



## **MNGT 481 ✂ Fall 2023 ✂ Live Case Competition**

### Challenge

Your team is to create a concept for a new video game will allow Balti Virtual to be one of the first companies to offer a game tailored to the new Mixed Reality (MR) headset from Apple. The executives would like your team to evaluate options for the type of game and platform. Your recommended strategy should best position Balti Virtual to succeed with attracting customers to purchase the game for use with the Apple headset.

To successfully complete this case, your team should do the following:

1. Carefully read the information about Balti Virtual.
2. Conduct an analysis of all the focus areas below.
3. Provide a go-forward recommendation that describes the concept for a new game for Balti Virtual that would work with the Apple Vision headset.

### External Analysis

- Provide industry statistics on the game industry that utilizes augmented reality. (e.g. size, market share, growth potential, etc.).
- There are numerous video game companies. Who are the main/direct competitors for Balti Virtual?
- What type of game is your concept (e.g. real time strategy, shooters, sports)? How does your game concept stand-out or fit-into this marketplace? Is the game a mixed or completely virtual reality game?

### Internal Analysis

- Identify the key competitive advantages that Balti Virtual has in developing this game.
- Identify the barriers to imitation that Balti Virtual can exploit and leverage.
- Analyze the internal resources needed to create your game.

### New Product Strategy

Your game concept is a new product for this marketplace. Your team can consider several aspects in developing the game concept. Some of these could include:

- Who will adopt or who are your target customers?
- What unique value does this game offer to users?
- Are there specific features or interaction points that are critical to your game?

### Budget

- The target budget for the project is \$1 million.

- Create a budget that explains the costs associated with developing and launching your game concept.

## Balti Virtual – background information provided by the company.

Balti Virtual is a Baltimore based development studio specializing in designing Virtual Reality and Augmented Reality experiences for applications in education, therapy, branding, and entertainment.

The company has a full-service augmented and virtual reality studio that aims to inspire wonder and creativity with state-of-the-art immersive experiences. With more than 20 years experience, Balti Virtual boasts an impressive client list including PayPal, HBO, Marvel, and Under Armour.

Please watch the following video that gives an overview of the company.

<https://youtu.be/dkUf1djOSxw>

Please review some of the prior projects by Balti Virtual.

<https://www.baltivirtual.com/bad-guys>

<https://www.baltivirtual.com/northrop-grumman>

<https://www.baltivirtual.com/decalcomania>



The company is comprised of a team that include several artists, coders, a quality assurance specialist, and sales/marketing professionals. Company management oversees their various projects, budgets and the strategic direction of the company.

## The Game Development Process

Dedicated to interactive entertainment, the video, computer, and virtual reality (VR) games industry is one of the fastest-growing segments of the entertainment industry. Comprising software, hardware, and peripherals, the electronic game industry provides entertainment experiences ranging from immersive games requiring hundreds of hours of play to casual games popularized by social media and mobile devices.

Within the video games industry, there are game development studios. Game studios come up with game concepts and details of play (known as game mechanics). The design team writes the plot and designs the characters and setting. Designers create the story that the game development team will flesh out. Once development begins, software engineers write code that defines the game experience, and collaborate with artists, who create 3D models, textures, and animations, as well as audio tracks. Game development is a process of progressive refinement, where initial placeholder content is created to “rough in” a core game, and over time is replaced with final/polished work. The game is analyzed for bugs or problems by quality

assurance and then the publisher gives the go-ahead to distribute the game. (adapted from the *Salem Press Encyclopedia*, 2022.)

## Apple Vision Headset

Apple Corporation has created the Vision Pro headset. A mixed reality headset that allows for little to complete immersion into virtual reality. The immersion level is set by the headset user.

If you are not familiar with this new device, please review the following material:

- Go to Apple.com and click on the Vision Pro tab at the top to see marketing material from Apple and consider watching the launch [video](#).
- [See a review by the WSJ](#)
- This is a mixed reality headset where the user chooses how much of the real world is visible through the headset
- The price is \$3499 per headset

## Background Information to Consider

### Determine Your Target Customer

In developing a new game, it is important to consider who will be playing it. Your team should consider and explain how the game design fits with the target customer you select. Some items to consider are single versus multiplayer and free-to-play versus paid. This game will be used with a new Vision Pro headset from Apple and has the potential to be innovative. Your team can decide whether to follow established marketplace norms or not.

The game content should fit with your target market, which should be considered the E or E10+ rating categories.

Please remember this is a new Apple product. As such, your game should not assume there are technology related accessories (e.g. VR boots from Ekto) immediately available to work with the Vision Pro.

Your team could include information about your planned customer's characteristics to help drive awareness and market the game on the App store.

### How you move within the game is an important consideration.

With the Vision Pro the user does not use a controller. The interactions between the user and the software are done using eye movements and hand gestures. Please explore reviews of the headset for more information. For example, this is covered in the WSJ link above and the

reporter notes that she did feel some queasiness. Keep this in mind for your game concept and movement. The next paragraph explains some ways traditional VR headsets do game movement. You are not limited to these options.

Virtual Locomotion Techniques (VLT) – Virtual reality is a more immersive experience than viewing something on a screen that is 2D. For your game, think about how people move within the game while only using small movements in the real world. Be aware of a potential pitfall. Some people experience disorientation or motion sickness while using VR – often called VR sickness. To lessen the chance of VR sickness, VLT have been developed such as blink/dash, teleportation, and static options. There are also hybrids that use a combination of the techniques.

- Blink/Dash – (example – Alyx) - To move – you pick a location, the video fades to black and fades back into where you wished to move as if you 'blinked'. Dash is similar but instead of fading to black, you move a high speed to the new location.
- Teleportation – (example Superhot) - To move - you pick a location and use a pre-defined function (such as a button on a controller) then the aviator is immediately repositioned to the new location
- Static – (example – Beat Saber) - you remain in a location (static) and the world moves around you. You must have physical room around your location to move in the game.