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Analyzing Twitter Marketing Strategies of Italian Brand and French Brand in Fashion Industry Using Data Science

An Empirical Study

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Introduction

The luxury goods market industry has a rather unique position on commerce landscape, which is characterized by its strong influence because of higher profitability and very high growth rate. Within the luxury market, fashion makes up the largest segment (Statista, 2023a). Thus, while it provides the purses and shoes and jackets which we love, the high fashion scene also plays a starring role keeping the worldwide economic machine running. Hence, there exists a rational imperative to allocate resources, both temporally and financially, towards the strategic marketing endeavors within the luxury fashion industry. In order to generate demand, maintain industry growth, shift consumer attitudes, and increase brand awareness, effective marketing strategies are essential.

Owing to the internet emergence, marketing strategies have transformed considerably with a new approach that includes social media. Luxury fashion firms have judiciously adopted social media channels like Instagram and Twitter as means of product promotion and client interaction. Fashion firms can use social networking to showcase their appealing images and eye-catching videos to get attention from their target audience. Real and authentic content on social media platforms helps fashion firms get trust from their target audience. Customers can have real and immersive experiences with high fashion by using web media to provide them with behind-the-scenes content from Luxury brands. In this era social media marketing has become increasingly crucial playing a role, for fashion brands aiming to connect with their audience while staying ahead in an ever-evolving industry landscape.

However, as explained in the research (Kohli et al., 2015), even with social media marketing's notable wins, certain firms grapple with perfecting the mix of pushing products and truly connecting with their audience. This underscores the demand for more study on successful social media marketing approaches tailored to luxury fashion businesses.

The research objective under analysis is the comparison and evaluation of the Twitter marketing practices applied by two top luxury fashion businesses namely, Gucci and Dior. Primary focus of this investigation is a comprehensive analysis of two important lines in the brands product portfolios. Given the sizable sales generated by these brands in the realm of leather goods sales, specific attention has been dedicated to the analysis of the Gucci Marmont bag and the Lady Dior bag. The idea is that through analyzing consumers interact with the handbags we could reach to the valuable information about digital marketing techniques.

Finding and extracting best practices with potential value for other businesses in the same industry is the ultimate goal of this work. To direct this investigation, the following research questions have been developed:

1. Is there any discrepancy in terms of influence operation relative to the digital marketing campaigns of Dior and Gucci?
2. Who are the target and reacting audiences for Dior and Gucci in the marketplace and how differently do the latter two brands work out marketing strategies for persona enticement?
3. How do Dior and Gucci differ in terms of user engagement, sentiment, and key topics discussed on Twitter, and what insights can data science provide into their marketing?
4. How can data science, such as topic modeling and sentiment analysis, offer actionable insights for optimizing strategies relative to the digital marketing campaigns conducted by the luxury brands, Dior and Gucci in particular?

To answer the research questions, examining how these two brands utilized Twitter to market two product lines was our focus. We intend to help businesses improve and move forward with a strong marketing strategy. This accomplished by using text mining techniques such as Topic Modeling and Sentiment Analysis to textual data provided on Twitter. Using natural language processing, we also discovered the primary qualities linked with these brands and product lines, as well as the feelings and preferences mentioned in this data.

This thesis is divided into three chapters:

- In the first chapter we introduce an overview of previous studies on product and brand identity, focusing on product branding on social media and analyzing online brand identity using sentiment analysis and topic modeling.
- The second chapter will describe the two brands and product lines chosen for the case study, that is Lady Dior and Gucci Marmont. Highlighting how their brand identity and communication strategy has evolved across time, in particular with respect to web channels and social media.
- The third chapter presents the study's methodology, data collection, content analysis strategies, and applies statistical techniques, such as Topic Modeling, to analyze texts referring to the two selected product lines: Lady Dior and Gucci Marmont.

In the last phase, we will give the findings by answering the studies questions and presenting a detailed evaluation of the Twitter marketing strategies that Gucci and Dior have used.

Chapter 1

Literature Review

1.1 Product and Brand Identity

Jean-Noël Kapferer first proposed the concept of brand identity in 1986. The components of the Kapferer brand identity includes, culture, reflection, physique, relationship, personality, and self-image that work together to form its identity and set it apart from rivals are represented by these facets (Kapferer, 1986).

According to Aaker (1996), brand identity can be viewed from four distinct perspectives. Initially, the brand-as-product perspective puts the company's value proposition at the center, which generally comprises a functional benefit. Such a perspective considers brand as a generator of value, which lets it be less sensitive to competitors. The second is the brand as organization perspective that focuses on the organization behind the brand such as the people, values, and programs. The relevance of the aforementioned perspective cannot be overemphasized when brands are similar in terms of their characteristics, and when the organization is visible - such as in durable goods companies or service companies. Third, the view of the brand identifying with an individual, implies that the brand is associated with emotional and self-expressive benefits, customer brand relationships, and differentiation. Such perspective is however markedly important for brands with under the surface physical differences that are consumed in public where the brand can make a visual statement about the person. Brand-as-symbol perspective comes into the picture last.

Keller (1993) represents the links between brand identity, brand image, and brand equity. It illuminates the effect of brand identity on consumers judgment and selection of brand. Brand equity in the model is defined as the effect on consumers' responses to marketing that is particular to brand knowledge. These components of brand knowledge correspond to brand awareness and brand image which consist of brand associations.

Kotler, Wong, Saunders, and Armstrong (2005) state that products establish a unique identity through consistent delivery of quality, features, style and design; decisions about these attributes are particularly important that they resonate with consumer preferences and influences purchase decisions.

To generate genuine and distinctive value that set a brand apart from others in a meaningful way, Aaker (1996) suggests to consider also emotion and self-expression benefits along with brand personality. As Kapferer (2008)

emphasizes the significant impact of a brand's name in establishing emotional connections with consumers as a brand represents more than just a label; it embodies an attitude deeply embedded in the hearts of consumers. Starting from emotional resonance, consumers progress through stages of liking, feeling a sense of belonging, developing preferences, forming attachments, becoming advocates, and sometimes even exhibiting fanaticism towards the brand. moreover, Kapferer (2008) states the value of intellectual property assets like designs, patents, and rights in maintaining a brand's competitive edge over time. it embodies the concept of the brand that customers enthusiastically embrace and thereby are guided in their preferences and even become the brand advocates. Hence, grasping and utilizing the intricacies of product and brand identity, marketers will be able to find a way of positioning the offerings that will satisfy consumers, generate long term value and offer differentiation in the marketplace.

1.2 Product Branding on Social Media

Design, communication, marketing, and human resources are all included in Wally Olins' (2009) definition of branding as a multifunctional tool. All facets of an organization are affected by it; it acts as a uniting factor and makes the strategy more understandable to a wider range of people. The relevance of branding on social media platforms was highlighted by Laroche et al. (2013), who noted that social media community building fosters brand loyalty and trust.

Social media allows for communication and content usage depending on instant needs and preferences. Its multidirectional nature and real-time capabilities are what define social media. This contrasts with the traditional model of media communication, as the internet and social media platforms reshape the dynamics of communication markets (Juslén, 2009).

Marketers are looking for methods to use social media sites like Facebook, Instagram, and Twitter to brand their products. According to Montero Torres (2015), Via social networking platforms, brands have the opportunity to engage in direct dialogues and communicate with consumers. These kinds of tailored interactions have the power to foster and strengthen brand loyalty to companies that participate actively in social media conversation.

Social media content communities have been more visible in recent years, partly as a result of corporations making content marketing a key component of their branding efforts. According to Steimle (2014), the content marketing technique defined as a process of creating and sharing relevant, consistent, and high-quality material with the ultimate purpose of attracting in and involving a target audience and encouraging profitable consumer behavior. Actively connecting with customers and building strong ties have been made

possible by the use of content marketing, thereby assisting companies in augmenting their market shares through the distribution of content on their social media channels (Potgieter & Naidoo, 2017; Rosenthal & Brito, 2017).

Scholars suggest that social electronic word-of-mouth across diverse social networking platforms holds significance as well (Hu et al., 2014). Hennig-Thurau et al. (2004), eWOM is characterized as “any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet”. Social eWOM encompasses any communication exchanged between users on social media platforms regarding brands or products; individuals who follow brand fan pages have notably expanded and constitute a significant portion of social eWOM marketing (Hu et al., 2014). Influencers wield authority over and direct electronic word-of-mouth within their follower base, acknowledged as opinion leaders within their social circles (Dalstam et al., 2018).

