

Marketing Requirements Document (MRD)

“Digital Tie Printer”

Device that prints out user-customized designs onto tie canvases

Digital Tie Printer will allow users to choose a design for their tie from a preset number of designs or create their own design using their phone or computer. Users can upload the design to the tie printer, insert a blank tie that comes with the product, and print the design onto said tie. When the users grow tired of the tie, they can wash the tie using a special function in the printer and then print another design on it.



Prototype

Features of the *Digital Tie Printer*

- Cleaning (Ironing piece-water tank)
- Inkjet printing
- Bluetooth connection
- Software to modify and implement designs
- Expansion packs of blank tie canvases

Revenue or Cost Focus

Our idea primarily focuses on cost reduction. Instead of spending money on a tie with a different design for each occasion, the Digital Tie Printer comes with two-three “template” ties that could be used repeatedly.

At the beginning of the printing process, the tie is heated to decompose the ink used in the previous design. This also saves the user time and electricity from the usual ironing.

However, our team also estimates that skilled designers or people with special interest in the tie design process could be encouraged to create a market for their own designs

and sell their work on our application store, which could also generate revenue over time.

Desire to Innovate

Our design never existed before and requires relatively more innovation.

Our design is a combination of “printing” and ironing ties. Some pieces & ideas of the machine are already used in other fields such as ink from friction(erasable) pen, steam heating process from ironing... The key part is how we make use of the ideas properly and possibly add some improvements to existing technologies.

Length of Time Horizon

Targeting a beta test over the summer, the stakeholders of the Digital Tie Printer have established the summer of 2020 as the target for launch, targeting the graduate season.

The set-back schedule for the design, development, manufacturing, and delivery of the Digital Tie Printer is as follows:

- Design Process: February through the end of April 2020
- Prototype development and manufacturing: May 2020
- Delivery of the first working set of products: June 2020

Design Schedule Detail

Activity	Timeframe
Design Research	February 2020
User & Domain Analysis (U&DA) Complete	February 28, 2020
Development of Requirements and Context Scenarios	March 2020 (first half)
Development of Framework and Design Language	March 2020 (second half)

Form & Behavior Specification (F&BS)	March 28, 2020
Detailed Design Development	April 2020
Delivery of final design and presentation	Late April 2020

Understanding of the Problem

Ties can be quite expensive, and money can quickly add up when you try to buy a variety. For the more artistic or fashionable fellow, this can feel limiting, and the desire to express oneself may not be fully achieved. Furthermore, many find a majority of ties on the market to be too boring. Some even want to take their tie designs to the next level if they're hardcore fans of something; they want to choose what exactly they put on their tie.

The challenge for the design team will be letting the users do the least jobs but create their desired ties. Though creating your own tie is our product's main thesis; if the whole creating process got too complicated, the User Experience would drop.

Willingness to Invest

Consumers are constantly looking for new ways to express themselves and make themselves stand out from the crowd, as well as save money. Therefore, it stands to reason that a device that would allow for total customization of multiple ties and saving money, in the long run, has the potential to do well in the market. Knowing that a device has the potential for much profit should give investors a good reason to invest the needed money to make this product a hit.

Risk Factors

The concept of printing your own tie aims to erase the need to buy multiple ties and in the process saving money for the user in the long run. However, there may be some users that think printing the tie is too much of a hassle and then resort to buying ties, completely ignoring the product.

Consumers must view that the "Digital Tie Printer" as a product that will help them save money on ties in the long run.

Team Members

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