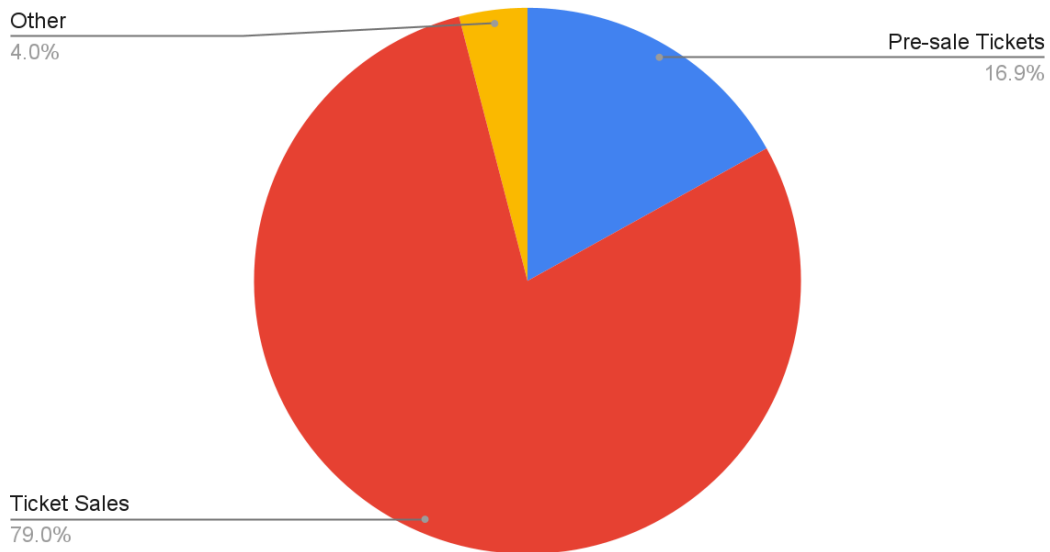
Ticket Sales
79.0%

Phase 1

- Pre-sale tickets
- Ticket sales

Phase 2 - Revenue Streams

Other
1.4%

Merchandise
8.7%

In-App purchases
5.0%

Pre-sale Tickets
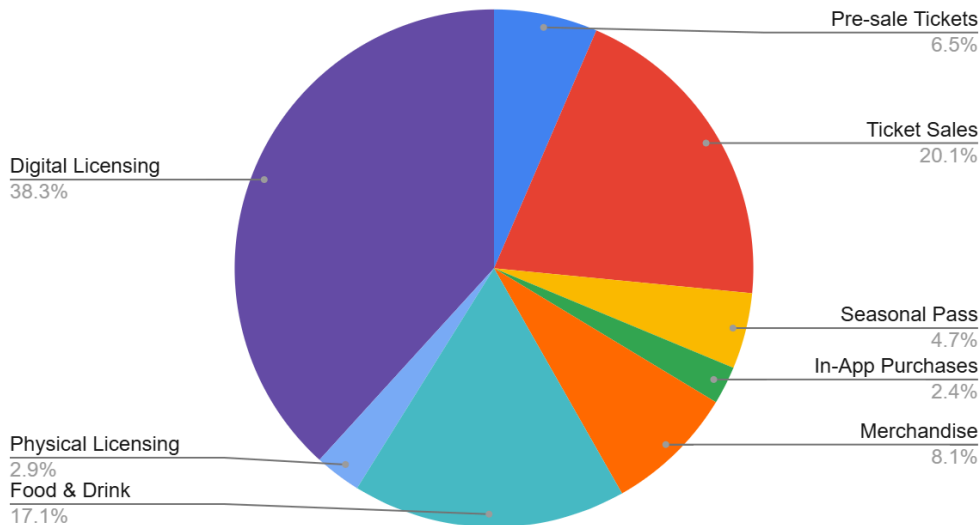14.9%

Seasonal Pass
26.5%
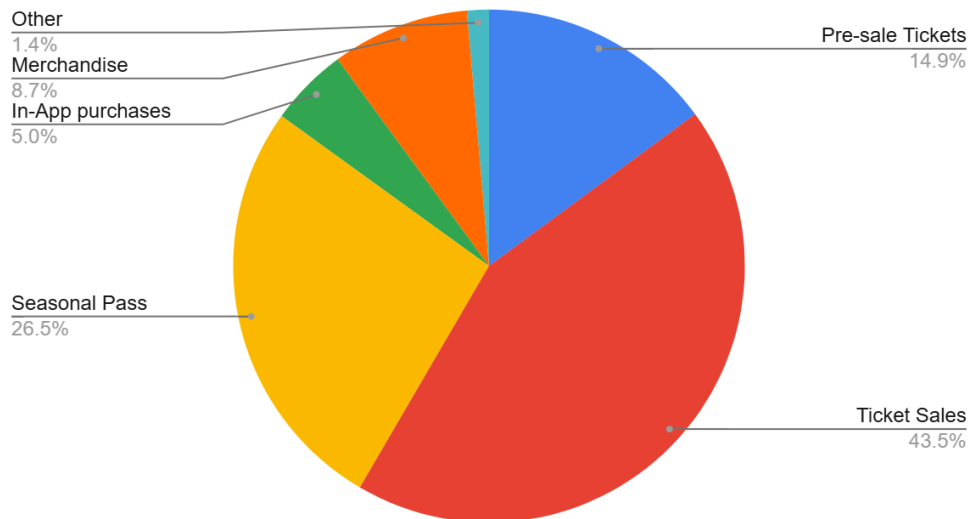
Ticket Sales
43.5%

Phase 2

- Pre-sale tickets

- Ticket sales
- Seasonal Pass
- In-App purchases
- Merchandise (in-house)

Phase 3 - Revenue Streams

Pre-sale Tickets 6.5%
Ticket Sales 20.1%
Seasonal Pass 4.7%
In-App Purchases 2.4%
Merchandise 8.1%
Food & Drink 17.1%
Physical Licensing 2.9%
Digital Licensing 38.3%

Phase 3

- Pre-sale tickets
- Ticket sales
- Seasonal Pass
- In-App purchases
- Merchandise (in-house or license)
- Food/drinks
    - Vending machines - Snacks (partnership)
        - Partner is responsible for maintaining and stocking machine
        - 50% of revenue cut from gross sales
    - Stalls - Quick meals (Burger, hotdog) - (partnership)
        - Partner is responsible for staff, stocking, and sales
        - 15% of revenue cut from gross sales
    - Tavern - Themed table service
        - In-house restaurant

- Licensing (Physical & Digital products)

MANUFACTURING

<u>Application software</u>
Since developing on IOS and Android separately would cost more, due to having two separate source code files, initial testing in phase 1 (pop-up events/conventions)will be done using a website/web app.

This saves costs and tests the structure of the application. It also means an app store submission isn't needed, and all revenue generated by the event won't need to factor in the cut taken by Apple/Google.

I did some research regarding the different platforms I could use:
https://medium.com/@fmmagalhaes/i-built-the-same-app-with-flutter-react-native-and-ionic-33ff8b358562
"An interesting way of assessing a framework's adoption is by checking the number of installed apps built with them. As of April 2024, in the United States, a notable 12.57% of the top 500 installed apps (from Play Store) were built using React Native, in contrast to Flutter, which holds a 5.24% share, and Ionic, holding only 0.52%."
https://www.joinsecret.com/compare/google-cloud-vs-aws-activate

For initial testing phase 1 (pop-up events):
In this phase, the focus is on affordability, simplicity, and ease of development for basic features.
- Development: Ionic (cross platform, open source)
- Cloud hosting: Google Cloud free tier
- Cost estimate:
    - Developers: $7,800
    - Graphic designer: $1,200
    - Backend server hosting: $200
    - Other features: $5000
    - Total: ~$15,000

For phase 2 (seasonal events)

In this phase, the focus is on fast development, affordable costs, and the potential to scale.

- Development: React Native (cross platform)
- Cloud hosting: Azure or Google Cloud
- Database: Firebase
- Storage and media hosting (photos/videos)
- Content delivery: Cloudflare
    - Developers: $58,000
    - Graphic designer: $2,000
    - App store/google store fees: $99 per year for apple, $25 for Google
    - Backend server hosting/Other features and costs: $30,000
    - Total: ~$90,000

For phase 3 (permanent location)
Due to the high amount of players and features inside the app, the software and tools required will emphasize high performance to ensure players have a smooth experience

- Development: Native, Swift for IOS, Kotlin for Android
- Cloud hosting: Azure or Google Cloud
- Database: Firebase
- Storage and media hosting (photos/videos)
- Content delivery: Cloudflare
- Google Maps SDK
    - Developers: $120,000
    - Graphic designers: $6,000
    - App store/google store fees: $99 per year for apple, $25 for Google
    - Backend server hosting/Other features and costs: $40,000
    - Total: $240,000

DISTRIBUTION

Business to Consumer

Direct access to the business's primary audience, allows for greatest control over data and presentation of experience. Can offer upgrades during check out such as season passes, premium in game packages (currency/cosmetics, starter kit), upgrades etc.

- Website/app: Ticket sales, bookings

- Social media: Eventbrite/other booking websites to list experience on, allowing algorithms to push experience based on user's interests
- Mailing list: Email information and discounts to interested parties, loyalty programs and return programs (to re-engage players who may have stopped coming)

Business to Business

Partnering with other businesses to build an audience based on their pre-existing consumers. Can draw in an audience that already has the need for the product.
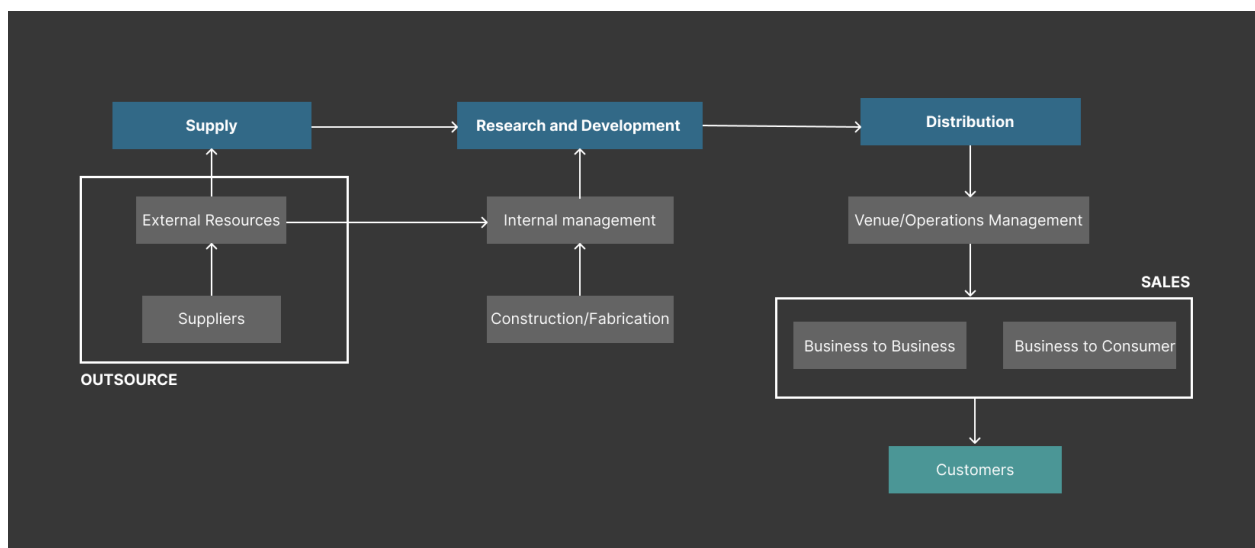
- Travel agencies and tour guides
- Corporate team building/school trip discounts
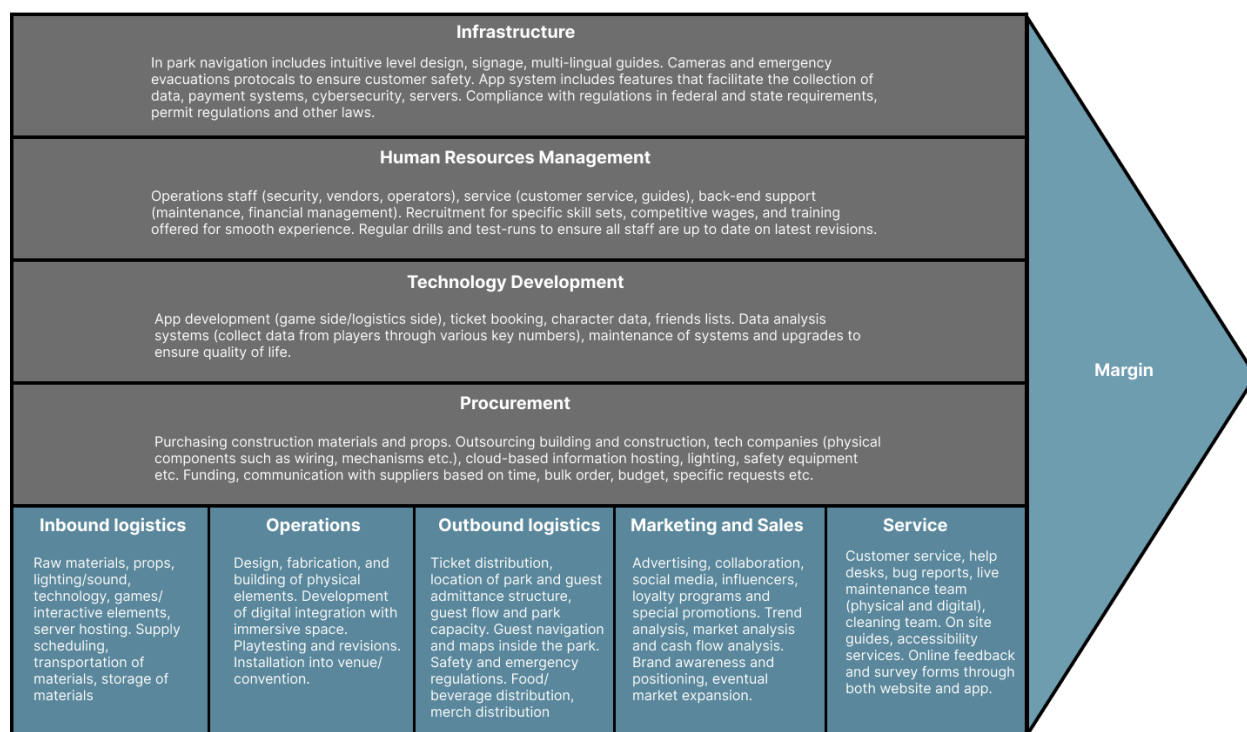- Private event hosting (galas, charity events, weddings, birthdays etc.)