1.3 Analyzing Online Brand Identity and Users’ Feedbacks Through Sentiment Analysis and Topic Modelling

With the expansion of the Internet and social media, businesses must comprehend consumer perceptions within their product categories, often conveyed through electronic word-of-mouth (Paul & Rosenbaum, 2019). According to Chen et al. (2017), consumer text comments serve as authentic reflections of customers' genuine sentiments and also signify their satisfaction levels with products, holding significant importance in online marketing strategies. As explained by (Swaminathan et al., 2022), to learn more about brand positioning and deduce market structure, marketing research has advanced towards interpreting the correlations between words and social tags.

The notion of "text mining" has arisen to describe the extraction of pertinent and meaningful data from the abundance of textual content available online (Netzer et al., 2012). Given the abundance of consumer data accessible, there arises a necessity for data-driven tools to facilitate the analysis of brand rivalry (France & Ghose, 2016). Natural language processing methods enable swift and predominantly automated examination of extensive sets of textual data.

Within the fields of data mining, web mining, and text analysis, sentiment analysis—a subfield of natural language processing—has grown to be a well-known research project (Liu, 2012). The method that used for investigating at people's neutral, negative, and positive sentiments on a particular product or service (Gürsoy et al., 2017). Sentiment analysis includes sentiment consistency, an idea suggested by Hatzivassiloglou and McKeown (1997). The theory claims that when some words, such as conjunctions like AND or BUT join adjectives these adjectives typically give a feeling of concordance. In addition,

Kanayama and Nasukawa (2006) introduced two types of sentiment consistency—intra-sentential (within a sentence) and inter-sentential (between adjacent sentences), shedding light on how sentiments are preserved or altered within and between sentences.

The two approaches to automatic sentiment categorization by machine are Machine-learning approach and lexicon-based Approach. According to (Taboada et al., 2011), the Lexicon-based approach to sentiment analysis is based on the use of word lists annotated with polarity and strength for emotional lexicons in order to elicit affective information from texts. This is a method of establishing the orientation for documents based on determining semantic orientation word or phrase in document. Intensification and negation are involved in the method which targeted for polarity classification problem that involves classifying a text as either positive or negative based on its opinion towards its main subject matter. There are some general-purpose lexicons for instance, BING (Liu et al., 2005) and NRC (Mohammad and Turney, 2013). Each of these lexicons relies on individual words, or unigrams, for sentiment analysis. They cover a broad spectrum of vocabulary in English, and each word is given a score that indicates whether it is positive or negative, as well as, occasionally, emotions include joy, anger, sadness, and more (Silge & Robinson, 2024).

A different approach titled Topic Modeling uses a collection of algorithms designed to find, recognize, and label themes in a document (Blei, 2012). Latent Dirichlet Allocation is a generative probabilistic model of a corpus. The basic idea is that documents are represented as random mixtures over latent topics, with a distribution over words identifying each topic (Blei et al., 2003).

According to (Hong & Davison, 2010), LDA has undergone various extensions, particularly concerning social networks and social media, where several modifications to the original model have been suggested. Structural topic models (STM) have been advanced by Roberts et al. (2014) over the Latent Dirichlet Allocation (LDA) topic models (Blei et al., 2003), which are solely based on the bag-of-words theory (Goldberg and Hirst, 2017) of setting the focal point onto the frequency and distribution of words within the text, or the more recent correlated topic models (CTM), whose hierarchical add-on allows for correlated latent topics (Blei and Lafferty, 2007). The core idea of STM lies in incorporating covariates and metadata in the model, refer to Chapter 3 for details of the model application.

Chapter 2

Case Study

Two luxury products of brands, namely Dior and Gucci, were selected as the cases of the current research and were considered to answer the research questions. The two firms incorporated in this analysis make part of the top three leading brands in the Vogue Business Index (Nast, 2024).

The choice of the brands Dior and Gucci is notable given their competitive positioning, a fact underscored by research conducted by ALTAGAMMA (2020). In the report, Gucci and Dior are considered competitors in digital market as they both work to improve their online visibility and customers engagement with creative digital marketing tactics.

Since most of the share of total global revenue generated by these brands comes from sales of leather goods, as shown in Table 1 here below, the decision was made to focus our analysis specifically on the handbag segment in order to examine and evaluate the online marketing strategies of these two companies for the two selected product lines.

Table 1. Revenue share of Dior and Gucci worldwide by product category (year 2022)

| Gucci (values in percentage of total revenue) | | | | |
|---|-------|---------------|---------------------|-------|
| Leather goods | Shoes | Ready-to-Wear | Watches and Jewelry | other |
| 52% | 21% | 15% | 5% | 7% |

Source: [Statista](#)

| Dior (values in percentage of total revenue) | | | | | |
|--|---------------------|------------------------|------------------|---------------------|--------|
| Fashion and Leather goods | Selective retailing | Perfumes and Cosmetics | Wines and sprits | Watches and Jewelry | Other |
| 48.8% | 18.4% | 9.76% | 8.96% | 13.37% | 0.355% |

Source: [Statista](#)

In the sections that follow we present the two brands, and describe their strategy, focusing on the online communication and branding for Gucci Marmont and Lady Dior.

2.1 Dior

The Christian Dior fashion house was established in 1946 by the French fashion designer Christian Dior. Born in France in 1905, Dior initially worked as an art director for several fashion houses before starting his own fashion house in Paris. Dior's first collection, presented in 1947, was an instant success and came to be known as the 'New Look.' Dior is not only renowned for its fashion designs but also for its exceptional line of perfumes, such as 'Miss Dior.' Following Dior's passing in 1957, the fashion house was led by several prominent designers, including Yves Saint Laurent, Marc Bohan, Gianfranco Ferré, and John Galliano., the fashion house was led by several prominent designers, including Yves Saint Laurent, Marc Bohan, Gianfranco Ferré, and John Galliano (Dior lagalerie, 2024).

The Christian Dior fashion house is currently a part of the LVMH Group, which is a French multinational luxury goods conglomerate formed in 1987 through the merger of Moët Hennessy and Louis Vuitton (Wikipedia Contributors, 2019).

In 2022, LVMH observed outstanding performances within its Fashion & Leather Goods business group, showcasing remarkable growth as revenue surged by 25%, including a notable 20% organic increase. Christian Dior, a flagship brand within this group, sustained impressive growth across all its product categories. This success was underscored by the highly anticipated reopening of its historic Paris store, alongside captivating fashion spectacles held in Seville and Egypt (LVMH, 2023).

For the fiscal year of 2023, Christian Dior's total revenue amounted to €86,153 million euros, reflecting a 9% increase compared to the previous year. Notably, within the business group, Fashion & Leather goods have accounted for the largest portion of the overall revenue, demonstrating a significant 9% uptick (Christian Dior FINANCE, 2024).

Today, Dior manages a global network of 245 boutiques across the world. (LVMH, 2024) It remains a prominent brand in the realm of upscale fashion which engages in the design and production of globally coveted haute couture, ready-to-wear, menswear, accessories, and fine jewellery, showcasing an unparalleled commitment to excellence and desirability.

2.1.1 Lady Dior

A piece of fashion accessories, which has become the symbol of sophistication and elegance, the Lady Dior handbag is once presented as a fashion icon and never-ending. Its prominent features include a well-defined form, geometric charm, and the distinctive 'D.I.O.R.' pendant (Dior website, 2024). The Lady Dior handbag boasts a square silhouette, rounded handle, and signature 'cannage' quilting, inspired by the chairs at Christian Dior's 1947 debut show.

Originally named 'Chouchou' in 1995, it gained legendary status when France's First Lady gifted it to Princess Diana in 1996. Because of Diana's affection for the bag, it was renamed the "Lady Dior," cemented in its iconic status (Solomon, 2022).

The handbag has succeeded commercially as the 100,000 pieces sold in the first year since it was released shows and it remains among the most fashionable items today. Famous globe celebrities, including Marion Cotillard, Jennifer Lawrence, and Rihanna, have served as influential endorsers, contributing to the enhancement of Dior's brand identity (Antonaglia, F., Passebois Ducros, J, 2020).

