## **College of Professional Studies**

# Case Study: - "Big Data to Predict Consumers Buying Patterns at GAP"

Pankti Patel
Northeastern University

#### Introduction

Being the CEO of Gap, Arthur peck asked for innovation in the system by incorporating big data analytics into the system. He observed that many top-notch creative directors came and went without making any significant mark to increase the sales. He told the Wall Street Journal that Gap had cycled through many creative directors but each had proclaimed as the next savior (**Bain**, **2016**). Therefore, instead of taking advise of the creative director or rather say of an individual person, he has been pushing the company towards decentralized design process where different teams and even the outside vendors such as amazon, create the designs for Gap and its other brands including Banana Republic, Old Navy, Athleta and Intermix. Peck saw that this loosely organized data-driven approach has benefitted some of the biggest rivals of Gap such as Zara, H&M etc. which makes it obvious why Peck would want to adopt big data analytics.

#### **Executive Summary**

The most challenging part of this analysis was predicting the consumer preferences as the market must conduct several surveys, interviews and the ultimate result was not efficient as consumers were found poor at predicting their future behaviors. People always want something new than yesterday's fashion and their taste does not only depends on their attitude towards an aesthetic object but it also depends on the social influences and the prevailing fashion of the time. Rather than relying on the opinions of the creative director, he planned to incorporate data mining obtained from social media, google analytics and company's own sales and customer databases and so the decision was taken within the context of using big data to inform the company's next assortment.

### **Analysis**

Peck was considered as the president of Growth, Innovation and Digital because of his investment in digitalizing the sales and dissolving the wall between physical and digital channels. He pushed his team to utilize big data to understand the customers' behavior. He constantly tested the new features as it listened to the customer's voice to know about the feedback of a customer. Data-driven decision making required that the customer be trackable and peck made sure that these customers identifiable online but anonymous when they shopped in store.

Problems faced by the company in the first two years:

When peck was appointed as the CEO, he faced some challenges:

- 1. Slow growth in core markets
- 2. Competition
- 3. Risk of e-commerce
- 4. Rise of Fast-fashion
- 5. Heavy and frequent discounting

Gap's market cap had decreased to \$9.2 billion which forced the board to look for a longer-term solution. Peck, after facing such issues, decided to develop a strategy which is called Big data in, Creative directors out (**Stern, 2016**).

His objective was not to replace the creative directors but to eliminate the position of it and give the responsibility for the brand's designs to a collaborative team informed by hard data. This approach was formulized by him in the product 3.0.

#### **Gap Product 3.0**

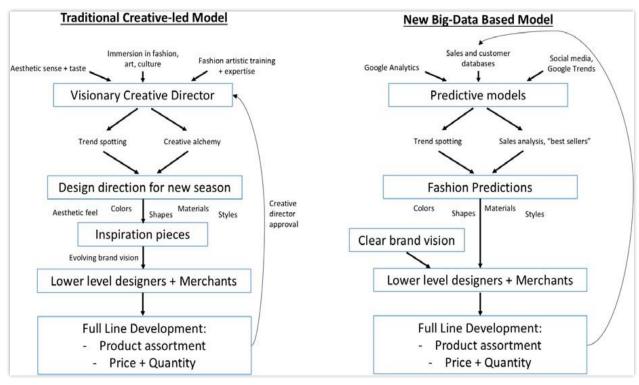
To combine a clear brand vision with a common operation model, Peck introduced product 3.0 at Gap Inc. which could govern every decision in inventory, sales, merchandising and design to identify the trends and combine them with real-time performance. This product heavily relied on the analysis of consumers' purchase data. Google analytics helped the company in identifying human's searching method as customers were using search terms on the websites and they were traced using their geo-locations (Israeli & Avery, 2018).

#### Exhibit 13

Despite all this, there was a doubt whether big data could replace the artistic vision of the creative director. The outcome of this whole process what was positive ass according to Peck, the consumers were clear on what they want and could provide honest opinions for their product. Instead of spending more money on inventory and marketing, Peck used in digitalizing the company.

This model was exhibit 13 where they have shown a comparison between the traditional model and the new big-data based model.

Exhibit 13 Gap Brands' Design Process



Source: A. I., & J. A. (2017, May 30). Predicting Consumer Tastes with Big Data at Gap. Retrieved from <a href="https://hbr.org/product/predicting-consumer-tastes-with-big-data-at-gap/517115-PDF-ENG">https://hbr.org/product/predicting-consumer-tastes-with-big-data-at-gap/517115-PDF-ENG</a> (Israeli & Avery, 2018).

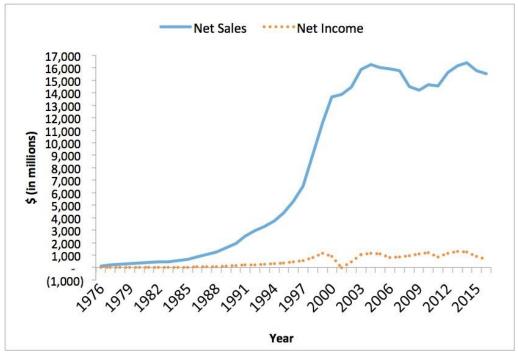
The procedure is almost same, only the decision makers have changed. In traditional model, creative directors make decision using the aesthetic sense and taste, immersion in art and fashion and their training in fashion. Whereas in the big data based model, predictive models make decisions based on the data. This exhibit demonstrates peck's product 3.0 and the comparison between the traditional and the new model.