Business to Business to Consumer

Using pre-existing channels for ticket sales can allow consumers who have pre-built trust in certain companies to feel more comfortable in purchasing tickets for the experience.

- Third party resellers or online travel agencies: Expedia, Booking.com, Groupon
- Influencer discount codes promoted on their social media platforms

SUPPLY AND VALUE CHAIN

Infrastructure

In park navigation includes intuitive level design, signage, multi-lingual guides. Cameras and emergency evacuations protocols to ensure customer safety. App system includes features that facilitate the collection of data, payment systems, cybersecurity, servers. Compliance with regulations in federal and state requirements, permit regulations and other laws.

Human Resources Management

Operations staff (security, vendors, operators), service (customer service, guides), back-end support (maintenance, financial management). Recruitment for specific skill sets, competitive wages, and training offered for smooth experience. Regular drills and test-runs to ensure all staff are up to date on latest revisions.

Technology Development

App development (game side/logistics side), ticket booking, character data, friends lists. Data analysis systems (collect data from players through various key numbers), maintenance of systems and upgrades to ensure quality of life.

Procurement

Purchasing construction materials and props. Outsourcing building and construction, tech companies (physical components such as wiring, mechanisms etc.), cloud-based information hosting, lighting, safety equipment etc. Funding, communication with suppliers based on time, bulk order, budget, specific requests etc.

Inbound logistics	Operations	Outbound logistics	Marketing and Sales	Service
Raw materials, props, lighting/sound, technology, games/ interactive elements, server hosting. Supply scheduling, transportation of materials, storage of materials	Design, fabrication, and building of physical elements. Development of digital integration with immersive space. Playtesting and revisions. Installation into venue/ convention.	Ticket distribution, location of park and guest admittance structure, guest flow and park capacity. Guest navigation and maps inside the park. Safety and emergency regulations. Food/ beverage distribution, merch distribution	Advertising, collaboration, social media, influencers, loyalty programs and special promotions. Trend analysis, market analysis and cash flow analysis. Brand awareness and positioning, eventual market expansion.	Customer service, help desks, bug reports, live maintenance team (physical and digital), cleaning team. On site guides, accessibility services. Online feedback and survey forms through both website and app.

Margin

IP RESEARCH

Patent

<u>What is the lifespan of your product?</u>
In phase 1-2: pop up events or semi-permanent locations that last from 1 day to 1 month.
In phase 3: permanent location that may span on indefinitely. Elements that can increase life span include consistent updates, new events, locations etc.

<u>How long do you think this patent will be valuable?</u>
If game features inside Catastrovia are unique enough, the patent will be valuable enough so that no direct competition can copy it immediately. It would be valuable for around 3-5 years before technological advancements are made to replace or innovate upon the feature.

<u>Will you file a provisional patent and then a patent, or go straight to the patent application? Why?</u>
If there is something patentable, a provisional license would be more effective. Since it's a game mechanic, technology or feature, it would be something that is iterated or tested upon. The provisional patent allows for

time to refine these features in that year before fully committing to the patent application. It is also cheaper which would fit the budget and scope of the project.

Is there a disadvantage to the technical drawings of your product being published on the patent website?
Yes, the disadvantage is that competitions might see and make designs that iterate upon it without copying it directly.

Briefly describe the problem that you were trying to solve?
There is a lack of spaces in entertainment where people can connect with each other and build relationships from scratch.

What solutions were used to solve this problem in the past?
Meetup groups, book clubs, DND clubs, escape rooms, theme parks.

What was it about each of these solutions that failed to solve this problem or did not solve the problem as well as your solution?
It can be challenging for people to stay friends after they meet up once or twice, and for activities such as escape rooms and theme parks people usually go with their own pre-existing friends and groups.

Describe your solution.
Catastrovia creates an environment where connections are naturally encouraged through the quests and activities inside the experience. The repetition and continuous returns to the same location allows players to maintain their new connections.

What makes it novel? Describe the functional and structural differences between your solution and the prior solutions.
It utilizes the combination of technology and physical elements. It uses the structure of the experience itself to encourage connections, rather than the activities.

What makes it Non-obvious? Describe all of the reasons why your solution would NOT be obvious to another inventor working on the same problem at the same time.

It is unconventional and focuses on gamification of entertainment experiences through the repetition of visit and character progression in a physical space. Most current entertainment types appeal to creating experiences for pre-existing player groups rather than building new ones.

Describe all of the results achieved by your solution.
- Facilitating new connections between players
- Gives player the freedom to choose how to engage in the experience, creates agency and personalization
- Accessibility into entering the experience (difficulty, pricing etc.)

What makes it useful? Describe all of the advantages of your solution over the prior solutions.
It offers consumers a new option, and a novel approach to making new connections that don't require pre-existing knowledge or skill of specific hobbies or interests.

Describe any disclosures of the invention to others that were not made under a confidentiality agreement and/or any sales or offers of sale of the invention and the dates of the disclosures/offers/sales.
Currently there are no sales of the project. There have been minor disclosures but without any specific details into project details.

Has anyone else contributed to your invention and, if so, what has their contribution?
Yes, at brainstorming game elements/game design for some elements of the park experience.

Trademark & Copyright
Did trademark search. No names found that are live, some similar names (ex. Catastrophe) that showed up in different industries.
In Entertainment industry the closest is:

Generated on:	This page was generated by TSDR on 2025-02-27 02:31:08 EST	
Mark:	CATASTROPHES	

CATASTROPHES

US Serial Number:	86320252	**Application Filing Date:**	Jun. 25, 2014
US Registration Number:	4688094	**Registration Date:**	Feb. 17, 2015
Register:	Principal		
Mark Type:	Service Mark		

TM5 Common Status Descriptor:

LIVE/REGISTRATION/Issued and Active

The trademark application has been registered with the Office.

Status:	A Sections 8 and 15 combined declaration has been accepted and acknowledged.
Status Date:	Feb. 18, 2021
Publication Date:	Dec. 02, 2014

▼ **Mark Information**   ▼ Expand All

Mark Literal Elements:	CATASTROPHES
Standard Character Claim:	Yes. The mark consists of standard characters without claim to any particular font style, size, or color.
Mark Drawing Type:	4 - STANDARD CHARACTER MARK

▼ **Goods and Services**

Note:
The following symbols indicate that the registrant/owner has amended the goods/services:
- Brackets [..] indicate deleted goods/services;
- Double parenthesis ((..)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks *..* identify additional (new) wording in the goods/services.

For: Entertainment services in the nature of an ongoing audiovisual series featuring cats provided through web casts; interactive online entertainment in the nature of a website containing non-downloadable video clips and a multimedia audiovisual series featuring the comedy of cats distributed via various platforms across multiple forms of transmission media

Which is not the same name, and also, not in the escape room/theme park industry. Catastrovia as a brand name has not been trademarked.

Do you have elements in your process or designs that can be protected under trade secrets?
In the future, algorithms for measuring player metrics, driving player progression, and other game play elements will be trade secrets.

Which classifications of trademark is your business operating?
Service mark (class 41): It's an entertainment space and this trade mark can protect the name, branding, and services provided by the park
Digital products (class 9): For the Catastrovia app, and branding associated with it

Which classifications will be valuable for you to own in the future?
Physical products (class 28): In the future if merchandise is sold at the park, like clothes, cosmetics, or other game play related physical products, the trademark can protect the brand

Why did you choose your brand name for your company?
Catastrovia is chosen because it is based on the word "catastrophe", believing that challenging times can bring people closer together.

<u>What would you like your customer to feel when they hear your brand name?</u>
Intrigued, that there is a conflict and story behind the name, wanting to learn more about it and discover the lore behind it.

<u>Can you build your brand name to have value for licensing in your industry or other industries? If so, which industries?</u>
In entertainment: video games, board games, TV shows/movies, books etc.
In retail: merchandise

<u>Do you have a brand slogan that you will also trademark?</u>
Not at the moment.

<u>Will you be filing for an "intent to use" trademark or "use in commerce"?</u>
Intent to use: Catastrovia is not yet on the market.

<u>What are the aesthetic features of your logo?</u>
Sci-fi, black and white, matches in game graphic stylization (no specific design at the moment).

<u>What will you copyright in your work? Make a specific list.</u>
- Characters
  - Tempo, Voitzren, other NPC characters
- Artwork
  - Any art created of characters, graphics, UI, and other features in the digital side of the experience.
- Text
  - Any story elements players can read in game
- Performances
  - In the future, if Catastrovia has its own in story bands or shows, these would be copyrighted
- Videos
  - Trailers, in-world advertisements, story videos
- Software
  - App, other in game technology needed to run physical components
- Technical drawings
  - Interaction Design diagrams - how player interact with the game

- ○ Technology architecture blueprints
- ○ Player experience maps
- Sculptural elements
  - ○ Any in park decorations, landmarks, or monuments that have been designed specifically to facilitate storytelling

How will you protect your copyrights?
Document the process of creating the various elements, make people sign NDAs for project details, file for copyright at the copyright office.

Will you file international trademarks? If so, in which countries?
Not at the moment.

Acquisition
Now
What type of IP will you acquire? be specific about the details.
- Brand name and Logo - Trademark protection
- Game mechanics/design details - Copyright
- App and digital elements - Copyright

One year from now
- New game mechanics - copyright
- Algorithms in app - copyright
- Merchandise - trademark
- Licensing agreements

List the vendors (even by type of work if you don't know the company yet) who you will need to perform services for you. Will you have employees or contractors? Indicate on the above list which are E and which are C.
- Game designers - C, eventually E
- Web developer - C, eventually E
- Graphic designer - C
- Manufacturing - C

Bring a timeline from your Business Plan so we can talk about when you should take various legal steps.
Phase 1 (pop-up event)

- Initial 3 months: Trademark registration for brand logo, name. Copyright game mechanics, app. Set up NDA agreements for project, find contractors
- Next 6 months: Copyright physical game elements
- After: Find licensing opportunities with partners, file additional copyright.

Who in your company will be responsible for handling legal compliance and interface with outside legal vendors (like law firms or even the Trademark Office).
- Contracting IP law firm(for complex details) + game founder responsibility(for simple elements)

LICENSING STRATEGY
Merchandising/Licensing
Merchandising will be licensed out to other companies. Starting off with physical merchandise since there are lower upfront costs, and can generate brand awareness while building revenue. Can be bulk manufactured.

This will be a royalty based license around 10% royalty for each sale.

The physical merchandising will be non-exclusive licenses since merchandise will also be sold in-house at the experience itself(does not include board games). Otherwise it is sold to other retailers for them to handle production and sales: Hot Topic, BoxLunch, Hasbro, UNIQLO
- Clothing (T-shirts, hoodies, bags etc.) with Catastrovia logo, characters, or other symbols.
- Stickers, buttons, posters with Catastrovia logo, characters, or other symbols.
- Figurines, collectibles
- Board games/puzzle boxes

Digital merchandise will be developed in phase 3 where there is enough popularity for the brand and enough revenue to sustain the business. The IP licensed out to companies will be used to branch out to wider audiences that enjoy other forms of entertainment and to bring in new players into the physical experience. These will have flat-fee payments with royalties if the product is successful.

- 15% royalties - Books (Novels, comics): HarperCollins, Dark Horse Comics
- Upfront fee and 5% royalties after success - Movie, Tv show: Netflix, Crunchyroll/Funimation, Legendary Entertainment
- Video games (Mobile, PC, Console)
  - Game studio license, 10% royalties: Ubisoft
  - Publisher, upfront fee and 5% royalties after success: Devolver Digital

Franchising

After the first permanent location of Catastrovia is established, franchising will be available so that elements will be provided for others to manage the experience. There will be resources provided for initial build out and continued support for updates made to the experience as a whole that will be reflected in each branch.

Elements provided
- Brand and IP (brand name, logo, story, game elements)
- Framework (Infrastructure for staffing, set-up, maintenance)
- Technology (Applications, physical tech)
- Merchandising (selling merchandise at franchising location)

There is a one-time fee to open a location, and an on-going 8% percent royalty earning.

For quality assurance, franchisees need to ensure a minimum investment for a venue (lease), staffing and training, app maintenance, and marketing. The build out elements and physical game props will be provided by the company, but the set up and construction costs will be paid for by the franchisees. Depending on venue size, the elements/games provided for the location would be different (ex. Smaller location: 2 puzzle machines, larger location: scavenger hunt set up)

Franchisees earn revenue from ticket and membership sales, and merchandise sales.

IMPACT MEASUREMENT
Part 1: Goal
What are you trying to accomplish?

Making a physical space with digital elements that fosters problem-solving, challenge, and reward when one engages in the activities alongside other players.

Who are you trying to accomplish this for?
Young adults who enjoy interactive spaces and want to make new connections.

Our goal is to [What?] for [Who?].
Our goal is to make a physical space with digital elements that fosters problem-solving, challenge, and reward when one engages in the activities alongside other players for young adults who enjoy interactive spaces and want to make new connections.

So what? In response to your goal statement.
So adults can enjoy interactive play in a public space

So what? In response to the previous response.
So people can build connections and friendships with those around them.

So what? In response to the previous response.
Having a place for people to meet will reduce the effect of the growing loneliness and isolation.

Our goal is to [What?] for [Who?] so that [So What?].
Our goal is to make a physical space with digital elements that fosters problem-solving, challenge, and reward when one engages in the activities alongside other players for young adults who enjoy interactive spaces and want to make new connections. So that a place for people to meet will reduce the effect of the growing loneliness and isolation.