Throughout its evolution, the Lady Dior handbag has undergone iterative redesigns, offering a spectrum of sizes, colour palettes, and material compositions to accommodate diverse consumer preferences.



Figure 1: Lady Dior Handbag (Dior, 2024)

2.1.2 Lady Dior's Online Communication

2.1.2.1 Website Analysis Based on the Internet Archive

The Wayback Machine - Internet Archive (archive.org) is a digital archive that allows users to see historical versions of web pages across time. Here we use it to analyse the evolution of the websites of Gucci and Dior, specifically focusing on the Gucci Marmont and Lady Dior. By mapping these elements over time, one can trace the branding and communication strategies of Gucci Marmont and Lady Dior, gaining a deeper understanding of each brand's historical and strategic brand identity development. This type of analysis can be particularly beneficial to understand the evolution of the product lines' identity by examining:

- **Design changes:** Tracking how the visual presentation, colour palettes, schemes, and layout have changed.
- **Message framing:** Observing the evolution of the language, associations, metaphors, and themes in the website pages of the two product lines can provide insights into how the brand communicates its values and how it has targeted specific audiences over time.
- **Product focus:** Seeing which products are highlighted or given prominence at different times can indicate strategic shifts in what the brand wants to emphasize in its product line.

Dior, in presenting Lady Dior bags on its website, utilizes product descriptions to emphasize the craftsmanship, design, and unique features of the bags, aiming to appeal to consumers who prioritize quality and classic style.

Dior also showcases the process of creating the Lady Dior bag from start to completion by video. Through the production journey approach, Dior emphasizes the meticulous craftsmanship and dedication to quality involved in creating the Lady Dior bags.

DIOR

MEN'S FASHION BAGS JEWELRY & TIMEPIECES KIDS & BABY HOME HAUTE COUTURE FASHION .

LADY DIOR

Dior's iconic bag, the Lady Dior, features all the hallmarks of Dior leather goods: soft lambskin topstitched with the iconic Cannage motif, rounded handles and D.I.o.r charms. An architectural piece, it is the symbol of Couture elegance and refinement. Reinterpreted with charms, a wide shoulder strap and a more supple design, wear this version for guaranteed on-trend style.

Figure 2: Dior website snapshot – Lady Dior webstore,2024



Figure 3: Dior website snapshot – Lady Dior webstore, 2021

2.1.2.2 Social Media Profiles

The social media profile picture presents an array of outfits from Dior's Spring- Summer 2024 collection, tastefully arranged against a complementary backdrop. This visually engaging arrangement blends empowerment and sophistication while reflecting the season's distinctive style and aesthetic.



Figure 4: Dior's Spring-Summer 2024 campaign showcased on its Twitter profile (Dior,2024)

Through visually captivating content on social media platforms, Dior showcases its latest collections, runway shows, and behind-the-scenes moments, leveraging influencer partnerships, collaboration with famous artists, photographers and other creative talents to promote its products and events.

moreover, Dior's social media channels offer a transparent look into the intricate process behind its haute couture and fashion designing which offering a glimpse into the meticulous craftsmanship that goes into creating each exquisite piece.

2.1.2.3 Coverage by Online Magazines

In a captivating online video featured by ELLE in 2020, viewers are treated to an exclusive preview as top model Ruth Bell shares her unique perspective on elegance and sophistication.

Central to Bell's interpretation of elegance is her choice of the classic Lady Dior handbag as it is the perfect canvas for Bell to express her individuality and personality. She interprets her favorite handbag to her own style and personality.



Figure 5: Ruth Bell with the iconic cannage motif Lady Dior bag (ELLE, 2019)

In figure 6, Jisoo, the esteemed global brand ambassador for Dior's fashion and beauty division, graces the Dior store with her presence, adorned with

their exquisite handbags. The lady Dior handbags featured in the image predominantly showcase colors of black, white, pink and gray. These hues are thoughtfully selected to highlight their versatility and enduring appeal. Additionally, the brand's identity is emphasized by the usage of gray, which is referred to as the Dior brand's identification color because it was Dior's favorite color. "My childhood home was rendered in a very soft pink, combined with gray gravel, and these two shades have remained my favorite colors in couture." - Christian Dior (Dior lagalerie, 2024).



Figure 6: Jisoo at the Lady Dior store (BAZAAR , 2021)



Figure 7: sophisticated Diana style with Lady Dior handbag (British Vogue, 2022)

Princess Diana's famous moments including the Lady Dior bag appeared in Vogue magazine in 2022. Princess Diana's support raised the status of the bag by turning it into a sign of sophistication and luxury.

2.2. Gucci

Established in Florence, Italy in 1921, Gucci originated as a luxury fashion brand founded by Guccio Gucci. Drawing inspiration from the elegant leather goods observed during his tenure as a porter at London's Savoy Hotel, Gucci began as a modest leather goods enterprise. One of the characteristics that sets Gucci apart in its entire history is its great designs and really the high-quality craftsmanship (Gucci,2024b).

In the '80s, investment firm Investcorp took over Gucci and gave the brand a major makeover - talking up new styles for a new era and refining its marketing game (Yoffie and Kwak,2001). In the 50s and 60s, Gucci was a real hit, especially thanks to the bamboo-handled tote bags that every fashion-conscious woman had to have (Roland, 2024).

In the 1990s, Gucci was acquired by the French luxury group Kering, a global Luxury group composed of Houses in Fashion, Leather Goods and Jewelry, and under its new ownership, the primary focus of Kering has always been Gucci, a brand that contributed 63% of revenue to Kering's Luxury House business in 2020 (Roll, 2020).

Gucci has its product categories offered such as jewellery, watches, leather goods, shoes, and ready-to-wear items. Notably, leather goods gain popularity, which yields to a large proportion of the total amount of sales, and correlates with the high focus of Gucci on the manufacture of quality demanded accessories (Kering, 2024).

According to Kering (2023), Gucci's revenue in the first half of 2023 remained stable, with a slight increase of 1% on a comparable basis despite an initial reported decrease of 1%. Sales from directly operated retail stores grew by 1%, while wholesale revenue dropped by 3% compared to the previous year. In the second quarter, revenue rose by 1%, driven by strong sales of exclusive products and key collections.

Gucci has more than 500 locations worldwide and its product categories offered such as jewellery, watches, leather goods, shoes, and ready-to-wear items. Notably, leather goods gain popularity, which yields to a large proportion of the total amount of sales, and correlates with the high focus of Gucci on the manufacture of quality demanded accessories (Kering, 2024).

2.2.1 Gucci Marmont

By engaging in online exploration on the internet, one can effortlessly identify prominent choices in the realm of handbags. The Gucci Marmont collection is one of the iconic and highly popular lines from Gucci was introduced under the

creative direction of Alessandro Michele in 2016. The Double G logo, which stands for GuccioGucci, is a key element in the Marmont collection (Nast, 2023). which originates from the historic hotel which is one of Hollywood's famous landmarks, this is why the collection has an interesting name – "Marmont" – (Treagus, 2024).

The texture, often a quilted pattern; takes the pieces and gives them an equally vintage glam factor. The consequence of merger is a line that successfully harmonizes legacy elements with a futurist aesthetics, which makes it timeless and a primeval object of luxury fashion.



Figure 8: Gucci Marmont Handbag (Gucci, 2024a)

2.2.2 Gucci Marmont's Online Communication

2.2.2.1 Website Analysis Based on the Internet Archive

At the beginning of 2020, it was noted that the Gucci official website lacked a separate section devoted to the Gucci Marmont handbag line. Rather, the bags were arranged according to their distinct characteristics, including shoulder bags and little bags. However, as the year went on, significant adjustments happened. More specifically, the Gucci website was updated in the middle of the year with a recognizable category icon for Gucci Marmont, which improved user navigation and made the collection easier to reach.

Upon perusing the Gucci website in the year 2020, one can discern a compelling depiction featuring the esteemed Chinese actress, Ni Ni, amidst the vibrant ambiance of an amusement park alongside a Gucci model, joyously engaged in a roller coaster ride. Notably, Ni Ni adorns a striking Gucci

bag adorned with an intricately designed Mickey Mouse motif. On further research it is revealed that this captivating visual story is an important element in Gucci's marketing campaign celebrating the Year of the Rat in the Chinese horoscope.



