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First 1000 Plan

HoloView mobile benefits from being a comparatively simple product. The bill of materials for the device and packaging is as follows:

1. ABS plastic base (1050)
2. Acrylic trapezoidal panel inserts (4100)
3. 4”x4”x2” custom packaging boxes (1100)
4. 15”x10” digital custom tissue paper (1050)

Base

The plastic base will need to be injection molded. Because the CAD files for the prototype were developed in Google Sketchup, I was unable to find a way to get a direct quote. I also researched ways to try to export and convert the file, but all of the results were costly and/or extremely complicated. Before trying to send in the order then, I would need to remodel the part in AutoCAD and export it in an acceptable file type. What I’m left with, then, is a basic estimate of how much my injection mold would cost based on the small size and moderate intricacy of the part, which is roughly $1500. Adding in an additional $1500 for materials and manufacturing expenses, and the cost of manufacturing the base is $3000, or $3 per unit. Ordering an additional 50 to account for potential defects, the total cost would be $3,150 for 1,050 units. The company I would most likely go with would be Protomold, a company recommended by Wired magazine who supposedly does business with a lot of makers. The price estimates I’m using are based on their numbers in this article:
https://www.wired.com/2013/01/protomold/

Panels

Because of the sheer number of panels I need (4000) it's not feasible to cut all of them using the laser cutter in the lab. Thus, I will use Big Blue Saw to manufacture my pieces. According to their website, a 0.125" thick triangle of acrylic that's 2" wide costs $0.72 cents per unit (for 1000). Factoring in a generous $0.15 per part for additional manufacturing (my part is not a true triangle) brings the cost per part to $0.87. For 4100 parts then, my total cost would be $3,567.

https://www.bigbluesaw.com/index.php?option=com_estimator&material=4&thickness=0.125&file=D7E5-P4T5-triangle-6-inches.dxf&step=20

Package

Following tech packaging trends, HoloView Mobile will be packaged in a custom "natural" box. The box has a natural cardboard color with the HoloView logo printed on the top. The boxes cost $0.75 per unit, for a total of $825 for 1100 units (100 unit increments only).

https://www.4imprint.com/tag/142/Packaging/product/105719-44-NK/Gift-Box-4-x-4-x-2-Natural-Kraft

Tissue Paper

To finish that packaging for HoloView Mobile, I will order custom tissue paper from Digiwrap displaying the HoloView logo. The paper will wrap the parts of the device and offer another layer for customers to unwrap. Custom 15"x10" sheets of White #18 paper cost $0.56 per unit for 1000, so my total cost is $588 for the tissue paper.

http://digiwrapit.com/pricing/

Total Cost

My total cost for development, manufacturing, and packaging of HoloView Mobile are as follows:

$3,150 (Base including injection mold, 1050 units and manufacturing)

$3,567 (4100 trapezoidal panels and manufacturing)

$825 (Custom packaging boxes)

\+ $588 (Custom tissue paper for wrapping)

Total: $8,130 for 1,000 units, or $8.13 per unit

Assembly, Packaging and Order Fulfillment

In order to prevent breakage during shipping, HoloView Mobile will come unassembled. Because of the design of HoloView, the only possible affordance is the correct one, allowing for assembly without instruction. Given the five pieces, any consumer will see the base and panels, and realize that the base affords insertion of the panels. The slimming nature of the panels helps to signify this. Since all of the panels are the same size and are clear, they can be inserted into any of the four slits, in any orientation. Thus, the only possible way to assemble HoloView is the correct way.

HoloView will be packaged on the outside by a custom natural colored box featuring the HoloView logo. Opening the box reveals custom HoloView tissue paper that, once unwrapped, reveal the pieces. The base will be in the center, with each of the four panels arranged around the base filling in the spaces between the legs.

My target market is educational museums throughout the US, so I will be selling my product in bulk. The individual products will be placed in a large box and shipped

through the USPS. Shipping costs will vary due to the location, but will be the responsibility of the customer.