Our goal is to [What?] for [Who?] so that [So What?] by [How?]
Our goal is to make a physical space with digital elements that fosters problem-solving, challenge, and reward when one engages in the activities alongside other players for young adults who enjoy interactive spaces and want to make new connections. So that a place for people to meet will reduce the effect of the growing loneliness and isolation by creating a space that fosters people to come back to the same experience again and again.

Part 04: CAPTURE
How will we know a change has taken place?
The change we are seeking to make: A world where people know where they can go to find like-minded friends.

The signals we will use to pick on that change: The number of friends in an average user's friend list inside the Catastrovia app

The methods we will use to capture insights: Number metrics in app

Part 05: EVALUATE
How will you accomplish this work?
By building the Catastrovia app with a friend list feature and having backend monitoring for friend list values and charting the information.

Part 2: Picture success
What changes do we want to see...

community/cultural level
A world where it is easier for adults to make friends.

organizational/environmental level
A world where adults have adequate public places for interactive play.

interpersonal/relationship level
A world where lonely people can find a place to build connections in their local community.

individual (including behavioral) level
A world where people know where they can go to find like-minded friends.

Think about what the person's daily life is like...
What will they see and feel?
Feel more motivated to go outside and interact with others near them.

Who or what will they interact with?

Challenges and rewards given in the experience when they work with others around them.

What changes will they experience in their life?
Feel more connected to their local community, have more friends and contacts

Part 3: Identify
How will we know a change has taken place?

The change we are seeking to make
A world where people know where they can go to find like-minded friends.

The signals we will use to pick on that change
- Number of tickets sold at our park
- The number of friends in an average user's friend list inside the Catastrovia app
- The amount of people who have visited or heard of Catastrovia

Ethical impact & Sustainability
Review the Okala impact metrics, the Iris metrics. How will you include each or some of these in your business?
I reviewed the IRIS metrics since it applies to my project. I want to make sure that Catastrovia is sustainable and ethical. The metrics measure how organizations manage their environmental, financial, and social impact. I will use them to guide future business decisions.

Other Ethical considerations
During my interview with the expert from the escape room industry, he mentioned something called a B-corp, corporations that meet a certain standard of environmental considerations, and their treatment of their workers. He also mentioned that I was doing my case study on Meow Wolf, they're actually a B corp.

With that in mind, I want to strive to make Catastrovia a B-corp. I need to meet the environmental and social standards.

Applications

Environmental aspects: Tracking water/energy use and finding sustainable and renewable sources, recycling props and materials, reduce emissions for transportation of materials, using digital tickets rather than paper, waste management for customers (recycling), sustainable materials for merchandising, partnership with eco friendly programs, publish sustainability reports

Social: Fair wages for employees, giving employees a voice in decision making, accessibility (ramps in physical location, app settings, subtitles etc.), hiring a diverse team, investment back into local communities/partnership with local community, track consumer feedback and make improvements,

Financial: Having multiple revenue sources, analyzing backend data from app to create most effective pricing methods and reduce unnecessary costs, accessible ticket prices, donation to causes aligned with theme of Catastrovia (meeting people/loneliness - mental health)

MVT PROTOTYPE TESTS
MVT #1
During this MVT test, players were added to the same Catastrovia Discord Server. On the server many channels simulated the app experience.

1. Review story channel in # story
In this channel, you will learn the basics behind why you are involved in the world of Catastrovia. Your overall goal is to help Tempo and the humans left in Catastrovia restabilize new earth in the time stream by completing various missions set out by Tempo's organization, the Temporal Order, as well as make a name for yourself in the world of Catastrovia.

Once you have done so, ping me in # general , and I will set up a character profile for you.

2. Review Catastrovia profile # catastrovia-profile
After I create your custom channel, you must review the catastrovia profile channel for a blank template for your character, as well as read over the example to see what to include in your character. Do not worry about the # stats channel, as that will be managed by me.

3. Create personal profile
Copy and paste the template from # catastrovia-profile , and fill out details of your original character.
When this is done, ping me in # general , and I will give you the @Active Player role

4. Review missions board
When the game starts, details about the mission will be posted in the missions board channel.

5. When you have completed the mission (don't worry about it until you have), please answer the survey pinned in # announcements

5. (Optional) talk to tempo, socialize with others in character, and learn more about the game world
Talk **in-character** (this means as your character's personality) inside of # comms with other players, you can also direct lore related questions at Tempo to learn more about the game world. (edited)

Players had to read the story about the world's lore, and backstory before registering their characters inside of the game. This ensures the players have a sense of recognition and familiarity with the world before being able to participate in the physical experience. This was to test the digital and physical integration portion of the experience.
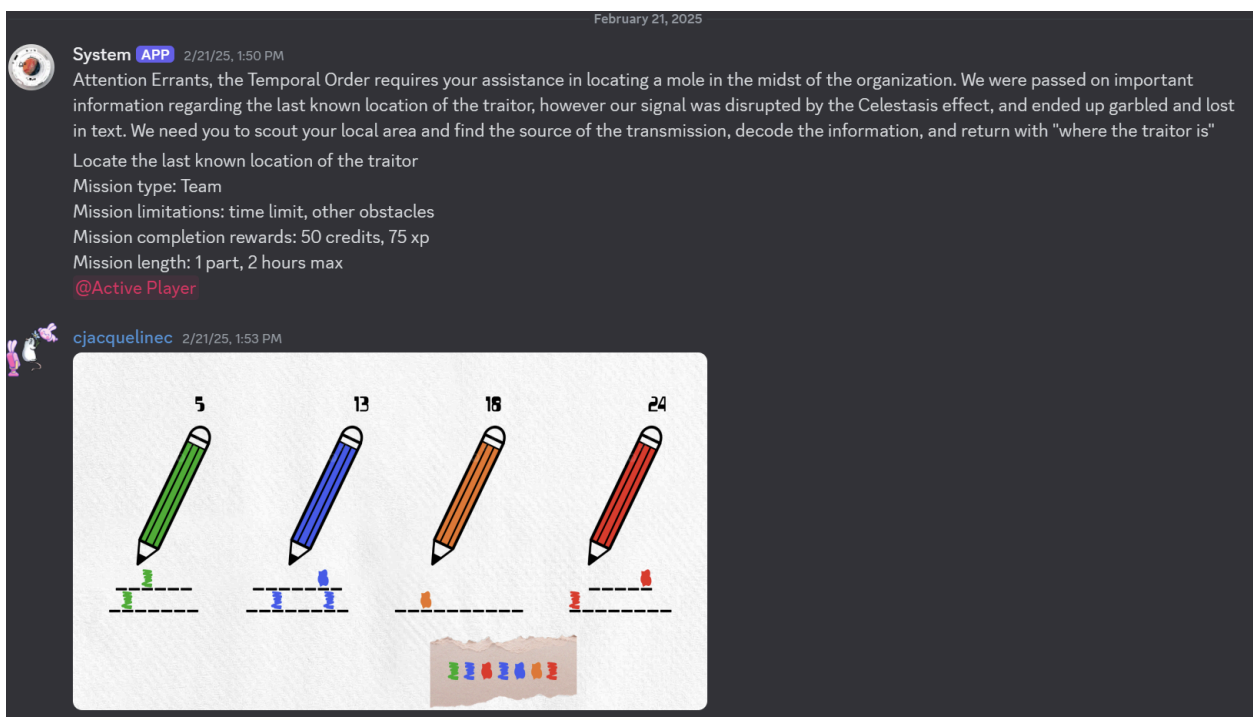

System APP 2/19/25, 9:02 PM
File 0-A123 [ACCESS GRANTED]

In 2057, a higher being from the cosmos named Voitzren had planned to wipe out certain planets from the galaxy, and earth was destroyed by a meteor. Other humans on different planets at the time witnessed this event, and realized their home planet was destroyed.

One individual in particular, a human named Tempo, mourned the loss of his home planet. He wanted more than anything to recreate it. Using the leftover meteor and higher technology, he was able to recreate an imperfect version of earth. This new planet is a fragment of earth with many issues, the primary one being Celestasis.

Celestasis is a condition in which the earth is "frozen" in time. The earth is blended in with other fragments of space. Due to Celestasis, those who are on earth are essentially trapped there, however Voitzren also cannot directly harm or destroy earth because no being from the outside can enter its barriers.

Tempo knew that Voitzren still posed a threat to humanity, and thought that the Celestasis gave humans time to develop their technology to eventually find a way to escape the time barrier and overcome Voitzren. Tempo disappeared into Catastrovia, with no one knowing his true whereabouts. Tempo had created many trials for those who wish to find him, saying that those who can overcome all of his challenges will be the ones that are capable to destroy Voitzren and save Catastrovia.

Character Name: Foetor
Personality & Demeanor: Cautious, experienced, tired
Background & Motivation: Foetor is old enough to remember what life was like back on Earth. The sunshine, the rainbows, the beauty is simply unmatched by any other planet. That being said Catastrovia comes close enough. Foetor will defend it with his life to make sure the next generation can make Catastrovia a better place. Its likely that he isn't going to make it out of this alive, but he didn't have many years left anyway.
Skills & Strengths: Observation, combat experience, strategist
Weaknesses & Fears: Slower reflexes, fears dying alone
Appearance:

There were 6 players inside this playtest. Most with minimum interactions/previous relationships with each other. All of them were game design students.

There was a channel for players to roleplay and talk to in-game NPCs (controlled by me, the DM), to create a sense of immersion.

Foetor (Kevin) 2/20/25, 7:08 PM
I'm getting too old for this shit *heavy sign*

Acsel <Vice-Commander of the Temporal Order> `APP` 2/20/25, 7:23 PM
The state of Catastrovia is a disaster, and now we've got no choice but to call in outsiders. But I'll tell you this, whatever doubts I've got about the Order, I don't have them about you. Prove me right.

When the playtest started, I gathered all the players in-person on ArtCenter hillside campus, and at the same time added the task the players had to complete in the server's in-game mission's board. During this playtest, I wanted to test what the player's experience was like if everyone had to work together.

February 21, 2025

System `APP` 2/21/25, 1:50 PM
Attention Errants, the Temporal Order requires your assistance in locating a mole in the midst of the organization. We were passed on important information regarding the last known location of the traitor, however our signal was disrupted by the Celestasis effect, and ended up garbled and lost in text. We need you to scout your local area and find the source of the transmission, decode the information, and return with "where the traitor is"

Locate the last known location of the traitor
Mission type: Team
Mission limitations: time limit, other obstacles
Mission completion rewards: 50 credits, 75 xp
Mission length: 1 part, 2 hours max
@Active Player

cjacquelinec 2/21/25, 1:53 PM

After the mission was posted, players began to explore the campus, trying to find physical elements that align with the clues. During this time, players typed in the channel in-character (role playing) to interact with each other. There was also a high level of engagement between players and the NPC to ask for hints for where the location is.

KayneTheBurr 2/21/25, 2:01 PM
Hey losers let's hurry this up

Acsel <Vice-Commander of the Temporal Order> `APP` 2/21/25, 2:02 PM
I believe the symbology of the pencils is relevant to this location... I sense a strong force of relevancy in the relic

DuanD 2/21/25, 2:05 PM
What is the color stand for

Acsel <Vice-Commander of the Temporal Order> `APP` 2/21/25, 2:05 PM
I believe it is the color of the relic itself. There is no special meaning other than for identification
Errants, I sense the energy signature is not near the area you are in, perhaps there is another area you could investigate?

DuanD 2/21/25, 2:06 PM
Does EMRX sounds familiar?

Acsel <Vice-Commander of the Temporal Order> `APP` 2/21/25, 2:07 PM
I do not think EMRX is relevant to the case

Eventually, a player points out the similarity between the puzzle and the ArtCenter hillside's donation wall.

Charlee 2/21/25, 2:13 PM
oh wait!
do you still remember there were many pencils near the gallery
and they have colors
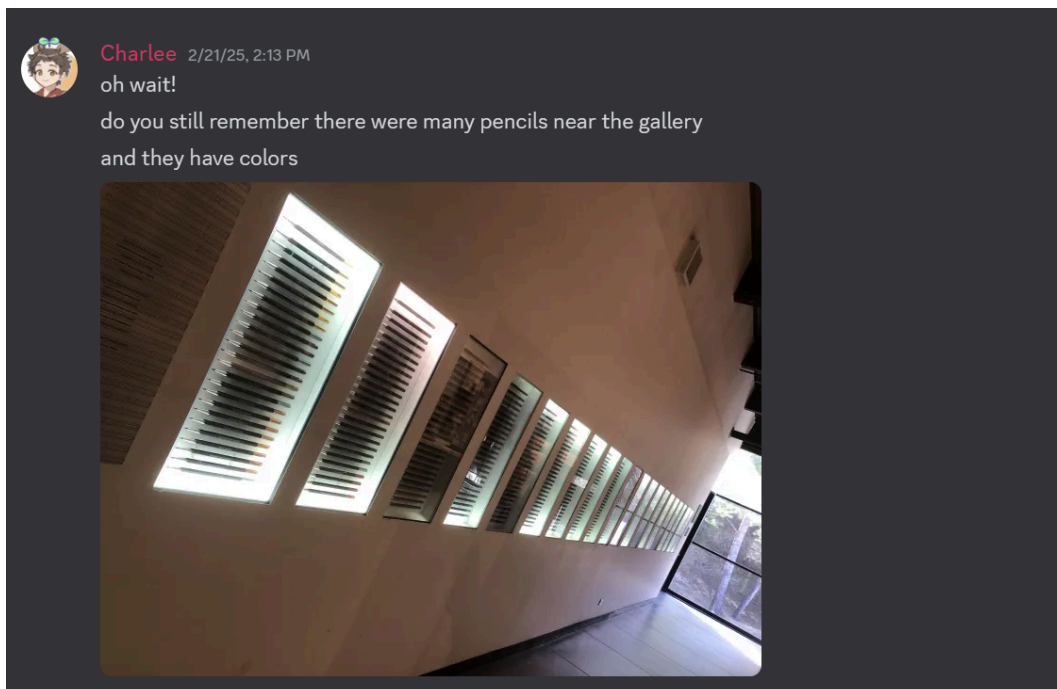
The players make their way over to the location and begin solving the puzzle. During this period I've observed players working together, asking questions to NPCs and generally being able to figure out the case on their own.