Figure 9: Gucci website snapshot – Nini carrying the Marmont bag at the amusement park, 2020

In 2021 (Figure 10), the Gucci website showcased the renowned talk show hosted by James Corden, with the esteemed guest Serena Williams elegantly adorned in a black Gucci Marmont bag, impeccably styled with a vibrant red floral dress. This matched ensemble provided a powerful visual cue which, purposefully, cast a spell on diligent viewers and portrayed the pinnacle of fashion.



Figure 10: Gucci website snapshot – Serena Williams with black Marmont bag on James Corden's show, 2021

In the year 2023 (Figure 11), the Gucci brand unveiled a visually stunning image that seamlessly combined classic elegance with contemporary flair. Featuring two women elegantly dressed in blue attire which holding a sleek black Gucci Marmont handbag. This carefully curated visual composition highlighted the fashionable nature of the handbags.

Furthermore, choosing to showcase two ladies with noticeable resemblances sent an equally strong signal of approachability and diversity in the world of fashion. Additionally, the versatility of short hair in styling echoed the adaptability of the Gucci Marmont bag to different fashion trends and occasions.

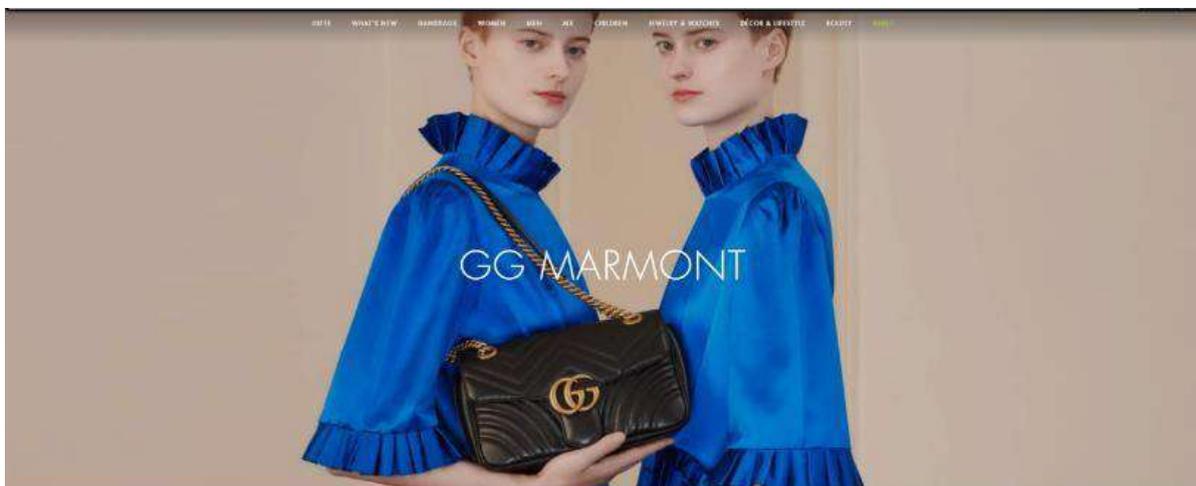


Figure 11: Gucci website snapshot – Gucci's Chic Marmont Handbag Display, 2023

2.2.2.2 Social Media Profiles

The social media profile picture of Gucci prominently features visual from its renowned travel line campaign, bags showcased by stars like NINI (Chinese actress and one of the Gucci ambassadors).

Gucci partners with other brands and fashion magazines to amplify its reach and credibility within the industry. Through the facilitation of prominent events such as the Grammy Awards after party, Gucci orchestrates immersive experiences that afford consumers distinctive and memorable engagements with the brand.

The social media channels of Gucci prominently display its unique color palette, which includes the brand's characteristic hues of red and green which are widely recognized as the hallmark of Gucci's brand identity.



Figure 12: Ni Ni and Chang Chen for the new Gucci Valigeria campaign, showcased on its Facebook profile (Gucci, 2024)

2.2.2.3 Coverage by Online Magazines

In a captivating online feature from 2020, the magazine titled "This influencer just carried the Gucci bag of our dreams" spotlighted Xenia Adonts as she strolled through the streets of Paris, adorned with the stunning Gucci Marmont bag.



Figure 13: Xenia Adonts, seen in Paris, showcasing the Gucci Marmont bag (Laiamagazine, 2020)



Figure 14: GUCCI editorial for HARPER'S BAZAAR Mexico in NYC by Enrique Vega (HARPER'S BAZAAR, 2024)

Figure 14 depicts a female adorned with a Gucci bag. Clad in red trousers and a yellow sweater, the woman is captured holding the Gucci bag in her hand. The deliberate selection of colors in the image, notably the red pants and yellow sweater, suggests potential inspiration drawn from the vibrant palette characteristic of Mexican cultural aesthetics.

Chapter 3

Data and Methods

3.1 Collecting Twitter Data by Keywords

For this study, we collected all Twitter posts about the Lady Dior bag and Gucci Marmont bag, posted between January 1st, 2020 and May 1st, 2023. Data was retrieved from the Twitter V2 Full Archive API through the Academic Twitter R package (Barrie & Chun-ting Ho 2021), the research encompasses tweets in English that specifically mention these bags. The collected dataset provides a rich starting point for analyzing public sentiment, trends, and discussions surrounding these two luxury bags lines.

This data collection approach ensures the collection of a wide range of user opinions and trends related to the targeted topic over the specified period. In the following sections we will explore the use of language in the dataset, making it a valuable resource for understanding the popularity dynamics, consumer views and preferences, and the social media footprint of these luxury product lines. Analyzing this data can reveal insights into marketing effectiveness, brand perception, and the impact of social media on consumer behavior in the luxury goods sector.

Summary of the query parameters used for retrieving tweets:

- **From:** Jan. 1st, 2020
- **To:** May 1st, 2023
- **Query for Lady Dior bag:** “Lady Dior bag”
- **Query for Marmont Gucci bag:** “Marmont bag”
- **Language filter:** lang:en

3.2 Data Preprocessing

A preprocessing is necessary for cleaning the data retrieved from Twitter, for example by removing stopwords, and for obtaining a more reliable and clean topic model as well as sentiment classification. The dataset used in the current study, described in the table that follows (Table2), refers to posts about the two luxury handbags from Jaunary 2020 to April 2023.

Table 2. Sampled tweets' description

| Lady Dior | | | | Gucci Marmont | | | |
|-----------|-------|------------|------------|---------------|-------|------------|------------|
| Account | Count | Start-Time | End-Time | Account | Count | Start-Time | End-Time |
| Users | 4408 | 2020-01-16 | 2023-04-17 | Users | 6285 | 2020-01-15 | 2023-04-17 |

There are three main stages for preprocessing tweets and converting them into analyzable data structures. Firstly, we remove special characters, including slashes, brackets, punctuations, web-source annotation marks and so on, in order to get rid of non-semantic symbols. Every tweet is then tokenized into words. After changing the tokens into lower case and removing the stopwords – which would convey global, non-specific meanings, such as “the”, “is”, “or” and so on –, the very root of every word is then obtained by stemming the tokens. Following these stages of data cleaning, the tweets with stemmed tokens are collected into a corpus for the purpose of text mining.