#### Shifting the distribution model

In 2016, it was observed that 55 percent of online shoppers went to amazon's website to search for any product because amazon provides over 350 million different products and about 10 percent of those are in the apparel category. There were two alternatives if Gap wanted to sell their products on Amazon. First is to control the pricing and customer relationship and provide the inventory to amazon and amazon will fulfil the orders or the second option is to sell the items to amazon and amazon will take care of how to sell, price and fulfil the products to consumers.

But, according to the former senior marketing manager of Gap, Randy Antin, Retailers always tend to have friendly relation with Amazon despite a fundamental rivalry. He saw the appeal that amazon will only provide the access to customers of Gap when they were not shopping on the company's own platforms (Israeli & Avery, 2018). But being the most visited site for apparel, Gap has made use of Amazon to save its business (Scholssberg, 2016).

**Gap Inc.'s Sales and Net Income (\$ in millions)** 



Source: A. I., & J. A. (2017, May 30). Predicting Consumer Tastes with Big Data at Gap. Retrieved from <a href="https://hbr.org/product/predicting-consumer-tastes-with-big-data-at-gap/517115-PDF-ENG">https://hbr.org/product/predicting-consumer-tastes-with-big-data-at-gap/517115-PDF-ENG</a> (Ayelet & Jill, 2018).

The goal of this strategy is driving higher merchandise margins in longer term and as expected it has proven successful at old navy-one of the brands of Gap Inc., where top line sales have grown by nearly \$1bn over the last three years (**Barrie Leonie**, **2015**). Also, the sales have been rising since 2012 after prizing data over design and this can be seen from the above graph (**Khadeej Safdar**, **2018**).

#### Conclusion

Peck believed that by incorporating big data analytics into the market could outperform creative directors at predicting the future fashion trends and so far, it has been proven true. Peck, who is now a president of the company, said that big data is becoming a significant tool for the companies like Gap and that data is a huge asset for them since they have decided to focus on their customers' shopping trends and their reviews to predict the next season's fashion (**Gurdus**, **2018**). Understanding customer data gives insights of what a customer's expectations are from the company and it has helped Gap guide its advertising dollars in the most effective way to get the best returns. According to peck, we are in an industry that dramatically changes, and people require newness in almost every sector be it technology, fashion, education etc. To understand their demands, big data analytics tools are required to analyze a customer's fashion taste, their searching patterns, their online shopping habits and their reviews.

#### References

- 1. Gurdus, E. (2018, April 12). Gap CEO Art Peck: Big data gives us major advantages over competitors. Retrieved from <a href="https://www.cnbc.com/2018/04/11/gap-ceo-art-peck-big-data-gives-us-major-advantages-over-competitors.html">https://www.cnbc.com/2018/04/11/gap-ceo-art-peck-big-data-gives-us-major-advantages-over-competitors.html</a>
- 2. Gap Gets Personal With Big Data. (n.d.). Retrieved from <a href="https://risnews.com/gap-gets-personal-big-data">https://risnews.com/gap-gets-personal-big-data</a>
- 3. Rupp, Lindsey (2016), "Gap CEO Says He'd Consider Using Amazon to Reach Customers," *Bloomberg*, May 17, 2016, https://www.bloomberg.com/news/articles/2016-05-17/gap-ceo-says-he-d-consider-using-amazon-to-reach-customers, accessed 04/11/2017.
- 4. A. I., & J. A. (2017, May 30). Predicting Consumer Tastes with Big Data at Gap. Retrieved from <a href="https://hbr.org/product/predicting-consumer-tastes-with-big-data-at-gap/517115-PDF-ENG">https://hbr.org/product/predicting-consumer-tastes-with-big-data-at-gap/517115-PDF-ENG</a>
- 5. Bain, M. (2016, November 28). Gap's CEO missed the brand's biggest problem when he called creative directors "false messiahs". Retrieved from <a href="https://qz.com/846941/gaps-ceo-art-peck-missed-the-brands-biggest-problem-when-he-called-creative-directors-false-messiahs/">https://qz.com/846941/gaps-ceo-art-peck-missed-the-brands-biggest-problem-when-he-called-creative-directors-false-messiahs/</a>
- 6. Stern, M. (n.d.). If not creative directors or data, what can make Gap's fashions sell? Retrieved from <a href="https://www.retailwire.com/discussion/if-not-creative-directors-or-data-what-can-make-gaps-fashions-sell/">https://www.retailwire.com/discussion/if-not-creative-directors-or-data-what-can-make-gaps-fashions-sell/</a>
- 7. Safdar, K. (2016, November 27). As Gap Struggles, Its Analytical CEO Prizes Data Over Design.

  Retrieved from <a href="https://www.wsj.com/articles/as-gap-struggles-its-analytical-ceo-prizes-data-over-design-1480282911">https://www.wsj.com/articles/as-gap-struggles-its-analytical-ceo-prizes-data-over-design-1480282911</a>