Eventually, players found out the final answer, which is where the traitor was located. The story however is not concluded, as they are hinted towards a second part of the experience to come, where they find the actual traitor. This builds up anticipation and drives players to want to continue the story (return to play again). Players are also rewarded for their efforts in their in game stat channel for completing the mission.
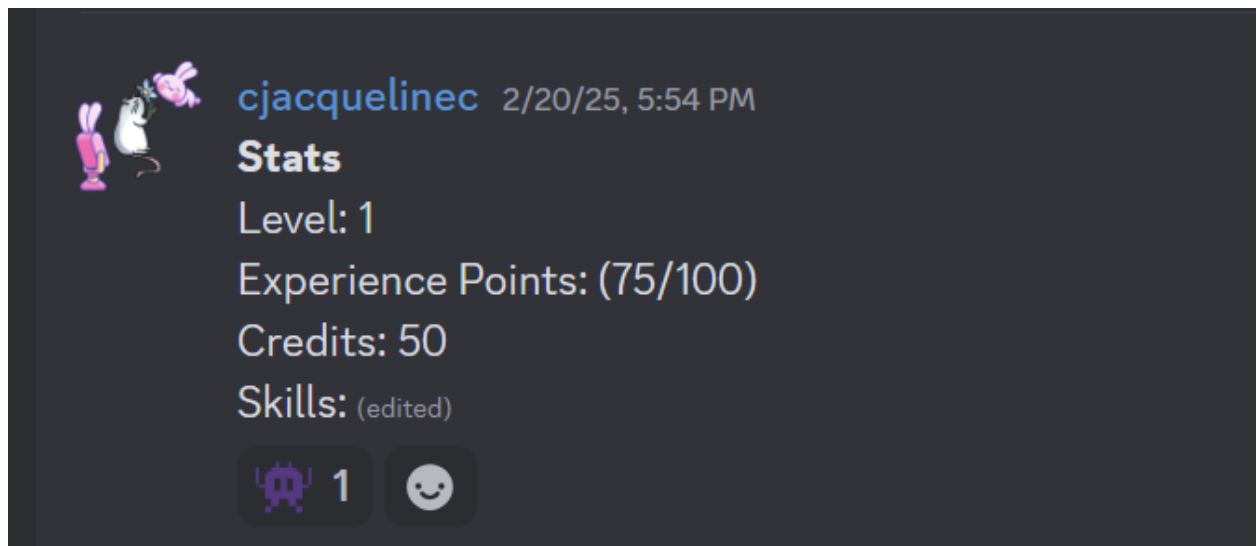
Survey results

After the playtest, the players are given a survey to fill out about their experience as well as some general questions about Catastrovia's experience in general. The survey was anonymous and players filled it out individually.

The age range of the playtesters are around the target audience, being young adults. This information will be more relevant later on when I test with different groups.

How old are you?
6 responses
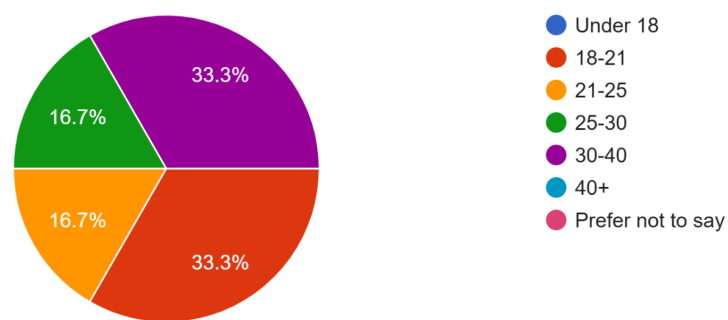
The next question I asked was regarding the typical entertainment types a player would engage outside of this experience. The top answers were cinema and park/nature related activities. I asked this question in order to figure out what elements of Catastrovia would be appealing to this type of audience, as well as what top competition the experience will face regarding how the audience would spend their time on entertainment.

What do you typically do for entertainment outside of the home? (Select all the apply)
6 responses

Theme parks & amusement pa…	1 (16.7%)
Escape rooms	2 (33.3%)
Concerts & live music venues	2 (33.3%)
Arcades	2 (33.3%)
Cinemas & film screenings	3 (50%)
Museums & exhibitions	2 (33.3%)
Bars & nightlife	1 (16.7%)
Sporting events	1 (16.7%)
Parks & nature activities	3 (50%)
none I don't go outside	1 (16.7%)
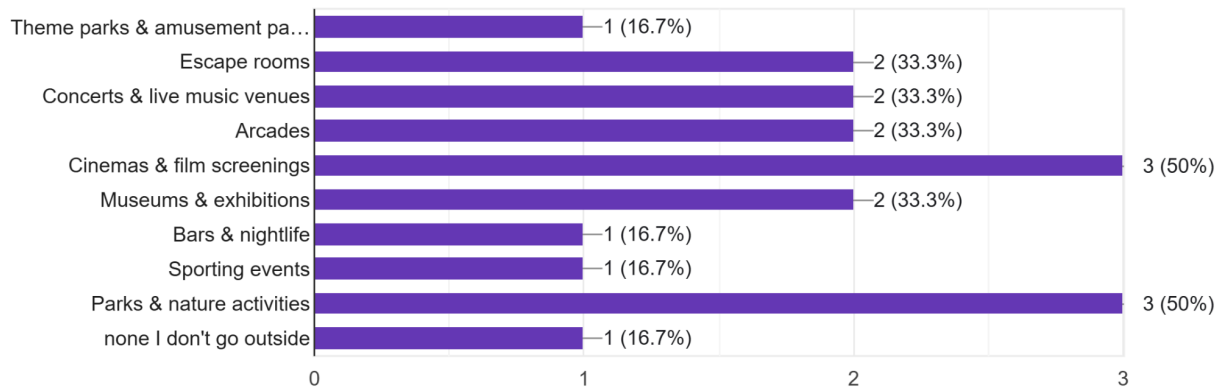
The next question is regarding the experience the playtesters had with escape rooms. This allowed me to gauge the level of experience players had previously, and figure out even if rudimentary players/experienced players would enjoy the experience. In this playtest, most players had moderate to no experience with escape rooms.

How much experience do you have with escape rooms?
6 responses

1	2 (33.3%)
2	1 (16.7%)
3	3 (50%)
4	0 (0%)
5	0 (0%)
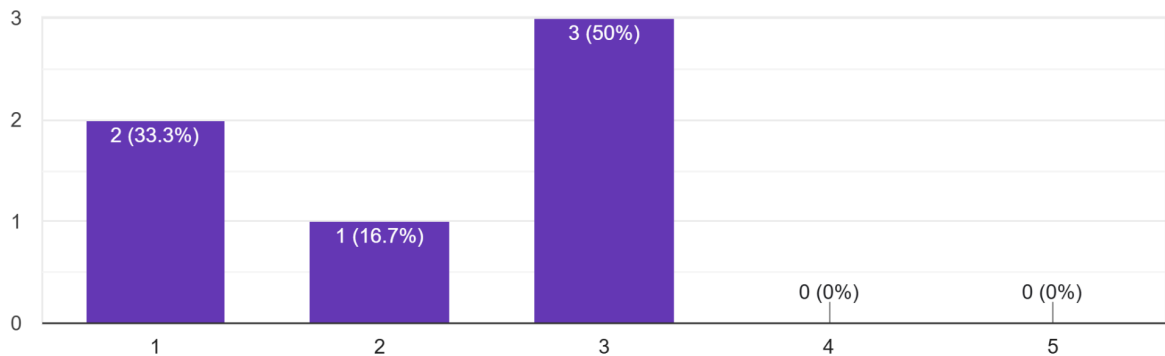
The next question similar to the previous question is regarding the playtester's experience with theme parks. This is because Catastrovia will have a more non-linear format, similar to how theme parks allow players to explore on their own terms. The answers of the players are also on the moderate to no experience level.

How much experience do you have with theme parks?

6 responses
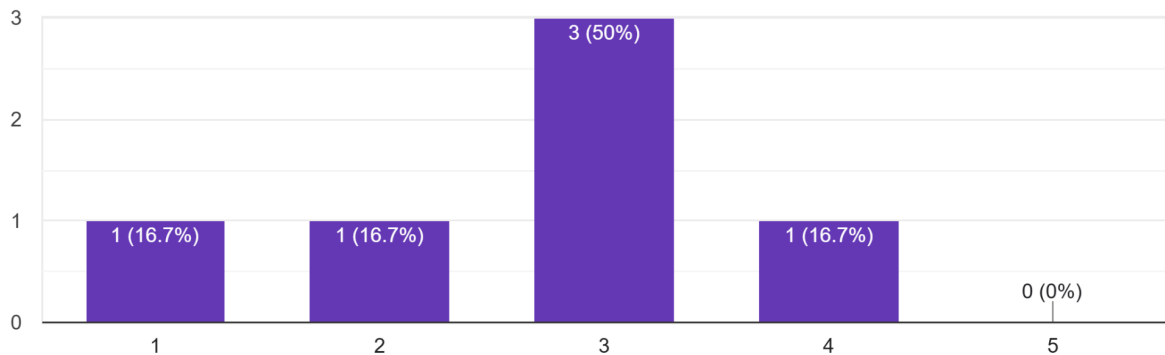
The next question was about if players felt there was something missing from traditional escape rooms/theme parks/immersive experiences. This is a part of research about whether there is a need for Catastrovia to be something unique that deviates from the traditional formats. The majority of participants noted that they did feel there was something missing.

Have you ever felt that traditional escape rooms or theme parks lacked something you were looking for?

6 responses

● Yes
● No
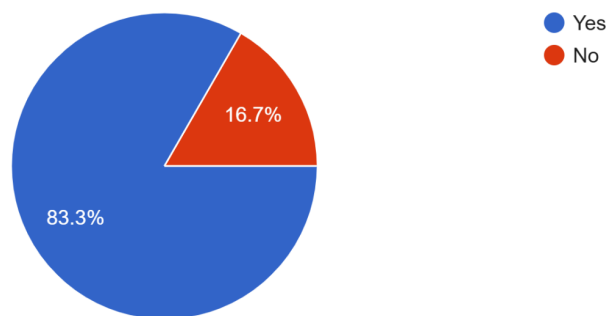
From the players who answered yes to the question, a follow up question was made available to them. This question was specifically asking what players felt was missing. The top answers are being too expensive, not being interactive enough/not enough roleplay, and not enough freedom to explore or make choices. These elements give insight in what directions Catastrovia could branch out in to fulfill player needs.

What do you think is missing from traditional escape rooms or theme parks?

5 responses

Not interactive enough / wante…	3 (60%)
Too predictable / wanted more…	2 (40%)
Lacked a strong story or immer…	1 (20%)
Too short or limited in experien…	1 (20%)
Too expensive for the experien…	4 (80%)
Lacked replayability or ongoing…	2 (40%)
Not enough freedom to explore…	3 (60%)
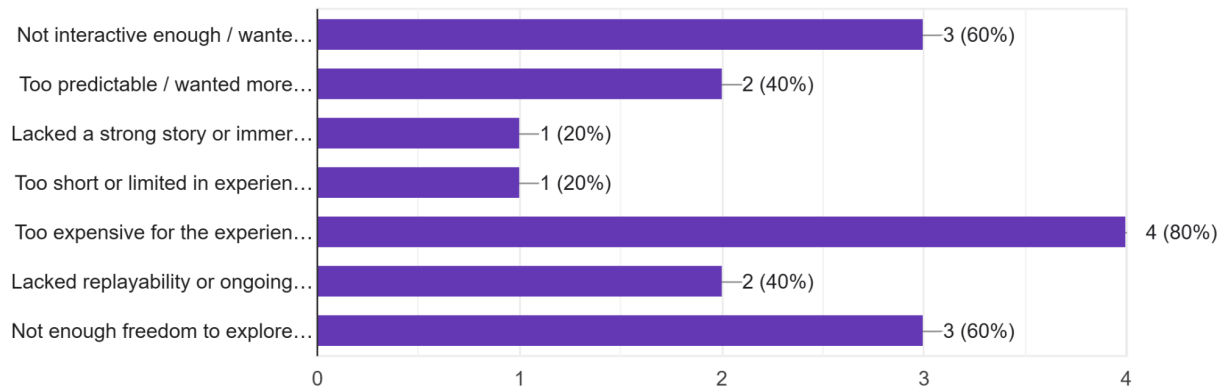
The next question was regarding player engagement during the MVT playtest. Very uniformly everyone answered 6/10. This meant the experience was above average in terms of engagement, but needed more improvements.

On a scale of 1-10, how engaged did you feel during the experience?

6 responses
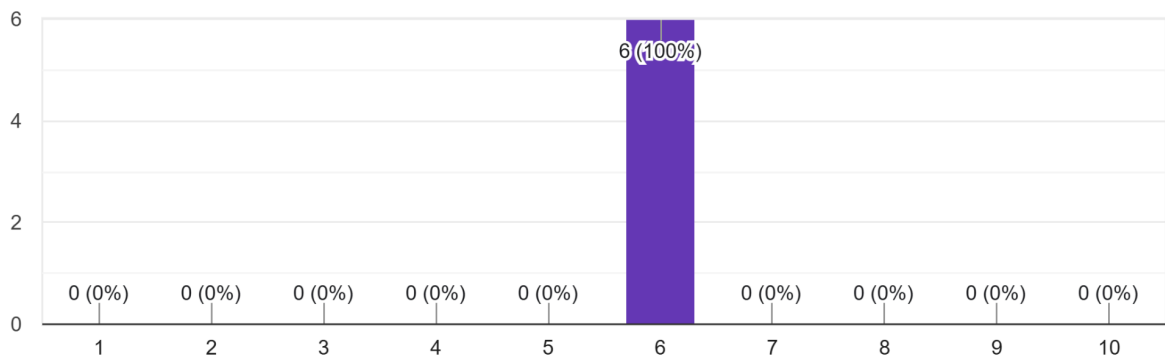
The next question was regarding, which parts the player found the most engaging during the test. The top answers were teamwork and exploration. This again, gives insight on what the stronger points of Catastrovia are.