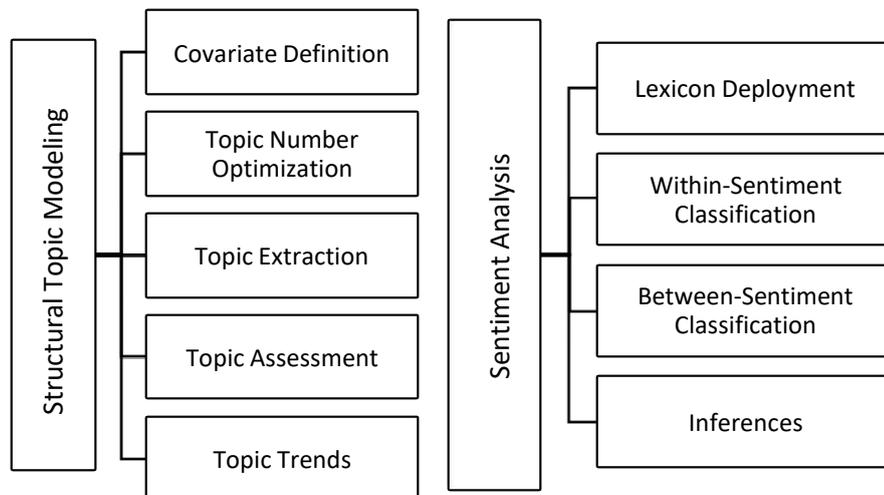
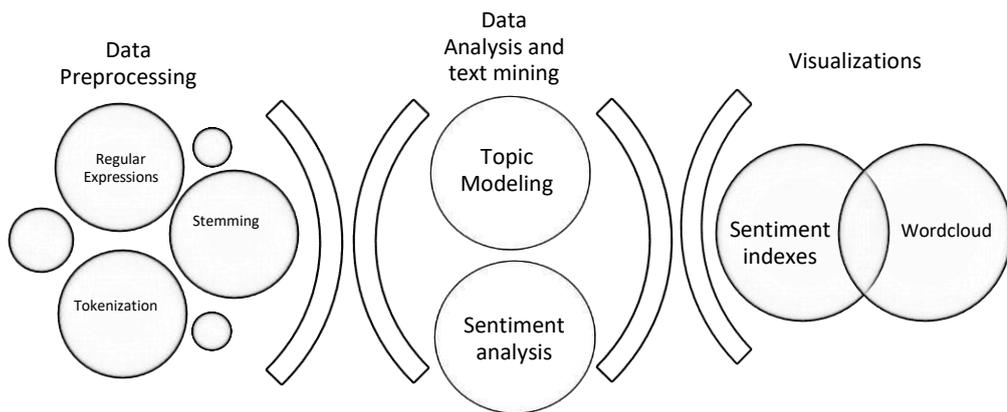


Figure 15: Visualized stages of structural topic modeling and sentiment analysis

3.3 Structural Topic Modeling

Structural topic models (STM), by Roberts et al. (2014) is a more sophisticated version of the Latent Dirichlet Allocation (LDA) topic models (Blei et al., 2003), which builds on top of the correlated topic models (CTM), which allows for correlated latent topics (Blei and Lafferty, 2007). Both are solely based on the bag-of-words approach (Goldberg and Hirst, 2017) of setting the focal point onto the frequency and distribution of words occurring and co-occurring within the text. The core idea of STM lies in incorporating covariates and metadata which can influence topic contents and proportions, for the sake of improved explain ability, richness and accuracy.

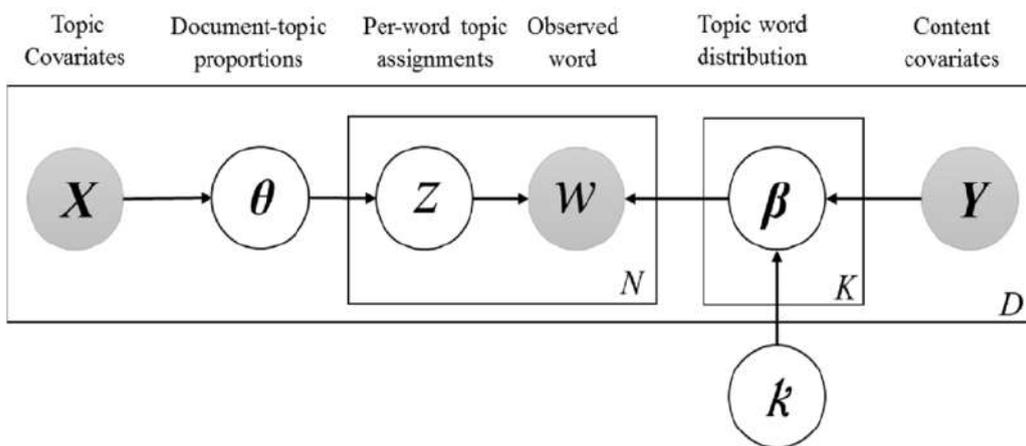


Figure 16: Structural Topic Modeling graphical representation from Roberts et al. (2014)

The above Figure 16, illustrates the mechanism behind a STM model that we employ in the analysis. Here, the corpus will undergo an extra phase of conversion to a document-term matrix, containing the counts of terms for each document, as the input for STM estimation algorithm. From the specification above, it can be seen that the only variable remaining to set is the initial number of topics (K), since other parameters are whether already fixed by the corpus construction or would be optimized through the STM algorithm. In relation to that, there are several criteria available for selecting the optimal number of topics, where held-out likelihood (exclusivity), semantic coherence and residual dispersion will be the bases in the present methodology. Moreover, date, impression counts, like counts, retweet counts, reply counts and quote counts were employed as the prevalence covariates relative to their potential contribution to tweet trends.

| Table 3. Optimal K-number of topics | |
|-------------------------------------|--------------|
| Metrics | Criteria |
| Held-Out Likelihood (Exclusivity) | Maximization |
| Semantic Coherence | Maximization |
| Residuals | Minimization |

Technically speaking, exclusivity denotes the uniqueness of topics relative to the top tokens, while semantic coherence signifies the extent to which topics share the main themes borne with the top tokens. According to Table 3, the optimal number of topics to initialize would lay somewhere that the above-mentioned metrics approximate to the closest distance from each other collectively.

3.4 Sentiment Analysis

the data preparation for the sentiment analysis, which is based on the lexicon approach described in Chapter 1, follows the same procedures as topic modeling with the exception that the stopwords removal would apply to any word other than the sentiment lexicons. This way, the constructed corpus would represent sentiment-related words used for the assessment. A series of negative words with contextually positive or neutral meaning, such as “(want so) badly, fell (in love), worn (this handbag), black, mini, small, limited, were discarded from the negative semantic lexicon so as not to add misspecification or noise.

| Table 4. Description of sentiment lexicons | | |
|--|--------------|-------|
| Lexicon | Sentiment | Count |
| BING | Negative | 2005 |
| | Positive | 4781 |
| NRC | Anger | 1245 |
| | Anticipation | 837 |
| | Disgust | 1056 |
| | Fear | 1474 |
| | Joy | 687 |
| | Negative | 3316 |
| | Positive | 2308 |
| | Sadness | 1187 |
| | Surprise | 532 |
| Trust | 1230 | |

The sentiment classification of tweets is performed on the Bing lexicon (Liu et al., 2005) for intra-sentiment analysis, while the inter-sentiment classification is going to be done according to the varied sentiments from the NRC lexicon (Mohammad and Turney, 2013). It is worth nothing that, as any tweet might be expressed with mixed feelings, entering the sentiments as content covariates may be implausible. Therefore, the sentiment analysis of STM will be carried out separately for every classified tweets.

Chapter 4

Results and Findings

In the following chapter we show the main results of the analysis of the data we have collected. In particular, we:

1. Do a preliminary analysis of the data showing some descriptive statistics, such as the distribution of collected posts, by brand, over time.
2. We analyze the sentiment of Tweets for the two brands.
3. We analyze the results of a Structural Topic Model which allows us to differentiate topic-contents by brand.

4.1 Preliminary Analysis

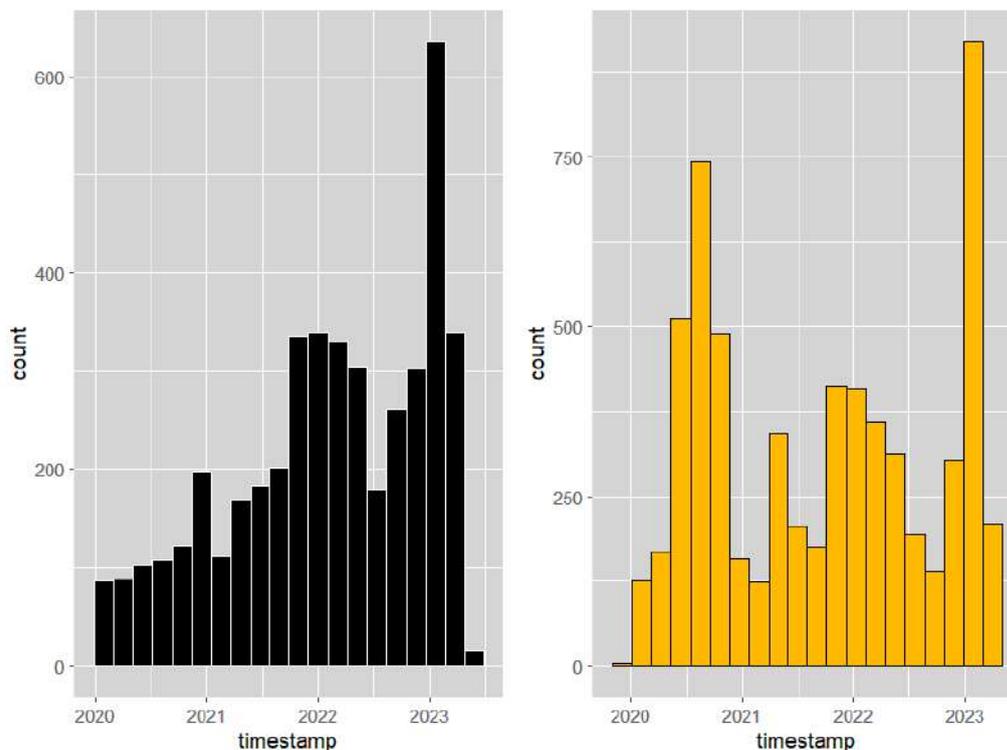


Figure 17: Tweet activities around Lady Dior (left) and Gucci Marmont (right)

