Trending Chic: Analyzing the Influence of Social Media on Fashion Brands

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Abstract

Social media platforms are popular venues for fashion brand marketing and advertising. With the introduction of native advertising, users don’t have to endure banner ads that hold very little saliency and are unattractive. Using images and subtle text overlays, even in a world of ever-depreciating attention span, brands can retain their audience and have a capacious creative potential. While an assortment of marketing strategies are conjectured, the subtle distinctions between various types of marketing strategies remain under-explored. This paper presents a qualitative analysis on the influence of social media platforms on different behaviors of fashion brand marketing. We employ both linguistic and computer vision techniques while comparing and contrasting strategic idiosyncrasies. We also analyze brand audience retention and social engagement hence providing suggestions in adapting advertising and marketing strategies over Twitter and Instagram.

1 Introduction

The impact of fashion in society has been a well-studied topic even during the era of print and visual media based advertising (Diana 2000; Kawamura 2005). The marketing and advertising strategies involved in fashion are often qualitatively different from other product marketing and advertising. While in most products it is important to emphasize the necessity or the quality of the product, fashion advertisements are tailor-made to match the tastes and sensibilities of the target audience.

Social media is an an incredible tool at the fashion industry’s disposal for marketing. By leveraging social media, brands can take control of public perception which is one among the many important factors in fashion marketing (Recklies 2006). The continuous feedback received by the brands via the likes and comments on their social media posts lets them gauge and further viralize their base in the market. There are several studies that focus on understanding the growing interest in social media marketing (Dubois and Duquesne 1993; Kim and Ko 2012; Kim and Ko 2010). The importance of fashion branding on social media is becoming even more pronounced as networks like Instagram are revolutionizing this field. According to the well-analyzed editorials in The Guardian and The New York Times, it is the social media that decides what you wear and Instagram is titled as the fashion’s new front row (Cartner-Morley 2015b; Cartner-Morley 2015a; Friedman 2015). Existing literature (Hu, Manikonda, and Kambhampati 2014) shows that Instagram alone has a significant share of posts that belong to fashion category.

In this paper, we consider the top-20 fashion brands and investigate how they use Twitter and Instagram by observing their native profiles. We analyze their styles and strategies of advertisement. Although textual analysis is interesting, we predominantly focus on visual analysis owing to the overwhelming number of images used by the brands in advertising. Using the neural network based deep image features similar to those extracted by Khosla et al. (Khosla, Das Sarma, and Hamid 2014), we find out how the two types of brand marketing strategies – direct marketing and indirect marketing are used. Our analysis revealed that brands that have a larger number of visibility tend to utilize the direct marketing strategy.

The summary of our contributions is as follows:
- A characterization of how top-20 fashion brands use the social media primarily to compare and contrast the posts on Twitter and Instagram.
- Using deep features obtained from the visual content, an investigation about two marketing strategies – direct marketing and indirect marketing.

We hope that the distinctions discovered in this paper can inspire marketing researchers to study the reason behind these inferences. To the best of our knowledge, there is no existing work on how fashion brands use different social platforms in terms of characterizing their behavior through analyzing textual and visual content. It is important to understand the distinctions and similarities so that the new businesses can adapt these ideas to promote their businesses and establish their brands.

2 Analysis

The dataset used in this analysis comprises of top-20 fashion brands (in terms of the number of followers) on Instagram and Twitter \( D = \{b_1, b_2, \ldots, b_{20}\} \) in Table 1 according to the survey conducted by Harper’s Bazaar (Bazaar 2015). Harper’s Bazaar is a monthly fashion magazine that delivers a perspective into the world of fashion, beauty and popular culture and is considered as a good style resource for women.