What aspects of the Catastrovia experience did you find the most engaging?
6 responses
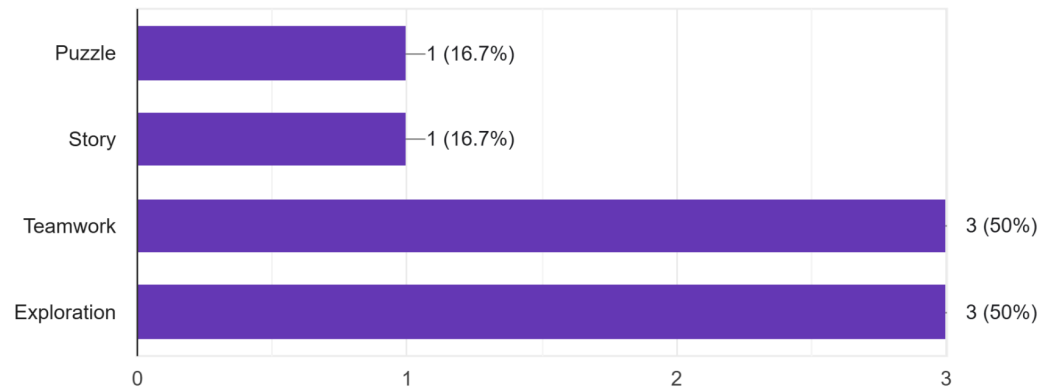
The next question is regarding player retention and their willingness to return to play again. Players answered yes to this question. A follow up question was asked for what specific improvements players would like to see in order to want to return. Some answers included: more intuitive puzzles, having a guide figure during the game (like D&D), more incorporation into story during the puzzle, having more puzzle types, more online components/digital components, and a stronger tie into the real world with story world.

Would you play again? Why or why not?
6 responses
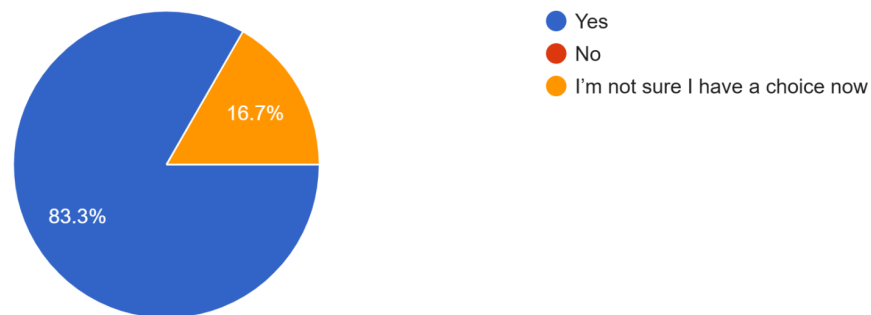
The next question is regarding onboarding new players and willingness for word-of-mouth marketing through players. Players are willing to bring new players to play the experience.

Would you invite your friends to play? Why or why not?
6 responses

- Yes
- No
- I think the group size is good as is
- When design is properly tested

16.7%
16.7%
66.7%
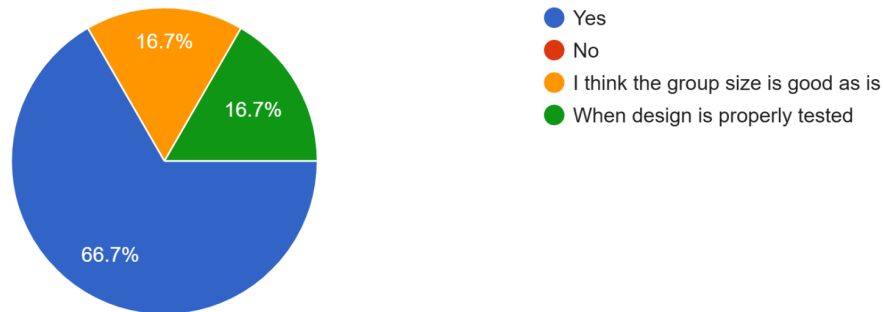
A follow up question is asked to this question, of what marketing/promotions the experience could provide for players to want to bring their friends to play. The top answer is exclusive in-game rewards.

What incentives would encourage you to bring friends? (Select all that apply)
6 responses

Exclusive in-game rewards	4 (66.7%)
Badges/trophies	1 (16.7%)
Discounts for group play	3 (50%)
Merch or collectibles	3 (50%)
Unlocking new story content	3 (50%)
What are friends	1 (16.7%)
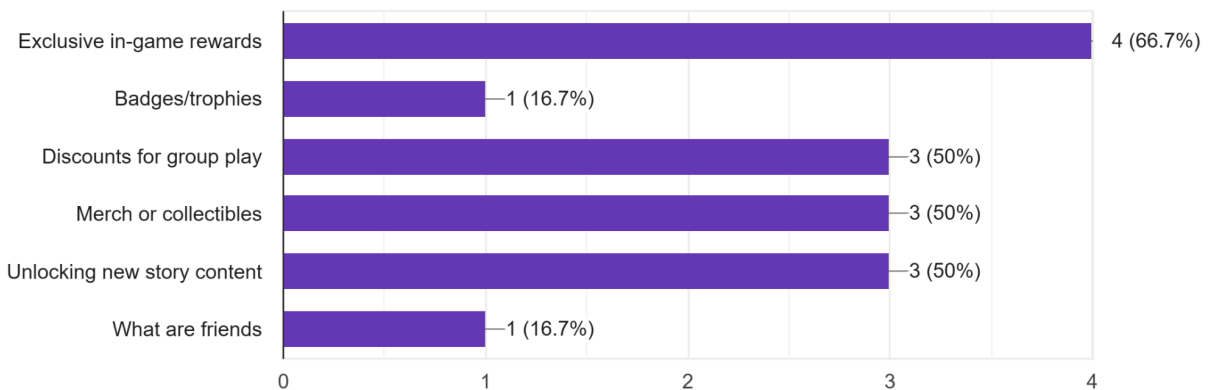
The next question is regarding the ticket pricing of the experience. The majority of players prefer a free experience with premium add ons, while some mentioned a $10-20 range. This is useful information to gauge how phase 1 pop-up events of the experience could decide on pricing of tickets/cost structure. Similarly, the question following that is about payment schemes, with players preferring one time ticket purchase followed by free with premium add ons.

71

Would you pay for this experience (with more missions/variety of gameplay)? If yes, how much do you think is a fair price?

6 responses

- Free
- Free + Premium Add-Ons
- $5-10
- $10-20
- $30-50
- $50-100
- $100-200
- $200+

33.3%
16.7%
50%

For payment schemes, would you prefer:

6 responses

- A one-time ticket purchase per session
- A membership model with unlimited access
- A free-to-play model with premium content available for purchase

33.3%
16.7%
50%
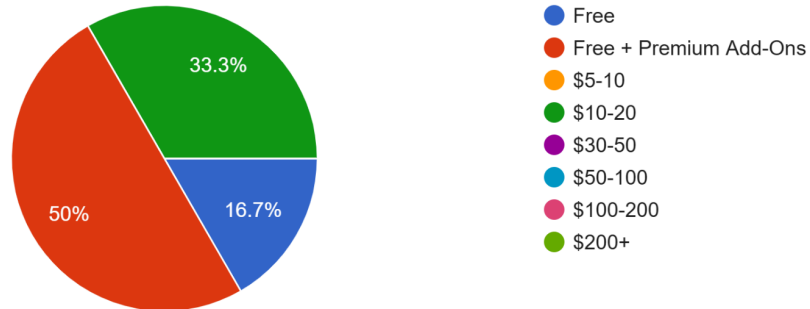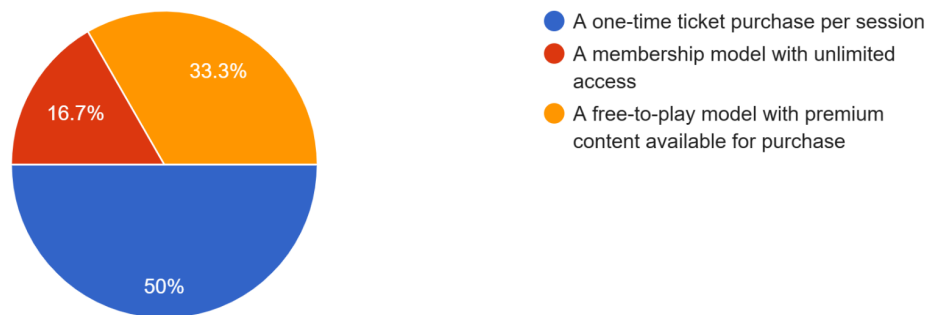
The next question was regarding the player's engagement with the narrative. The question asks if the player's character creation has enhanced their experience. There is a mixed response here, with some players thinking that it did not make any significant difference, while others think the character creation helped them get into character more. Interestingly, one response was that a physical prop would help them get into character, which is something Catastrovia would provide during a real experience launch.

The next question was regarding the theme of the experience. Where players prefer a fantasy theme to the current theme of Catastrovia of Sci-fi. It could be a clue to pivot to thematically shift to a more magical related story, depending on other playtest results.

What genre or theme would make the experience more exciting for you?
6 responses
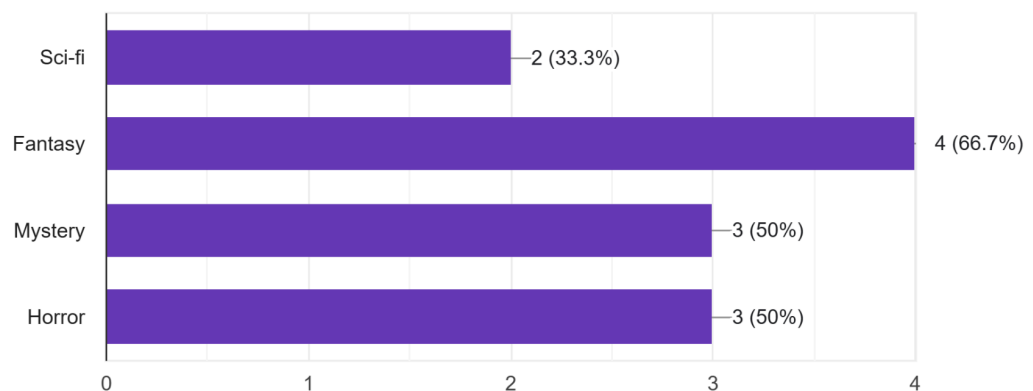
The next section of the survey asks about collaboration, being a core element of Catastrovia. The majority of players mentioned that by working together, they were able to solve the puzzle easier and had more fun.

Did you enjoy working with others? Why or why not?

6 responses

Meh sometimes

yes, I can contribute a little

It was fun solving a puzzle with a team

Yes, I couldn't solve that puzzle if just me

Yes

Yes, team work makes things easier and more interesting.

How did the teamwork aspect affect your experience? (e.g., made it more fun, frustrating, challenging, rewarding)

6 responses

Good for looking for clues and puzzle solving

yeah, is more easier

It helped move the experience along thanks to other points of view (aka Charlotte carried)

Made it easier and more fun

More fun, little party game, because I feel like the character we made didn't really used their characteristic

It makes my experience more fun and rewarding.

The next question was gauging if the Catastrovia experience allowed them to grow closer to other players. The current game mode tested in this playtest was to put a group of players together to achieve the same goal, with no additional encouragement from the system for them to work together. Players seem to have a moderate amount of growth of closeness between them. This data will be used to compare against other game modes, to see which would drive the most amount of connections between players.

After participating in this experience, how much closer do you feel to other players you didn't previously know/aren't friends with?

6 responses
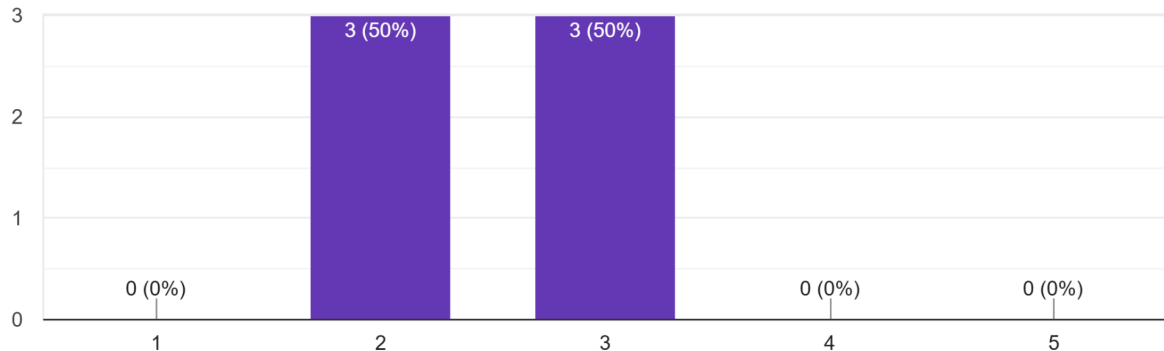
The next question asks whether players would want a solo experience or not. From the data, it seems players prefer a team-based experience and some have no preference. Due to the unfamiliar circumstances Catastrovia would place a player in, this data points towards players wanting to have some form of company as they explore the world.

Would you prefer a solo option or is team-based play essential to the experience?

6 responses

- I prefer solo
- I prefer team
- No preference/Both
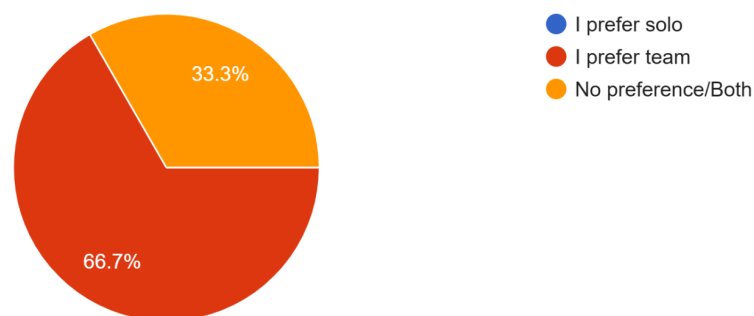
The next section asks about the branding of Catastrovia. The first question is about the general impression of Catastrovia as an entertainment format. The second being what is the closest comparison it has to other entertainment forms. The top answer being escape rooms. This gives information on what to reference in terms of marketing, branding, and game formatting.