The above histograms were obtained for temporal activities of users tweeting around the handbags of the two luxury brands, Dior and Gucci. It is seen there were some peak activities around Lady Dior in 2022 and 2023, whereas the latter was further extended back to the midyear of 2020 for Gucci Marmont.

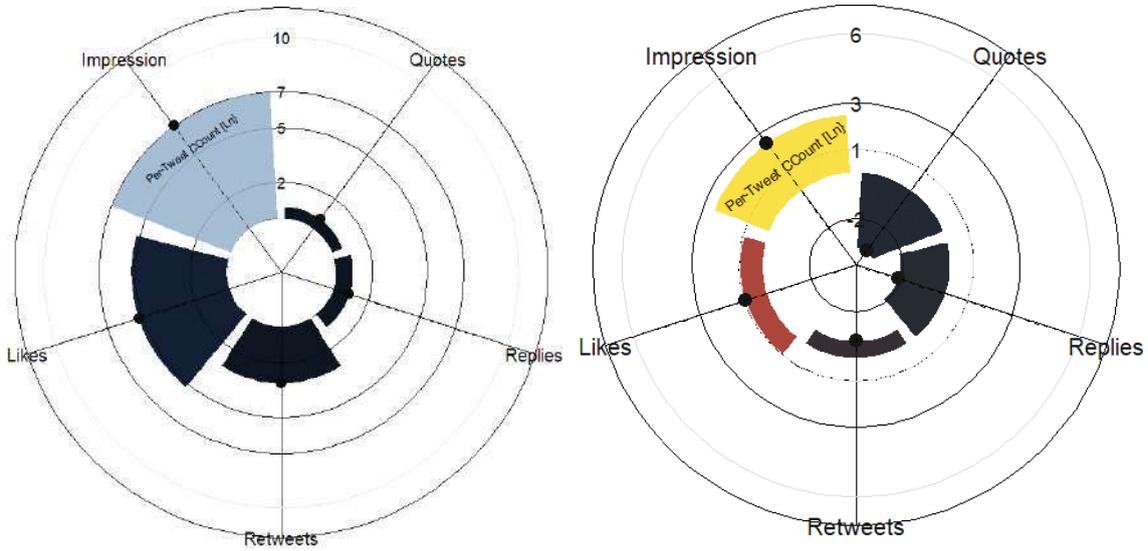


Figure 18: Influence Indices of Tweets around Lady Dior (left) and Gucci Marmont (right)

Figure 18, summarizes the metrics of user-generated tweets for the two product lines of Dior and Gucci according to impression counts, likes, retweets, replies and quotes. For the influence indices to become comparable between the two brands, these metrics were converted into ratios by dividing the five counts by the total tweet counts for each brand. Also, to facilitate the visual comparison, the above indices were transformed by taking their natural logarithm, whose natural ratios were plotted.

From the above diagram, it can be observed that every influence metric was significantly higher for Lady Dior with respect to Gucci Marmont, despite the total user tweets around Gucci Marmont being more than Lady Dior's one (see Table 2). Impression counts relate to the level of hits any tweet would receive, which can be a strong indicator of digital marketing influence campaigns conducted by the brands. Like counts, as known to everyone, resembles a favorable reception of tweets from users. Moreover, the three indices of retweets, replies and quotes simply point to interaction behaviors from Twitter users, from which the reply counts may stand as a better proxy metric of a hot trend. Hence, the output indices might be indicative of digital marketing outperformance of Dior over Gucci, at least in relation to Twitter platform.

Table 5. Frequent hashtags observed

| Lady Dior | | | Gucci Marmont | | |
|-----------|------------------|-------|---------------|------------------|-------|
| Rank | #Hashtag | Count | Rank | #Hashtag | Count |
| 1 | #shopmycloset | 233 | 1 | #shopmycloset | 1743 |
| 2 | #dior | 209 | 2 | #poshmark | 1566 |
| 3 | #poshmark | 208 | 3 | #giveawai | 1296 |
| 4 | #jisoo | 76 | 4 | #win | 1288 |
| 5 | #ladydior | 69 | 5 | #gucci | 350 |
| 6 | #fashion | 64 | 6 | #bag | 87 |
| 7 | #bag | 59 | 7 | #guccibag | 76 |
| 8 | #handbag | 47 | 8 | #ebai | 68 |
| 9 | #christiandior | 34 | 9 | #กระเป๋า(bag) | 61 |
| 10 | #blackpink | 31 | 10 | #guccimarmontbag | 58 |
| 11 | #suzi | 30 | 11 | #รณรงค์ | 55 |
| 12 | #baesuzi | 27 | 12 | นม(brandname) | 54 |
| 13 | #diorbag | 23 | 13 | #shoulderbag | 53 |
| 14 | #배수지(baesuzy) | 23 | 14 | #แท้(genuine) | 51 |
| 15 | #ebai | 18 | 15 | #shopeeth | 49 |
| 16 | #purs | 18 | 16 | #amazon | 47 |
| 17 | #블랙핑크(blackpink) | 17 | 17 | #fashion | 45 |
| 18 | #princessdiana | 16 | 18 | #marmont | 40 |
| 19 | #luxuri | 15 | 19 | #smallzyssurgeri | 36 |
| 20 | #style | 1 | 20 | #luxuri | 34 |
| | | | | #guccimarmont | 34 |

The handbags of Lady Dior were manufactured under Christian Dior. However, following some events in the late 90s, the brand name changed to Princesse, then to Lady Dior, in honor of Diana, Princess of Wales. In recent years, Jisoo, the Korean singer and actress, has become one of the global ambassadors of Lady Dior bags. The singer is also one of the founding members of the top-ranked girl group BlackPink. Also, Bae Suzy, another Korean singer and model, has appeared as the ambassador to Dior. Therefore, it seems that luxury branding might be the focal point of digital marketing campaigns by Dior. On the other side, the giveaway, win and shop my closet are the featuring tags around Gucci Marmont. There are also popular marketplaces such as poshmark, ebay, and amazon which have got frequent hashtags from Gucci Marmont. Evidently this way, the audience of Gucci have been probably targeted by enticing affordable handbag products.

| Table 6. Frequent words observed | | | | | |
|----------------------------------|----------|-------|---------------|-----------|-------|
| Lady Dior | | | Gucci Marmont | | |
| Rank | Word | Count | Rank | Word | Count |
| 1 | black | 438 | 1 | shoulder | 2102 |
| 2 | mini | 423 | 2 | leather | 1394 |
| 3 | cannag | 394 | 3 | mini | 1250 |
| 4 | leather | 365 | 4 | giveawai | 1225 |
| 5 | medium | 346 | 5 | black | 1153 |
| 6 | ebai | 323 | 6 | matelass | 964 |
| 7 | shoulder | 297 | 7 | matelassé | 774 |
| 8 | jisoo | 271 | 8 | belt | 572 |
| 9 | diana | 257 | 9 | authent | 524 |
| 10 | patent | 245 | 10 | ebai | 501 |
| 11 | hand | 218 | 11 | crossbodi | 474 |
| 12 | princess | 199 | 12 | velvet | 425 |
| 13 | love | 192 | 13 | quilt | 403 |
| 14 | bui | 186 | 14 | chain | 348 |
| 15 | saddl | 158 | 15 | pink | 314 |
| 16 | 2wai | 157 | 16 | red | 312 |
| 17 | lambskin | 151 | 17 | calfskin | 310 |
| 18 | icon | 145 | 18 | women | 299 |
| 19 | quilt | 143 | 19 | super | 288 |
| 20 | sold | 138 | 20 | medium | 250 |

With some influencers of Dior already outstanding as Princess Diana, Jisoo, and Bae Suzi, there also other hot spots in user tweets around this luxury handbag. The latter primarily pertains to the design of the handbags in regard to the style, color, size and materials. Actually, shoulder, saddle and two-way bags, black colors, small and medium sizes, as well as cannage and leather materials were the common words of mouth around Dior. As for Gucci, the motifs of giveaway and authentic were observable, with shoulder and crossbody styles, black, pink and red colors, mini and medium sizes, leather and velvet materials, and matelassé and chain designs as the widely-heard words of mouth from Twitter users.

