“LUMOS MAXIMA”:Improving the success of fast fashion through smart design and replenishment decisions

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A dissertation submitted in partial fulfilment of the requirement for Bachelor of Science (Honors) degree in Computer Science

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in Collaboration with
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2020

Abstract

Apparel industry have past many stages and now embracing fast fashion with digital technology, this demand the apparel brands and manufactures to change and adopt quickly to changing consumer landscape. This paper will discuss a unique problem that's faced with apparel brand and manufactures who is doing Pure play online. The problems being low market success rates of designs and inability to make smart decisions on demand expectations.

To solve above Author has discussed with domain experts to understand how they make decisions now and what relevant information/Data can enhance their process. Input included the information and also how it would be useable through an intuitive platform. With this I have identified the relevant source of data and require technology to create the overall solution discussed here.

The solution will scrape data from various online platforming structure product details with will act as a search engine which has the AI capability of matching similar products and also comparing the success of those products. This feature if self will give the product designers the ability to catch trends and create products that will have better chance of success. The product will also look at past trend in volume and price and will be able to predict the potential demand for a particular product based on similar products previously online. This prediction will allow the business to make better decisions on quantity that need to be produced.

The project was able to create above solution with satisfactory feedback from the end users and sponsors of the project and has the potential to operationalize in the business. The outcome of this project can be developed further to become an integral part in Pure play online apparel industry segment in future.

Key words: Fast fashion, fashion design, replenishment decisions, performance matrices, sales forecasting, time series, multi-layer perceptron, random-forest regression