GNG 2101

Project Deliverable B: Business Model Canvas and DFX

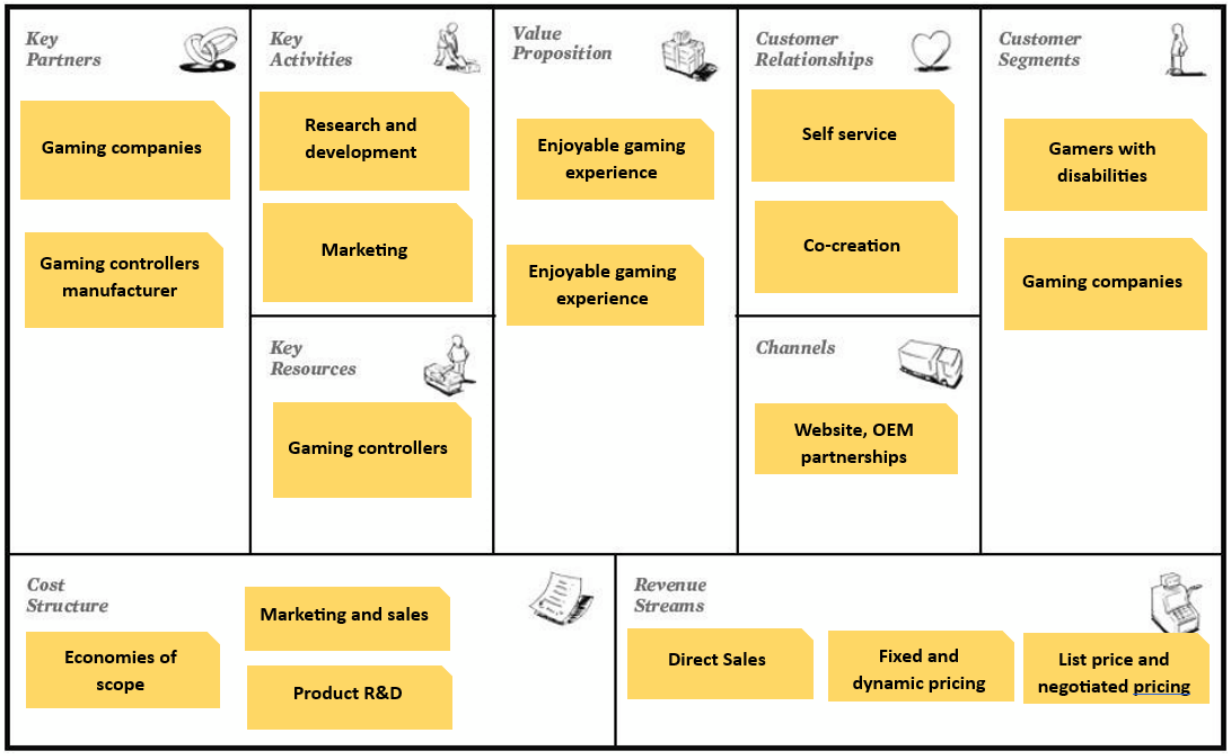
Viktor Covete (300290425)
Oobishek Poinen (300185019)
Leul Shiferaw(300296010)
Isam Karroum (300233745)
Alberto Fong Hou (300215012)

2 Business Model Canvas and DFX

2.1 Business model and sustainability report

1. Our controller can be used by all, our company is one of the only stable companies that is willing to manufacture these kinds of slick, custom and affordable controllers for multipurpose use.
    a. As it is 2023 and everything and everyone is becoming more and more inclusive, it is important for people who have issues moving their fingers to be able to play video games and compete at the same level as those who have perfect mobility in their fingers.
    b. As there is a spike in the gaming communities members due to the pandemic it is imperative that these types of controllers are available to those in need. That is also why we decided to add the fact that our company is going to manufacture these controllers in bulk and they can be used by anyone.

2. **Business Model Canvas. What's Your Business: Adaptive and custom Gaming Controller**



3.

Core Assumptions are:

a. No seller in the market that do customization on controller for individual games
b. Similar products on the market are not strong enough for the majority of people with tremor disorder.
c. Most of the current modified controllers are overpriced and limited modifications.

Feasibility:

a. We believe with enough cases of modifying for different games we are able to come up with a general solution for most of the clients with tremor disorder with a variable strength difference on the joystick.

4.

a. <u>1. Social Impact:</u>

- <u>Positive Impact</u>
  - Inclusivity and Accessibility: The adaptable Xbox controller directly addresses a crucial issue faced by individuals with disabilities, specifically those experiencing hand tremors. With a customized solution from our client, we are enhancing inclusivity allowing a wider audience to enjoy the benefits of gaming regardless of physical limitations.

  -Improved Quality of Life: The device can improve the quality of life for our client by providing them an easier and more enjoyable experience when playing video games.

- <u>Negative Impact</u>
  -Cost and Affordability: The customized solution may have a higher production cost compared to mass-produced controller accessibility paddles. This could potentially limit accessibility for lower income individuals but is very much in dependent on the client's specific requirements

b. <u>2. Environmental Impact:</u>

- <u>Positive Impact</u>
  -Reduced Material Waste: Utilizing 3D printing and prototyping techniques allows for precise production, minimizing material waste compared to traditional manufacturing methods.

- <u>Negative Impact</u>
  -Material Selection and Recycling: Depending on the materials used in 3D printing, there may be environmental concerns. Our goal is to ensure that materials are chosen responsibly and that recycling options are available for creation and disposal.

2.2 Design for X

<u>Assumptions</u>

1) Our design will incorporate a platform to hold the controller in place at a slight elevation. During the client meeting, we asked whether the client had issues gripping and holding the controller. He explained that he can't hold the controller, so he places it on the floor. He also explained that the hardest mechanic in his shooting games is aiming, which is binded to the left bumper located on

the back of the controller. By having the controller at a slight elevation, he can rest his hands on the ground while also being able to hold the controller without the chance of it slipping out. It also allows him to use the left bumper.

2) We will also modify the input of the controller at specific times. When I asked the client whether he was right or left handed, he said left. Since one of his biggest complaints was aiming, switching the joystick layout when the aim is activated (when the left bumper is held down) will improve his aim.
3) We will also use mats on the platform to increase comfortability. The client stated that he currently lays the controller on the floor on mats. To help the client with integrating the new controller, we will use a similar material for the client to rest his hands.
4) To maximize the accessibility of the controller, we will also incorporate modifiable macros which can be changed through a computer application. The client stated that he also plays racing games which have a different layout than first person shooter games. By allowing for modifiable macros, we increase the accessibility between games and clients.
5) We will use a rubber-like texture on the grips of the controller to help the client maintain hold of the controller. The client explained that the controller often slips from his hands, which is another factor in why he cannot hold/grip the controller (hence why he lays the controller on the floor). By increasing the grip of the controller, the client will have access to the controllers buttons and back bumpers, which will increase not only his proficiency in any game, but that of any client unable to hold a controller.

Wrike:

Unable to complete since the free trial has ended, waiting for the university account to come back online

Your trial has ended

Pick a plan that's right for your team, and keep collaborating!

See plans

Not enough time? Extend your trial

Get in touch with us if you need more time, have questions, or just want to learn more about Wrike.

Get in touch

Here
sha