4.2 Structural Topic Modeling of User Tweets

In the next phase for topic modeling on user tweets around the two handbags from Dior and Gucci, we will use structural topic modeling, which were already explained in scope (see the methodology section).

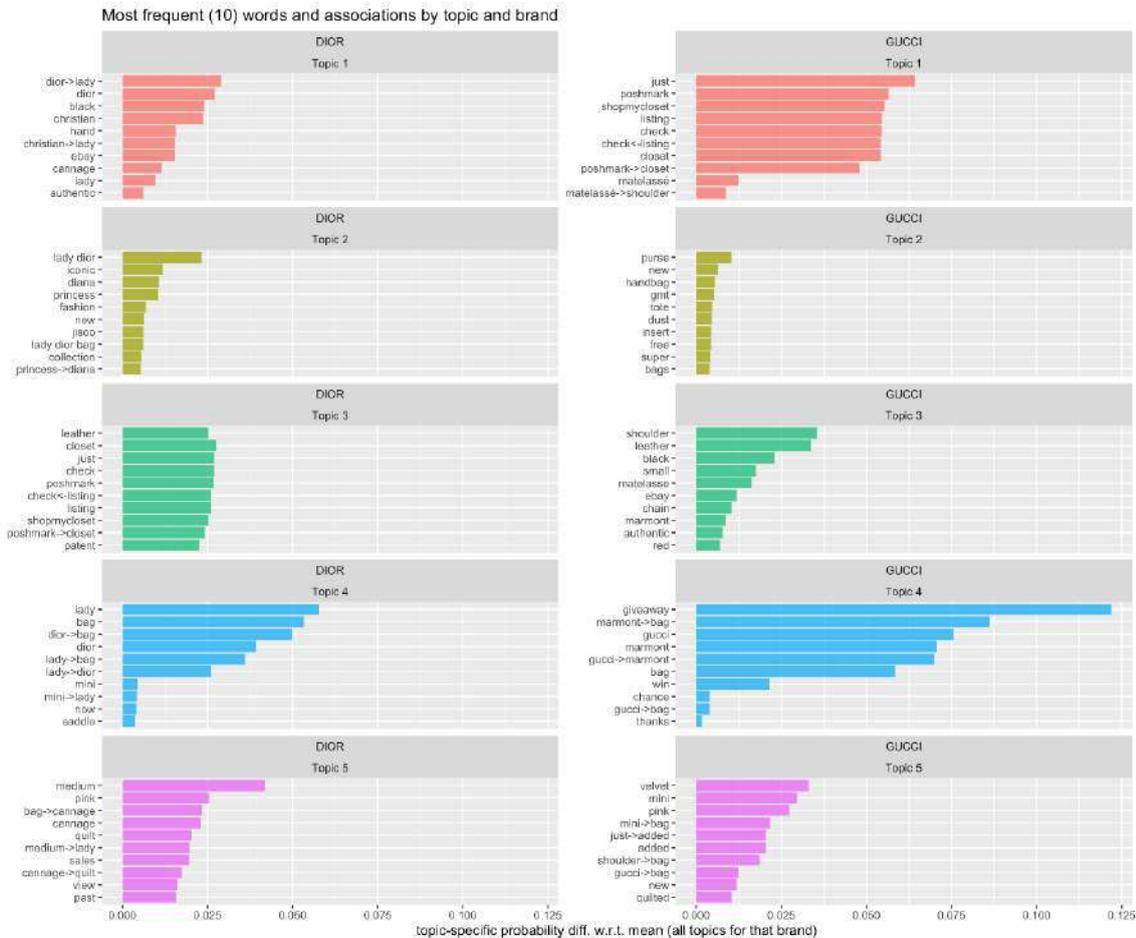


Figure 23: Most frequent word associations by topic and brand, Dior (left) and Gucci (right)

After estimating the structural topic model with five topics, using the brand as a covariate affecting the contents of topics, we can explore and describe inferred topics, shown in figure 23, and their most frequent features, separately presented for each brand.

For Lady Dior, topic #1 describes the handbag designs; the words “black” and “cannage” were the most frequent features which suggests discussion about the popular color and distinctive quilted pattern of the bag. The topic also includes associations with “ebay”, the online marketplace as a platform for purchasing or selling them.

Whereas for Gucci, topic #1 is characterized by frequent mentions of "poshmark," "shopmycloset," and "listing," suggesting discussions related to online shopping platforms and listing items for sale, particularly the Gucci Marmont bag. The association between "check" and "listing" indicates actions taken by users, such as checking listings for the Gucci Marmont bag on platforms like Poshmark.

Topic #2 for Lady Dior focuses on the iconic design and heritage of the Lady Dior bag, as indicated by frequent mentions of "Lady Dior," "iconic," and

"Princess Diana." The association between "Princess" and "Diana" suggests discussions about the historical significance of the Lady Dior bag, which gained fame after being carried by Princess Diana. Terms like "fashion," "collection," and "new" imply discussions about the latest Lady Dior collections and fashion trends associated with the brand. It also includes associations with "Jisoo," referring to a member of the group BLACKPINK, who is a brand ambassador for Dior. The association between "Jisoo" and "Lady Dior bag" suggests discussions about celebrity endorsements and influencer marketing strategies employed by Dior to promote the Lady Dior bag.

Topic #2 for Gucci emphasizes on the features and variants of the Gucci Marmont bag, as indicated by frequent mentions of "purse," "handbag," "tote," and "bags." Terms like "new" and "super" may imply discussions about newly released variants or popular models of the Gucci Marmont bag.

Topic #3 for lady Dior includes associations with "leather," highlighting discussions about the material used in Lady Dior bags. The association between "closet" and "poshmark" suggests discussions about storing or selling Lady Dior bags on online resale platforms like Poshmark. Terms like "just" and "check<-listing" may imply engagement with listings or recent activity related to purchasing or selling Lady Dior bags.

Topic #3 for Gucci highlights discussions about product features and design elements specific to the Gucci Marmont bag. Terms like "shoulder," "leather," "black," "small," "matelasse," and "chain" indicate a focus on various design characteristics of the bag. the word "authentic" related to the authenticity of Gucci Marmont bags.

Topic #4 related to Dior centers about brand and product identification, with frequent mentions of "lady," "dior," "bag," and "mini." Associations like "dior->bag" and "lady->dior" reinforce the connection between the brand and the Lady Dior bag. The term "mini" suggests discussions about the mini variant of the Lady Dior bag.

Topic #4 about Gucci appears to be related to promotional activities and giveaways associated with the Gucci Marmont bag. Terms like "giveaway," "win," and "chance" suggest opportunities for users to win or participate in promotions. This topic may focus on brand recognition and appreciation, with frequent mentions of "gucci" and "marmont."

Topic #5 of Dior which discussing the size and color variants of the Lady Dior bag, with mentions of "medium" and "pink." Associations like "bag->cannage" and "cannage" suggest discussions about the cannage pattern, a distinctive feature of Lady Dior bags. This topic appears to be related to sales and product view, as indicated by terms like "sales" and "view." The term "past" may imply discussions about past sales events or collections of Lady Dior bags.

Topic #5 for Gucci concentrates on material and design aspects of the Gucci

Marmont bag, with mentions of "velvet," "mini," and "pink." Associations like "mini->bag" suggest discussions about the mini variant of the Gucci Marmont bag. The term "quilted" indicates discussions about the quilted design feature of the Gucci Marmont bag. This topic appears to be related to new additions and brand affiliation, with terms like "just->added" and "added" suggesting recent additions or releases of Gucci Marmont bags.

