

## *MIS 381N*

### *HW6– Predicting Consumer Tastes with Big Data at Gap*

#### *Team Members*

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### **Question 1:**

GAP was doing poorly because they failed to have an identifiable brand and a specific product in the market. The market for mid-tier apparel was heavily fragmented and without a strong brand GAP failed to stand out. Other factors include such as e-commerce, slow growth in the fashion industry, and the rise of fast fashion.

Peck was correct in letting go of the creative directors, however completely abandoning the human touch and following a solely data-driven process may not have been the best approach. The creative directors were supposed to be market-drivers and create new apparel that would appeal to future trends. As noted in the article, many creative directors came in promising to predict these future trends, but then failed to deliver. Another problem is that each of the directors had their own “style” or vision for the market which prevented the creation of a unified brand.

Data-driven creative process was much better at responding to emergent trends and shifting supply chain allocations to meet the trend. However, it hinged greatly on the clear brand image proposed for each division. Peck continued to struggle with improvements to the products as evidenced by his lack of marketing investment.

### **Question 2:**

Based on the sales results shown in Exhibit 10, the big data approach worked best for Old Navy and didn't work well for GAP & Banana Republic. This is likely because Old Navy courted the low-quality fashion market and was able to pivot to fast fashion, which relies heavily on supply chain management more than market driving. The refocus on fast fashion for Old Navy was beneficial because their target market is consumers who want to follow a trend at affordable price rather than attaching to a brand. GAP and Banana Republic were likely affected worse by this strategy because they appeal to the mid-high level quality markets. In these cases, consumers may want to be told what the latest fashion trend is or to look for a specific style that appeals to them. The lack of product quality and a continued lack of brand specificity likely drove lowered performance. If the clear brand image proposed by Peck creates a unified brand, then the strategy will likely perform better in the long-term outlook.

### Question 3

Overall, we find the Product 3.0 framework to be valid. It's a good strategy for Gap because it allows the company to pivot their attention and resources to capitalizing on their strengths - satisfying basic consumer clothing needs - while removing the distraction of activities they have less competitive advantage in - creating new fashion trends. The brands within Gap Inc. are not going to be the trend setters, and because of that, their strategy should be focused on reacting to the trends as they occur and capturing as much value from them as possible. The Product 3.0 framework allows the company to do this in various ways, starting with a systemic design process. Instead of pretending that they are trend creators, each brand will take the high-level trends that have been identified with big data and filter the trends through their unique brand vision to create products that tap into the current trends yet maintain consistency with their brand image. The next big improvement associated with Product 3.0 was the company's use of small consequence, information probing decisions. One example of this is how the Gap tests out a small quantity of new products in certain stores very early in the season and based on the responses, scales up or down production as needed. Finally, the last big improvement derived from Product 3.0 was increasing the speed of operations to be as continuous as possible. To enact the company's new strategic plans, speed was paramount. To speed up production, Gap began storing larger quantities of fabric in inventory and even moved part of their production facilities from Asia to the Caribbean for quicker shipping.

We believe that Product 3.0 will yield success for the company and the only improvement we would make would be to add back a small portion of human creativity in the big picture design process. Product 3.0's architecture is currently set up so that Gap is completely reactionary to its environment and no longer has any built-in mechanism for anticipating the future. While this may be good in aggregate, there are instances when the company could benefit from having one or two creative designers who still have some say in the process. Our suggested alternative would be for Peck to allow Product 3.0 to forecast trends and then the creative team can choose which trend can be created in the flagship products for the Gap to release on their platforms.

### Question 4:

Big data and predictive analytics will typically be more useful at identifying gradual shifts in preferences but will struggle at predicting the big leaps. The case discussed the *ratchet effect*

where often, consumer preferences change incrementally each year with only small deviations from the previous year, but then suddenly, tastes change dramatically. Using data and analytics, you will likely not have much trouble at identifying and predicting the small incremental changes, but the models will likely fail when it comes to extrapolating beyond the recent history. Another way of putting it is that big data solutions will typically perform well in stable environments where the system that is being explained is not changing. In marketing, big data is more useful in optimizing the production process, supply chain and logistics, forecasting sales and understanding consumer preferences.

The role of science in business is in determining customers' currently desired product features, optimal price points, decisions to be made on inventory management, discounts and promotions for optimal sales and identifying future shift in trends. In a world with increasing amounts of data, "art" will continue to play several roles. For one, human intuition is still valuable as a gut check and final arbiter against solutions derived from the data. Human judgement is also needed to help formulate the problem at hand before unleashing the power of predictive analytics.

As rules of thumb, we propose a few heuristics guidelines where we feel that "science" should dominate decision making: the system is stable, data is abundant and reliable, and high precision is required. In contrast we feel that "art" should dominate when: big "leaps" of intuition are needed or simply when scientific approaches are not feasible.