2.1 Group statistics

Since Twitter was founded in 2006 and Instagram in 2010, we see in Figure 1 that most brands had their accounts cre-
Table 1: Top-20 brands used in this study

| Nike – b_1   | Adidas Originals (AO) – b_2 |
|--------------|-----------------------------|
| Louis Vuitton (LV) – b_3 | Dolce Gabbana (DG) – b_4 |
| Michael Kors (MK) – b_5 | Adidas – b_6 |
| Dior – b_7   | Louboutin World (LW) – b_8 |
| Gucci – b_9  | Prada – b_{10} |
| Burberry (Brb) – b_{11} | Vans – b_{12} |
| Fendi – b_{13} | Armani – b_{14} |
| Converse – b_{15} | Jimmy Choo (JC) – b_{16} |
| Free People (FP) – b_{17} | Calvin Klein (CK) – b_{18} |
| Ralph Lauren (RL) – b_{19} | Cartier – b_{20} |

ated on Twitter first. Figure 1 shows the timeline of when the brands created their accounts and first posted a tweet or photo on Twitter or Instagram respectively. Among all these brands the first post was made by Vans in 2008 on Twitter and by Michael Kors in 2011 on Instagram. Every month (on an average) a minimum of 18 posts and a maximum of 124 posts on Instagram and a minimum of 20 posts and a maximum of 619 posts on Twitter were made by these brands.

The frequency of posts per month by each brand using eq (2) is computed along with the average number of likes, average number of comments and the average number of hashtags for all posts of brands. Suppose n^{(a,b)}_j and n^{(b)}_j are the number of posts made on Twitter and Instagram by the brand b respectively in the time period. \[ p = [t, i] \] refer to Twitter and Instagram respectively,

\[ M_j^{(p)} = \mathbb{1}\left\{ \sum_{i} m_i^{(p) | \forall i,} \right\} \]

is the vector that is an indicator function (1) for each time period, indicating whether any posts at all were made during that time period. It is 1 if any posts were made and 0 if not. Then, \[ \omega_p = \frac{P_i}{\sum M_j^{(p)}} \]

and is the average frequency of posts made by a brand on the platform \( p \).

From Figure 2, we notice that the brands Michael Kors (MK) and Burberry (Brb) created their accounts at the same time and have similar number of posts. But in terms of the number of followers, MK has 24% more number of followers than Brb, follows twice the number of people followed by Brb, gets 3 times as many likes and comments than Brb. Brands like Free People (FP) created an Instagram account during summer of 2011 and post pictures with a very high frequency (124 pictures on average every month). When we observe the number of likes and comments, they are around 20k and 136 respectively which are neither high nor low compared to other brands. These examples suggest that the rate at which a brand makes posts on these platforms do not have any effect on the visibility of posts.

Users can make posts on Twitter in two forms: (a) submissions that are uploaded to and hosted on the Twitter server itself and (b) cross-shared posts where tweets posted from another application appear on Twitter timeline. On an average, 87% of tweets contain pictures of the products or models showcasing the brand’s products.

Table 2: Top-IDs and their corresponding words

| Top-IDs | Words |
|---------|-------|
| 1       | red, contact, make, pack, collection, team, hit, online, time, stores |
| 2       | Louis Vuitton |
| 3       | Dolce Gabbana, Prada, Armani |
| 4       | Michael Kors, Adidas |

We can notice that the runway luxury fashion brands like Louis Vuitton, Dolce Gabbana, Burberry, etc., focus on the same topics in Twitter and Instagram. Very few brands like Nike, Adidas Originals, Vans, Converse and Free People focus on different topics on the two platforms. Nike being the most popular brand on Instagram focuses mainly on topic 7 whereas on Twitter focuses on topic 0 whose words suggest that Twitter might be used for correspondence or queries. We find that brands like Burberry focus mainly on British style and includes men’s collections and Michael Kors focuses on the styles and accessories. The active brand according to the number of friends – Louboutin World uses both the networks to contact customers online.
2.2 Visual Features

In analyzing the visual content on both the social networks, we use the dataset of images collected from the brand accounts on Twitter and Instagram and we extract deep features for each image present in our dataset. In this article, we use the overfeat networks’ image features (Sermanet et al. 2014) for two reasons. As argued by Khosla et al., overfeat-type features are particularly capable of extracting representations that are well-suited for internet images and abstract tasks. Overfeat is a stable implementation that makes use of GPU (we used Tesla K40) in the efficient extraction of features for large scale image datasets.