How would you describe this experience to a friend in one sentence?

6 responses

A scavenger hunt

walking around campus

Silly ARG with Sci-fi elements

Braincell burning

Cool

This is an interesting experience that stars like TRPG and then go to live action puzzles.

How does this experience compare to other immersive experiences you've tried, what is the closest comparable?

6 responses

Escape room	4 (66.7%)
Theme park	1 (16.7%)
Art exhibit	0 (0%)
Convention	0 (0%)
Event	0 (0%)
I don't play these type of game	1 (16.7%)
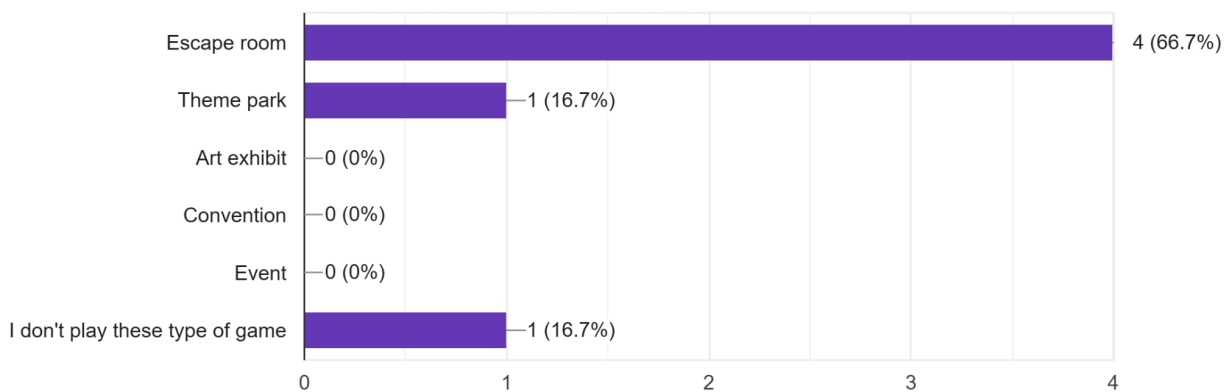
Finally the last question is regarding if players have encountered similar experiences before. The vast majority of players have not experienced anything similar to it. This shows Catastrovia is a unique experience and its gameplay format is something not yet well known in the market.

Have you played similar immersive experiences before? If so, which ones?

3 responses

I don't play these type of game

Yes in other escape rooms

No really, theme park could be one but it was a long time ago

Conclusion

During the first MVT test many useful pieces of information were learned, where the basic structure of digital and physical components are tested together. It seems players enjoyed the character creation portion, but wanted more engagement within the game structure itself for the story. Players are able to get a little bit closer to their fellow team members, but there isn't any significant growth. Player retention is strong since players want to play the game again.

MVT #2

For the second MVT test, I wanted to test whether an application should be the focus of Catastrovia rather than the physical space. This test was created after learning information about leasing in physical locations and how there are many factors and considerations that could be difficult to manage. The test will check the viability of a pop up event format that does not require a lease that a physical location would need. It gives insight into what should be the focus of the initial start up, the app or the physical location.

The other element I wanted to test was if a more competitive game format would encourage players to build connections more than a collaborative one. Although players created their character profiles inside the server, this time there is less of an emphasis to use their characters since they will be talking to each other in person. I wanted to see how much of the story element would drive player engagement, and if it is something players find essential to the experience.

To start the test, a new game mode was created in the Catastrovia server and posted on the missions board.

In this game mode, 6 players met up at the Del Mar station at Old town Pasadena. I divided the players up into 3 teams of 2 people. Each player teamed up with someone they did not know previously.

Players were then given the instructions to use their phones to take pictures of various items in the environment, with a bingo board detailing exactly what they should photograph. Green tiles mean easy items to look for, yellow tiles mean moderately difficult items to look for, and red tiles mean difficult items to look for. When players finish looking for all items in a row (horizontal, vertical, or diagonal), they earn additional bingo points.

Players were then given 1 hour to look for as many things as possible. Each team had their own channel inside the server where they could submit their items.
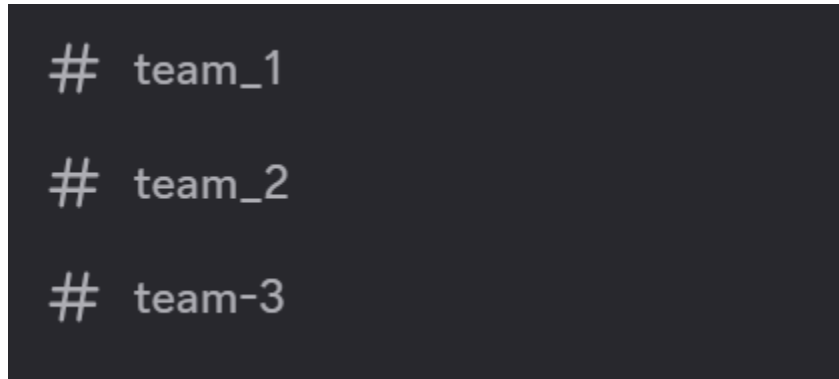
As soon as the timer began, the teams started to wander around the old town area to take pictures of various items. I decided to follow one of the teams to further observe their experience.

I saw that due to the nature of the game, players who don't know each other began to communicate organically in order to complete the task. As players walked around the area, they also started to pay more attention to their surroundings, increasing a sense of exploration.

Players explored a variety of locations, such as parks, busy commercial areas, as well as indoor locations to find the various items listed on the bingo board.
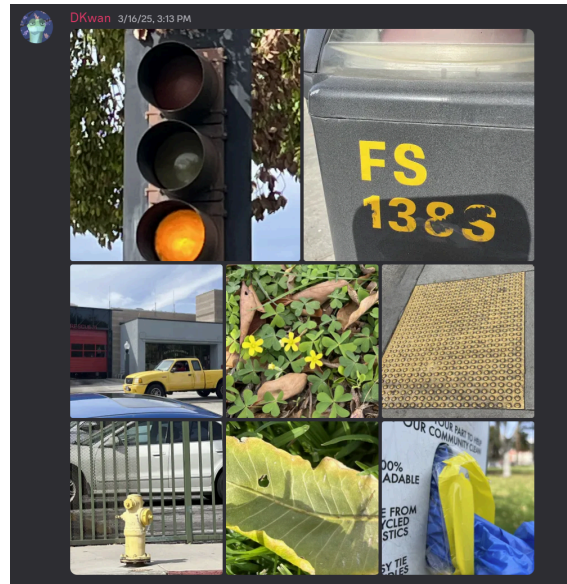
As players began to submit their photos, I quickly realized it was hard to keep track of exactly what they were submitting. I asked for players to name exactly what they wanted to submit, but due to the time constraints and the fast paced nature of the game, many players forgot or found it difficult to do so.
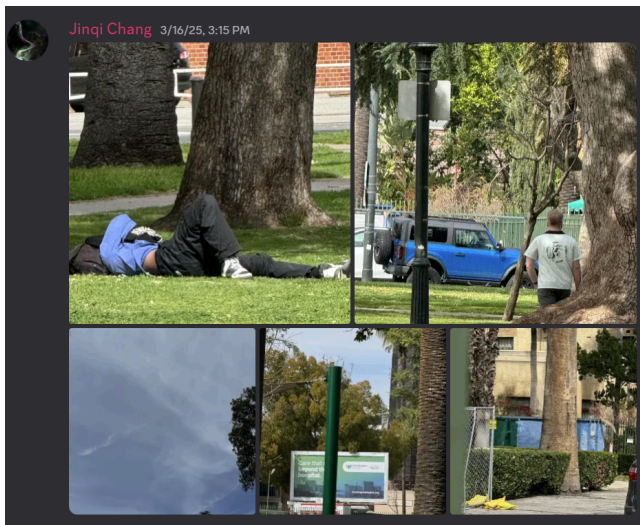
Similarly, when tallying points, I had to manually check the progress of each team's bingo boards and cross out sections, as well as count the points by hand.

This made me realize what parts of the process should be automated in the actual Catastrovia experience.

Elements such as submitting finds for exploration can be automated with QR codes, barcodes, or other automatic systems inside the app. When these elements are submitted, the app itself should automatically cross off bingo board sections and award players with points.

cjacquelinec 3/16/25, 3:46 PM
15 minutes left

Samtaro 3/16/25, 3:15 PM
Red things
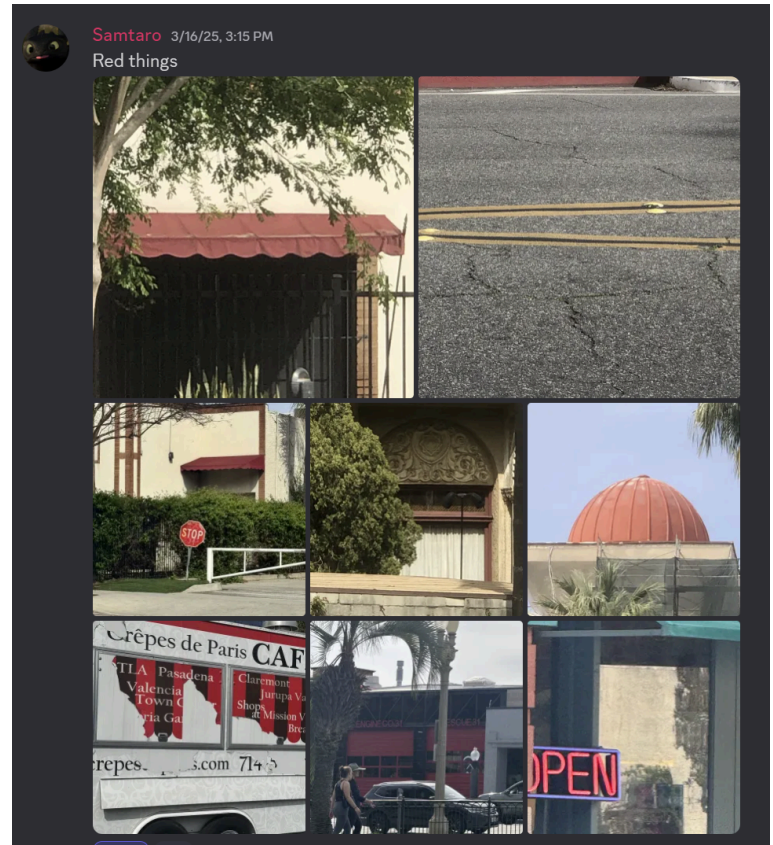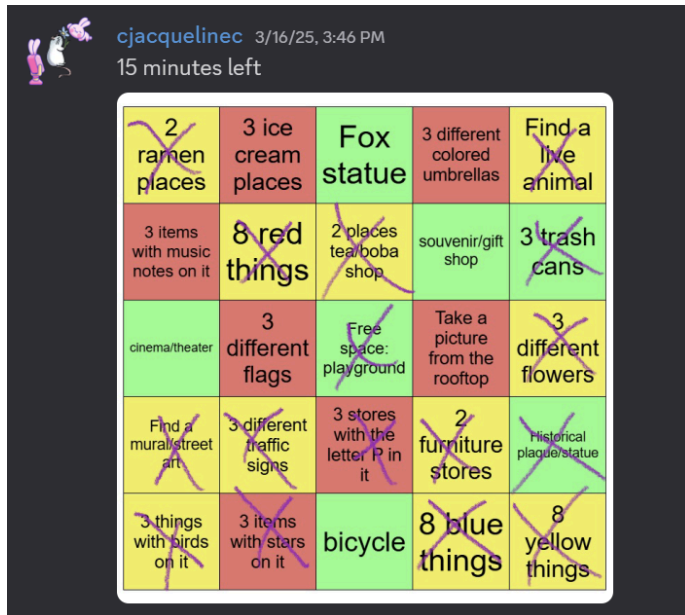
Another aspect of the app I think I want to include is to create a progress bar that will be visible for all the teams.

When I gave updates on how many points the other teams were doing, as well as how close players were to overtaking them, it gave players a renewed sense of urgency and excitement for the game.

In the app, this can be translated to a UI that tells the player how others are fairing, as well as how many more points they need to earn in order to overtake them.

In terms of the game's story, players were introduced to a new character that is a "Lumen Specialist". Lumen in Catastrovia means photographs and other imagery, and this character symbolizes the amount of expertise the player will slowly gain. From this mission, the player's rewards for winning are XP and in-game credits, but there is also a new reward called the Lumen Novice Mark.
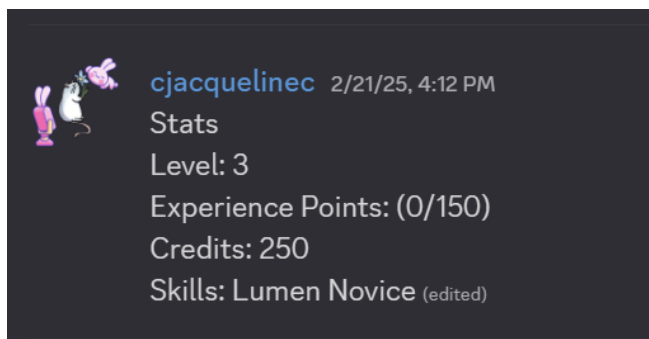
This mark means players have reached the rudimentary level of this skill, and as a result they can take on other Lumen type missions in the future, since some missions will require players to have a certain skill level in order to participate. This acts as a difficulty gate and creates an incentive for players to return to improve their skills. Returning players for this playtest have leveled up and gained more credits.

By the end of the hour, the results were in.

