

## **Robotics 11 Invention Writeup**

Have you ever been in the middle of playing an online game and felt really thirsty? You want to get a drink but you can't leave the game or put down your remote; what do you do? Introducing the Xbox Controller Cup Holder. This innovative device clips right onto your Xbox One remote and enables you to have your drink right with you while you play your games. With a universal design that fits all sorts of cup sizes, you can opt to put a straw in your drink for easy access or drink it straight from the cup while you play like a boss. The ingenious design of the product is practical and ergonomic, enabling you to access all the buttons and ports of the remote while still having a durable structure. Using incredibly light polycarbonate plastic, we made sure the controller stays very comfortable to hold. Since the device has such a small form factor, we were able to bring the price down to a low \$9.99.

Cost: \$9.99

Material: Polycarbonate

### **Manufacturing:**

- 3D Hubs injection moulding (For 1000 pieces: \$9500/tooling machine, \$0.77/part)

### **Shipping:**

- \$1850 a year for Canada Post International Parcel – Air

### **Packaging:**

- ULINE 4 x 4 x 4" Corrugated Boxes (For 500 boxes: \$0.31/box)
- ULINE 4 x 8" OPEN END BUBBLE BAGS (\$110/1000 bags or \$0.11/bag)

### **Profits:**

- \$0.77 / plastic part
- \$0.31 / box
- \$0.11 / bubble wrap bag
- = \$1.19 cost for each product sold
  
- \$9.99 - \$1.19 = \$8.80 profits
  
- \$9500 tooling machine + \$1850 yearly shipping = \$11350 other costs
  
- \$11350 other costs ÷ \$8.80 profit for each sold = 1289.77
- Need to sell 1290 to break even