We use the network’s 22nd layer representation for each image as the feature vector corresponding to that image. We then perform clustering (using k-means) on this space and use those clusters to study the different marketing strategies utilized by the brands and how it affects the visibility of their products. We obtain k clusters for each brand on the two platforms separately. These clusters represent the different types of content categories present in the images for example – sunglasses, watches, floral patterns, etc. Figure 5 (a) indicates that brands which post similar textual topics across these platforms post different types of visual content.

We identified two distinct and common strategies that brands use – direct product marketing (DM) and indirect product marketing (IM). DM focuses on the product and IM uses attributes that are not but related to the product for marketing. For instance, a bag that is photographed by itself on a pedestal is DM, while a fashion model (person) holding the bag and the bag being vignetted is an example of IM. We often find both, while we find that IM is more effective, particularly when used with celebrities. The same can be observed in the following cluster analysis over the said feature space. Figure 5 displays the brands $b_1$ – Dolce Gabbana, $b_2$ – Gucci, $b_3$ – Michael Kors along the cluster types – $C_1$ – Products, $C_2$ – Runway/Redcarpet events, $C_3$ – Portraits for both Instagram (top row) and Twitter (bottom row). Brand $b_1$ focuses on direct marketing on Instagram but doesn’t make posts of category $C_1$ whereas it focuses on indirect marketing w.r.t category $C_3$. Brand $b_2$ follows the similar trend as $b_1$. Whereas, brand $b_3$ primarily focuses on indirect marketing no matter what category it is. While $b_1$ and $b_2$ have mean likes of 27245 and 25280 respectively, brand $b_3$ has 47941 likes on average for the said clusters. Similar pattern is spread across many other similar brands, strongly favoring indirect marketing and aligning with the past research (Bakhshi, Shamma, and Gilbert 2014).

Among all the brands, Nike has the largest number of followers and the number of likes received for a post. Adidas focuses on the same topics as Nike giving us a good case study. Each row in Figure 3 corresponds to a cluster category where Nike and Adidas both post similar kinds of photos except that Nike and Adidas has a unique cluster focusing on the tank tops and track jackets respectively. Both the brands focus on direct and indirect marketing in very similar patterns. Direct marketing for shoes and indirect marketing for equipment and attire. We notice that Nike and Adidas acquire similar number of likes for most similar categories. On the idiosyncratic categories we find that Nike posting tank tops get significantly larger number of likes than the track-
Bakhshi, S.; Shamma, D. A.; and Gilbert, E. 2014. Faces engage us: photos with faces attract more likes and comments on Instagram. In Proc. CHI.

We investigate how brands focus on different topics associated with marketing strategies can obtain more visibility. Our work employs linguistic and visual analyses on the posts made by top-20 fashion brands on Twitter and Instagram. Through this research we hope to open up new discussions about the role of visual content on social media in learning about fashion trends and inspire marketing researchers to study the reasons behind these findings.

3 Conclusions

Our work employs linguistic and visual analyses on the posts made by top-20 fashion brands on Twitter and Instagram. We investigate how brands focus on different topics on different social media and how certain types of visual cues associated with marketing strategies can obtain more visibility. Textual analysis revealed that in spite of the number of hashtags a post contains or how frequently a brand makes posts online, do not contribute to visibility. Visual analyses show that even if the textual topics are same on both the platforms, brands adapt different posting styles w.r.t visual content. However, it was evident from the analysis that brands exercising indirect marketing are gaining more visibility in terms of the number of likes and comments. Through this research we hope to open up new discussions about the role of visual content on social media in learning about fashion trends and inspire marketing researchers to study the reasons behind these findings.

References

[Bakhshi, Shamma, and Gilbert 2014] Bakhshi, S.; Shamma, D. A.; and Gilbert, E. 2014. Faces engage us: photos with faces attract more likes and comments on Instagram. In Proc. CHI.