Nuria <Lumen Specialist of the Temporal Order> APP 3/16/25, 4:12 PM
By the power vested in the Temporal order, I declare the winners to be:

🥇 first place: team 2 with 120 points
🥈 Second place: team 1 with 82 points
🥉 Third place: team 3 with 48 points

The leading team had 120 points. This meant they found almost everything in every single tile except for 2 red tiles.

I noticed that this was due to player experience, since the members of that team were very familiar with the old town area, whereas on the other teams, especially the players in third place, were not as familiar with the area, putting them at a disadvantage.

This made me think about how if Catastrovia had a physical space, the loyal players that spend a lot of time

exploring the space would have an easier time. This could be frustrating for players who don't know the location as well as the others. As a result, the app should have some kind of in-game backend system that tracks how much time a player has spent playing inside the location to create more balanced teams.

Survey Results

For the survey, I added some new questions and now with new data, I will compare relevant numbers to the previous survey.

For information about this group of playtesters, I found that they were overall more familiar with games and physical themed experiences than the previous playtesters for MVT #1.

The first question was to gauge the age group of the testers. This was similar to last time but without the 30-40 player age group.

How old are you?
6 responses

- ● Under 18
- ● 18-21
- ● 21-25
- ● 25-30
- ● 30-40
- ● 40+
- ● Prefer not to say
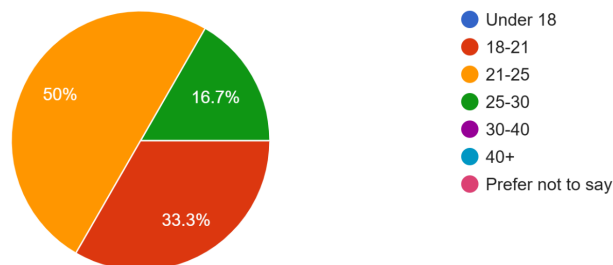
The second question was to ask what were the leading entertainment activities people did outside of their homes. This time, the top answers were theme parks and escape rooms, compared to the last test, where the lead answers were cinema and natural parks.

What do you typically do for entertainment outside of the home? (Select all the apply)
6 responses

Theme parks & amusement pa…	5 (83.3%)
Escape rooms	5 (83.3%)
Concerts & live music venues	3 (50%)
Arcades	2 (33.3%)
Cinemas & film screenings	4 (66.7%)
Museums & exhibitions	4 (66.7%)
Bars & nightlife	2 (33.3%)
Sporting events	2 (33.3%)
Parks & nature activities	4 (66.7%)
restaurants	1 (16.7%)
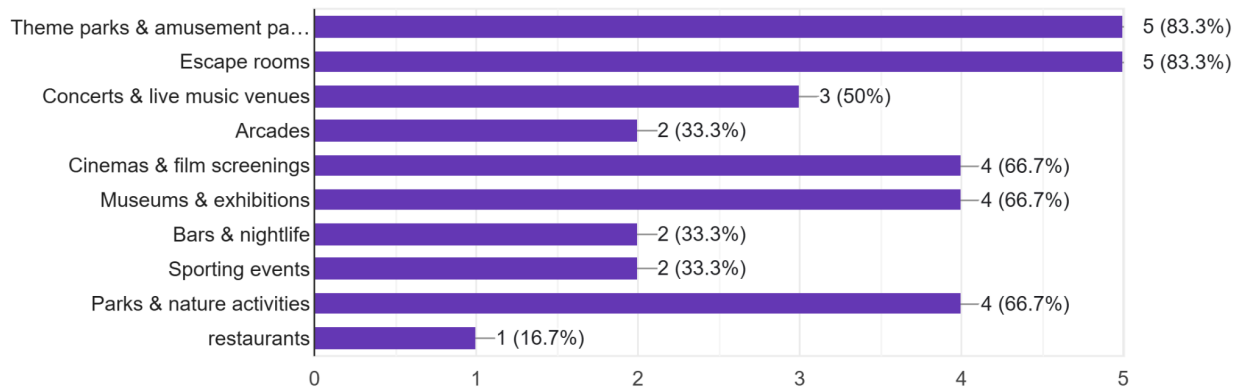
For experience with escape rooms, there is a slight increase in familiarity with these groups of playtesters. Similarly, there is a slight increase in familiarity with theme parks as well.

How much experience do you have with escape rooms?
6 responses

1	2	3	4	5
1 (16.7%)	2 (33.3%)	3 (50%)	0 (0%)	0 (0%)
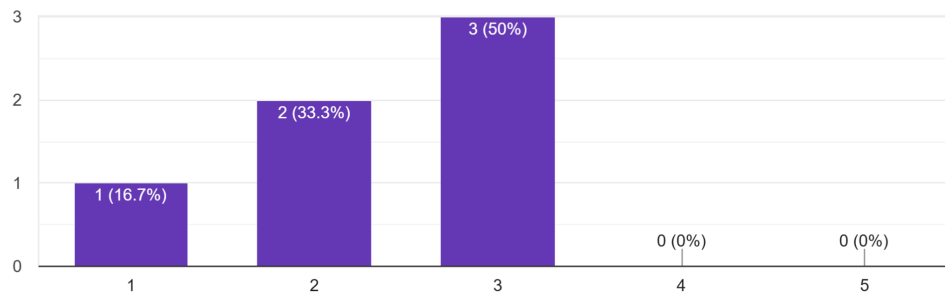
How much experience do you have with theme parks?

6 responses
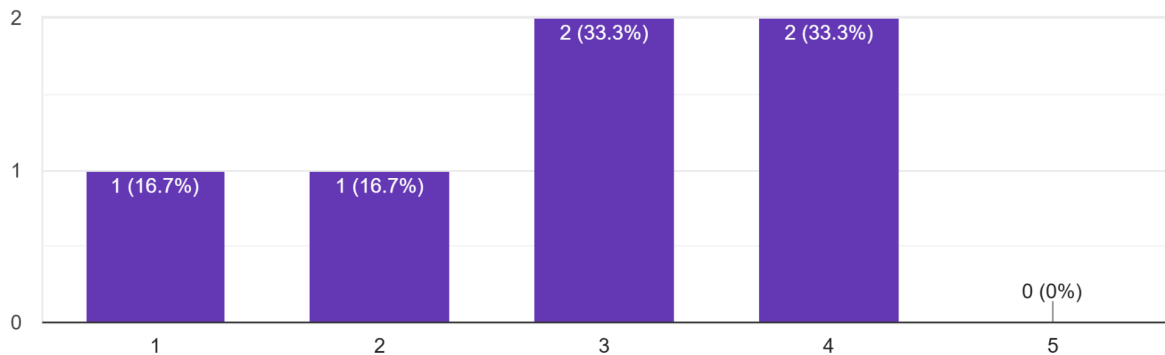
The next questions were about what players found lacking in traditional immersive experiences. There are some very similar results from the previous survey, with top answers being price and wanted more immersion/roleplay.

What do you think is missing from traditional escape rooms or theme parks?

4 responses
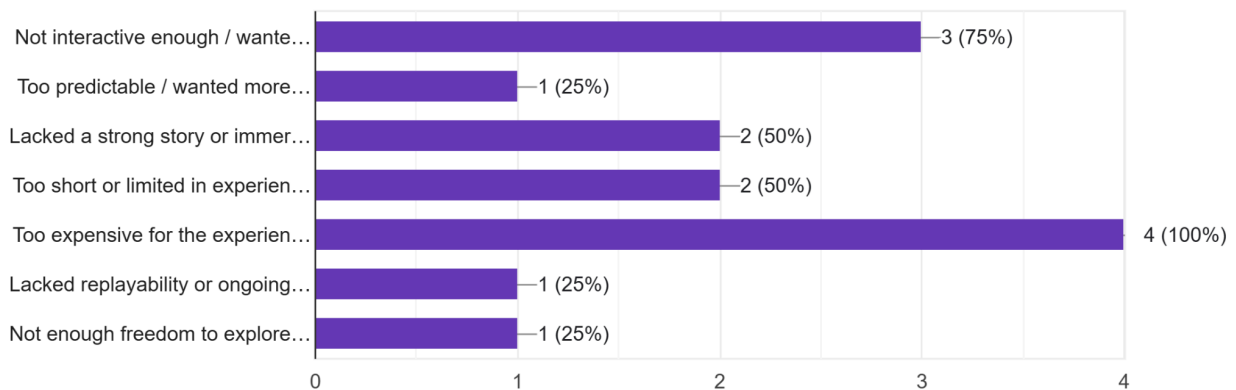
The questions for the next section are about the playtest they had just participated in.
For player engagement, there is an interesting variation of engagement levels compared to the last survey where everyone answered 6/10.

This time some players felt the player was so engaging they scored it a 10, whereas others found it less so and scored it a 4. This means there is an

average engagement of 6.5/10, making it slightly more engaging that the previous game format.

On a scale of 1-10, how engaged did you feel during the experience?

6 responses
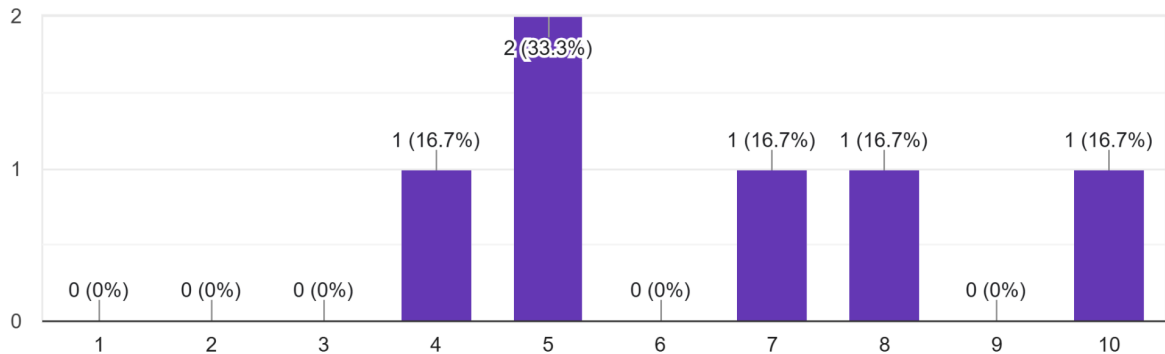
For what elements were the most engaging, players answered teamwork and exploration. This is similar to the previous survey. One tester added a comment about the story and world being interesting, but felt a disconnection in the actual experience. This result shows that the story is something players find important, and the emphasis on this should be something Catastrovia should focus on.

What aspects of the Catastrovia experience did you find the most engaging?

6 responses
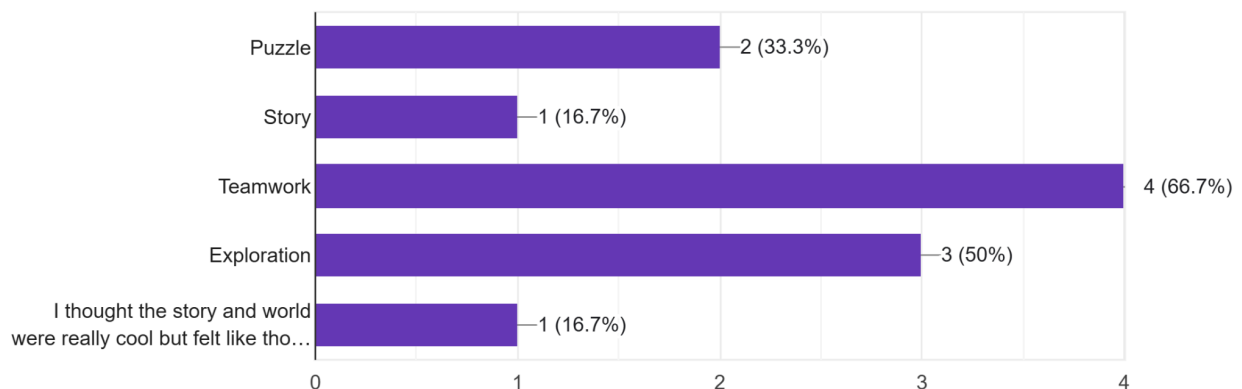
The next question was about whether players would return to play again. Players once again emphasized the importance of the game's narrative. One

player mentioned that this type of game mode would be something they would not want to participate in if they were tired, since there is a lot of walking around. This made me realize the importance of having a variety of different game modes inside of Catastrovia, so that players who are seeking different types of entertainment can all find something valuable inside the experience.

Would you play again? Why or why not?
6 responses

- Yes
- No
- If the scavenger hunt was more tied to the world, yes
- yes when leisure, no when tired & unamiable event area
- I would play again if the scavenger hunt was more thematically aligned with the narrative and story world
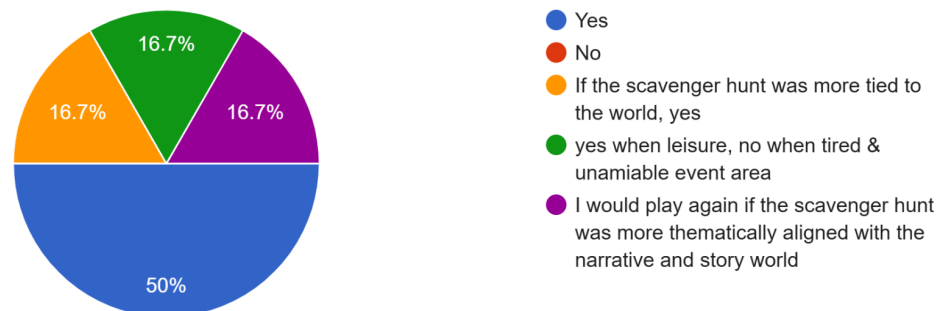
For the preference of indoor versus outdoor locations, players have expressed they prefer an indoor location over an outdoor one. This means the focus of Catastrovia should be less on the application and more on the physical space.

What did you think of the outdoor location of the game?
6 responses

- I prefer indoors
- I prefer outdoors
- No preference/Both
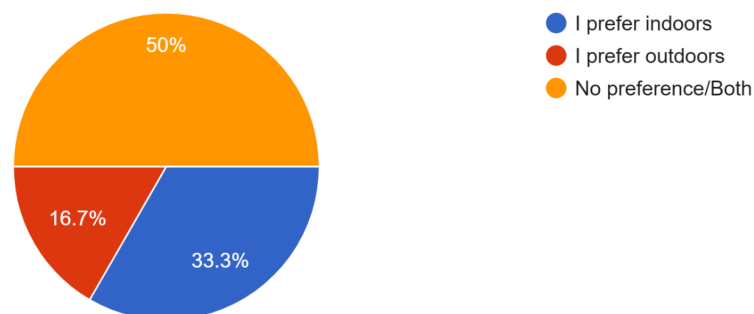
For what improvements players would like to see with an outdoor game mode. They wanted stronger emphasis with story and character with the gameplay. They wanted some kind of guide on how to play the game before

the game starts. Some players wanted more direct competition, for the game mode itself, such as being able to take away resources or points from other players.

One element that drew my attention was the player that mentioned they wanted an area limitation so that it's easier for players to navigate the space. This can be difficult with an outdoor location. As a result, this is more data pointing towards having a physical indoor space being something players would want.

What improvements or additions would make you more likely to return?

6 responses

If the scavenger hunt was more tied to the world, I would be more inclined to play again. Scavenger hunts are fun in itself, but this one felt a bit disjointed from the story - where we had to create a character profile that ended up not tying into the playtest either

orienteering, which save a lot of energy, and make the game more controllable.

I would want the scavenger hunt / puzzle to be more related to the narrative and story world. The world and narrative initially felt compelling to me when reading about it but the scavenger hunt had very little relation to it in my opinion. The objects we were tasked with finding didn't feel like they had a relation to the story or were not narratively contextualized in a way that related them to me. I wasn't able to feel immersed in the story / world while playing because I didn't feel as if there was theming done to set the experience for the player. (For example, if the story was read aloud to all the players right before the scavenger hunt, that would help set the experience and get players in a more engaged mindset). I also felt like the characters we made before hand had no impact on the puzzle. If our created characters each gave us a more unique experience in the puzzle / overall experience, that would make it more likely for me to play again.

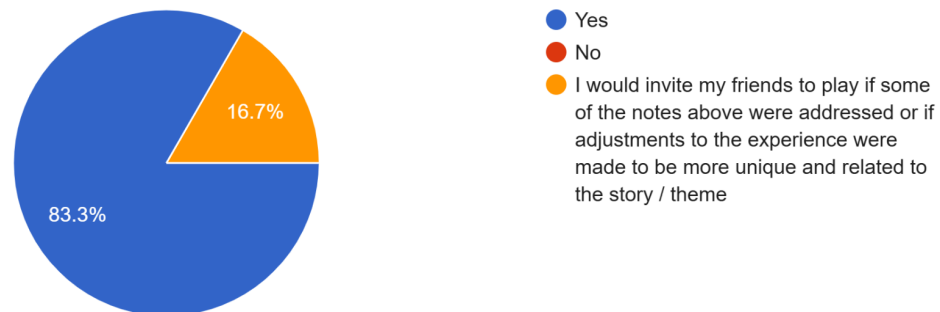More direct competition, more theme driven content.

It will be much better if the designer can give a area limitation like a marked map, and more clear hints for people new to the place.

Puzzle and storytelling can be more relevant

For inviting friends and bringing in more engagement, players agreed they would want to with adjustments to the experience that made it more engaging.

Would you invite your friends to play? Why or why not?
6 responses

- ● Yes
- ● No
- ● I would invite my friends to play if some of the notes above were addressed or if adjustments to the experience were made to be more unique and related to the story / theme

For future Catastrovia plans, this section asks about player's impressions of the financial and marketing aspects of Catastrovia.

This time, the top answers for incentives to bring new players into the experience are exclusive in-game rewards, and discounts for group play. There is also a significantly larger amount of people who are interested in badges in trophies compared to the last playtest. This is likely due to the fact that this game mode was competitive, and that winners wanted some element that allows them to brag about their achievements.

What incentives would encourage you to bring friends? (Select all that apply)
6 responses
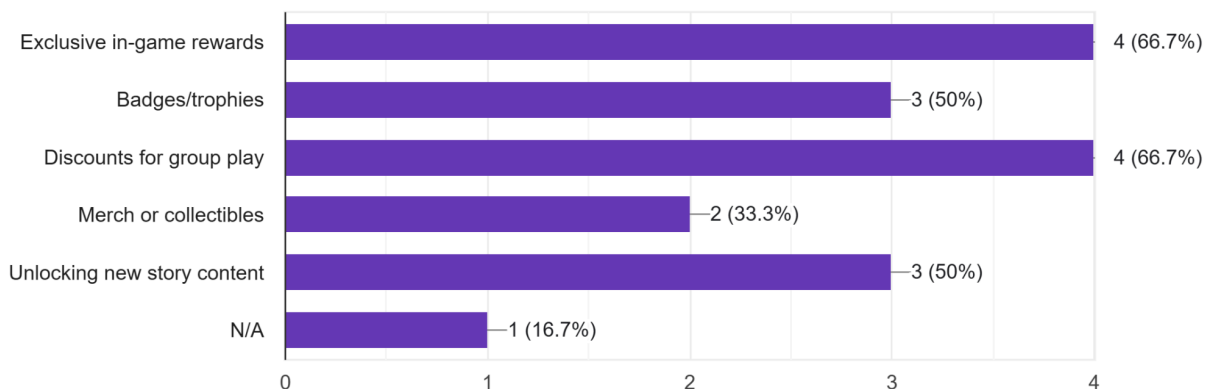
For price, the points remained relatively the same compared to the last survey, although there is an increase in players who think the experience

should be free. This means there needs to be some more added value to the format for the gameplay.

Would you pay for this experience (with more missions/variety of gameplay)? If yes, how much do you think is a fair price?
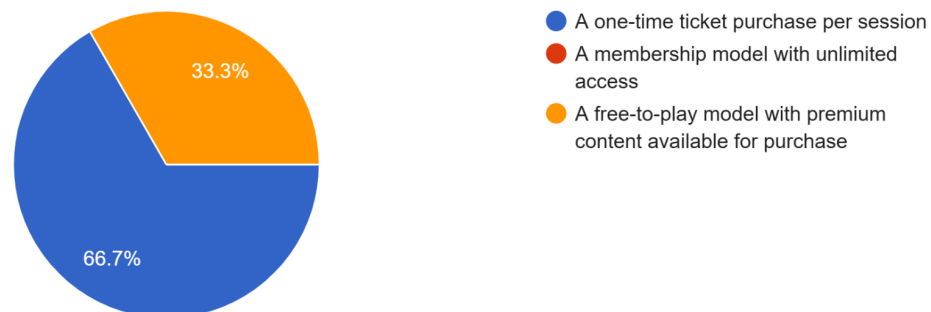6 responses

- Free
- Free + Premium Add-Ons
- $5-10
- $10-20
- $30-50
- $50-100
- $100-200
- $200+

33.3%
16.7%
50%
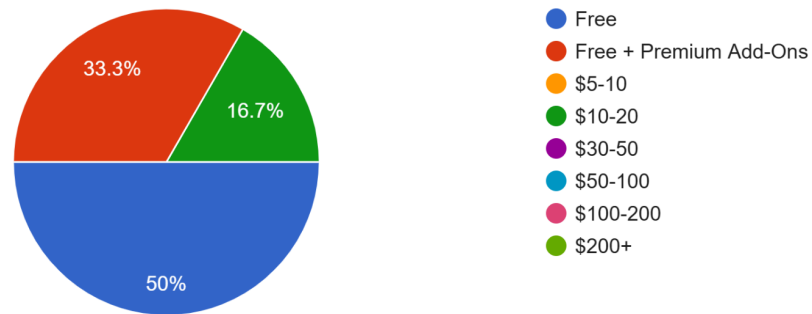
For payment schemes, players vastly prefer a one time ticket purchase for this type of game mode, compared to the previous MVT where players were open to membership models.

For payment schemes, would you prefer:
6 responses

- A one-time ticket purchase per session
- A membership model with unlimited access
- A free-to-play model with premium content available for purchase

33.3%
66.7%

The next section of the survey is about narrative and its importance on the experience. Due to the lack of emphasis in this test, the results reflect this change.

Lastly, this group of playtesters preferred a sci-fi theme for the experience.

The next section of the survey is about competition, since it is a new game mode introduced to the players.

Players all agreed that competition gave them more engagement into the experience and contributed to their immersion.

Competition

Did you enjoy competing against others? Why or why not?

6 responses

I enjoyed competing against others because I'm a player that enjoys competition

Yes for multistandard competition, No for single

I enjoyed competing against others because it incentivized me to try and beat the other team and added onto the pressure of the game when time began winding down.

I enjoy competing, it is more intense to fight against other players.

Yes, positive competition gives me more motivation to engage into the game.

Yes! We are faced with more challenges and uncertainties.

Players were also asked to elaborate on how the competition aspect affected their experience. Most found it more fun, challenging, and rewarding.

How did the competition aspect affect your experience? (e.g., made it more fun, frustrating, challenging, rewarding)

6 responses

The competition made the scavenger hunt more fun

earnest

I believe the competition aspect made the game more fun and rewarding. I also think if the competition aspect were pushed further or incorporated into the gameplay mechanics that would have made it more fun and rewarding as well. I don't think it made the game more challenging or frustrating since all the players could still find all the objects on their own though I could see how it potentially could (players following another team to find objects for them, etc.)

More fun and more challenging.

It makes the experience more interesting, motivating, and rewarding.

made it more fun

The next question was about how much closer players felt towards other players after participating in this game mode. The hypothesis was that a competition driven game mode would allow players to build connections easier, and this was validated with the data.

Compared to the previous MVT with a collaborative game mode, some players answered 4 on the scale of not being closer at all to extremely close. This means players who have never met each other were able to bond over the game mode easier than the previous test.

After participating in this experience, how much closer do you feel to other players you didn't previously know/aren't friends with?
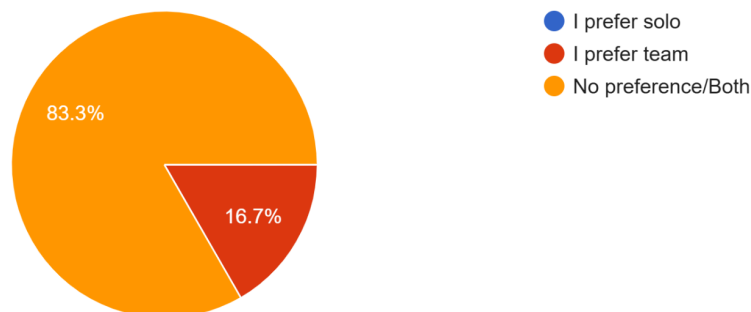6 responses
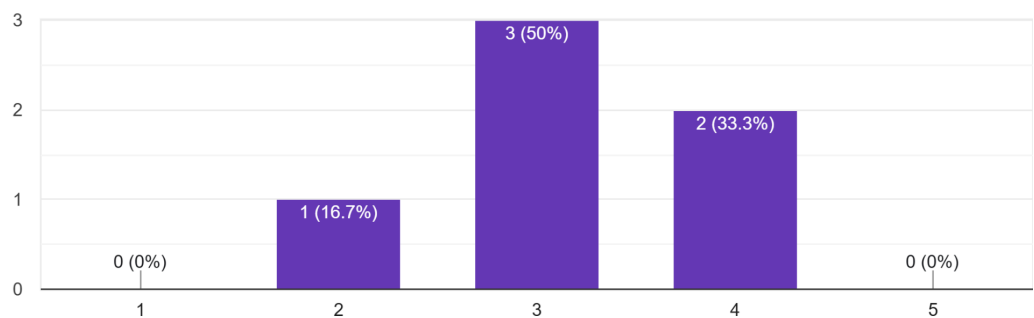
In this group of playtesters, they have no preference over team-based versus solo experiences.

Would you prefer a solo option or is team-based play essential to the experience?
6 responses

- I prefer solo
- I prefer team
- No preference/Both

The next section asks about branding. Players find that this type of game mode is closest to a scavenger hunt event, compared to the last MVT where the closest comparable was escape rooms.

Branding

How would you describe this experience to a friend in one sentence?

6 responses

> It's a Scavenger Hunt

> Tired but impressive

> Scavenger hunt in old town pasadena

> A fun outdoor live-action interactive game with role-playing elements.

> This is a role-play live action game that team you up with a brand-new person to explore a reality based space for completing missions.

> This interesting game has taught me to discover the fun details of Old Town.

How does this experience compare to other immersive experiences you've tried, what is the closest comparable?
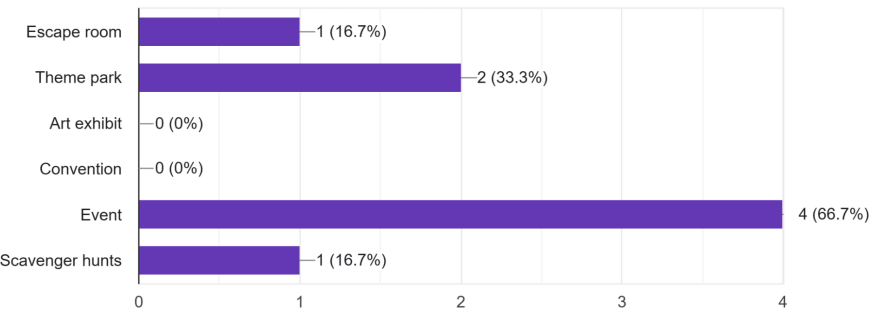
6 responses

The final question was about whether players have had similar experiences.

Have you played similar immersive experiences before? If so, which ones?

4 responses

NO

No similar experience

I played a similar game when I was very young in the kindergarten, which required us to find hidden toys in the campus buildings.

Yes. Decoding treasure hunts at some tourist attractions

Conclusions

This MVT made me realize the importance of narrative and how players want this to be a focus, it is something that cannot be sidelined. Players preferred an indoor location versus an outdoor one, and the app needs several types of systems to automate player experiences. In terms of building connections, a competitive game mode is better than a collaborative one.

As a result, when launching Catastrovia, the physical portion of the experience will be emphasized over the application.