All in all, there seems to be three main themes within the user tweets for Lady Dior, including handbag design, online market and influencers. To differ from the latter brand, the primary themes within the words of mouth of Twitter users around Gucci Marmont might be about promotional activities and design variation and online shopping platforms.

4.3 Sentiment Analysis

4.3.1 Within-Sentiment Classification

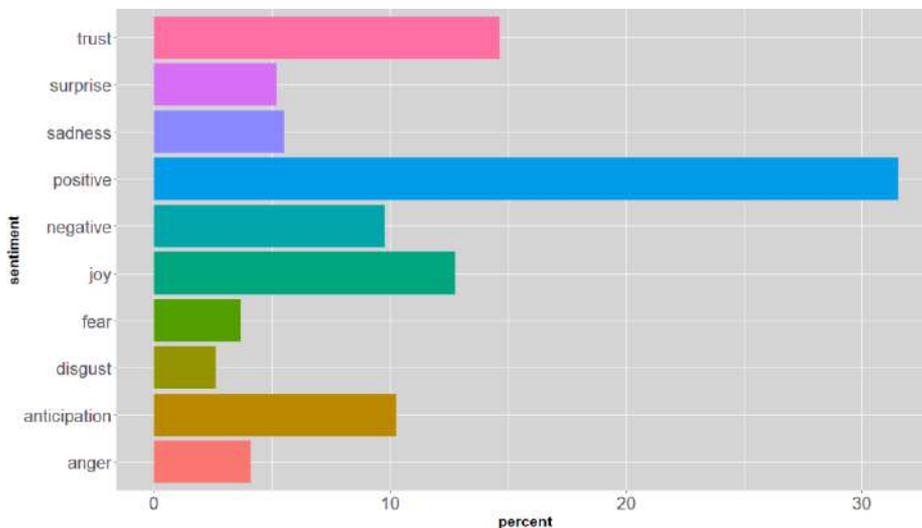


Figure 24: Within-Sentiment Classification for Lady Dior

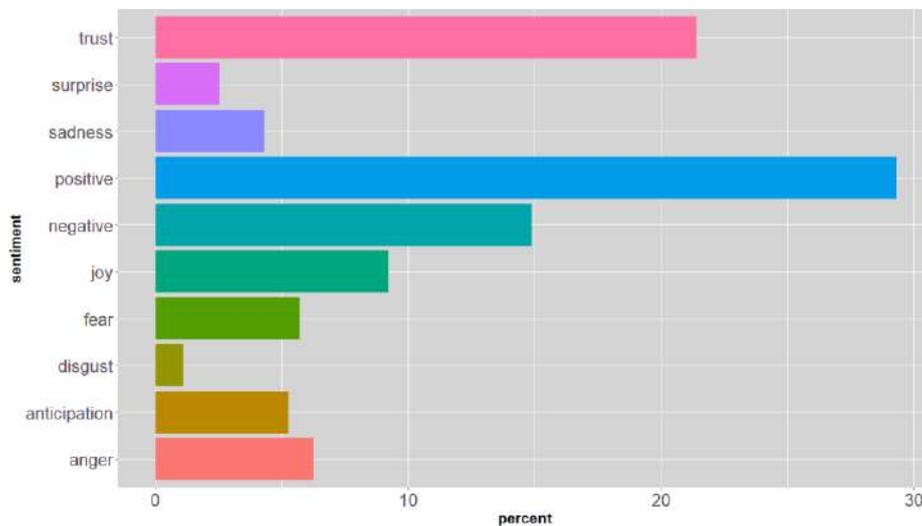


Figure 25: Within-Sentiment Classification for Gucci Marmont

Based on the within-sentiment classifications above, the user feelings of surprise and anticipation were higher for Lady Dior relative to Gucci Marmont; nevertheless, the trust expressed in tweets about Gucci Marmont is higher than trust in tweets about Lady Dior.

4.3.2 Between-Sentiment Classification

Further analysis would be based on between-sentiment classification of tweets into positive and negative as coming below.

| Table 7. Frequent positive expressions observed | | | | | |
|---|-----------|-------|---------------|-----------|-------|
| Lady Dior | | | Gucci Marmont | | |
| Rank | Word | Count | Rank | Word | Count |
| 1 | love | 161 | 1 | win | 1343 |
| 2 | authentic | 88 | 2 | authentic | 511 |
| 3 | classic | 88 | 3 | super | 289 |
| 4 | luxury | 68 | 4 | top | 176 |
| 5 | gold | 67 | 5 | love | 112 |
| 6 | cute | 56 | 6 | gold | 99 |
| 7 | pretty | 52 | 7 | luxury | 93 |
| 8 | favorite | 49 | 8 | free | 64 |
| 9 | top | 39 | 9 | genuine | 48 |
| 10 | beautiful | 36 | 10 | classic | 38 |
| 11 | charm | 30 | 11 | luck | 38 |
| 12 | afford | 28 | 12 | loved | 34 |
| 13 | beauty | 25 | 13 | pretty | 26 |
| 14 | famous | 23 | 14 | excellent | 25 |
| 15 | loved | 23 | 15 | beautiful | 22 |
| 16 | nice | 23 | 16 | cute | 21 |
| 17 | rich | 21 | 17 | gorgeous | 18 |
| 18 | elegance | 20 | 18 | worth | 17 |
| 19 | elegant | 19 | 19 | perfect | 13 |
| 20 | gifted | 19 | 20 | ready | 13 |

Table7 shows the positive words of mouth frequently expressed by the tweet users around Lady Dior and Gucci Marmont. By carefully inspecting the table, a few distinct expression could be pinpointed, which would be “afford, famous and rich” for Lady Dior, contrary to “win, free and luck” for Gucci Marmont. This might further stress the initial guess about the target audience of these brands, which were the upper-class for Dior and the upper-middle-class for Gucci.

Discussion and Conclusions

This thesis adopts an empirical approach to investigate user tweets about two luxury brand handbags product lines, Lady Dior and Marmont Gucci, exploring their marketing strategies, brand-identity influencing and user engagement tactics, and users' sentiments and trends. This has been done by applying structural topic modeling and sentiment classification techniques to a very large dataset of Twitter posts referring to the two selected product lines.

Findings suggest that the influence indices and social metrics of Dior's digital marketing campaign surpassed those of Gucci. Moreover, from the analysis of posts' contents and hashtag, it was found that the audience of Dior was the upper class, whereas the upper- middle -class was mostly targeted by Gucci. The primary strategies used by Dior was employing influencers, such as celebrities and artists, as well as branding their bags to make them look more "iconic". Its digital marketing efforts concentrated on showcasing various aspects of their bags, including size options, color varieties, and design elements. For targeting the upper middle class, it was observable that Gucci pursues two parallel promotional strategies: providing discounts and sales, as well as producing varied handbag designs to align with diverse customer segments. Dior emphasizes in its communication the historical brand reputation and assurance of authenticity.

From users' side, the main themes around Dior were its unaffordability, global ambassadorship and handbag designs, on the other hand, affordability and design variations of Gucci Marmont handbag products were among the most relevant contents of users' tweets, where there was a lot of discussion about its various design presentation. Sentiment analysis revealed that surprise and anticipation was higher in tweets referring to Dior than those referring to Gucci; nonetheless, Twitter users expressed more trust in tweets about Gucci Marmont relative to those about Lady Dior.

Practical Implications

The study's findings offer several practical implications for Dior and Gucci:

- Dior may consider a strategic pivot from classic styles to innovative designs to match Gucci's design diversity and attract new customer segments.
- Dior could broaden its affordability by more carefully crafting its promotional strategy, for example through discounts and sales, thus challenging Gucci's perceived affordability edge.
- Gucci might benefit from further engagement with celebrity influencers and global ambassadors to augment its luxury appeal in comparison to Dior.

Future Work

Some of the limitations of this research and of its findings are due to the size and timespan of the Twitter database that has been collected and utilized in this work. To enhance the accuracy and depth of the analysis, future studies should aim to build a richer database, including multiple social media platforms. Expanding the observation window in subsequent research could provide valuable insights into how trending topics evolve over time.

Also, the methodology employed in the study, particularly the bag-of-words approach for sentiment analysis, has its limitations. Future research could explore the adoption of more nuanced methods that account for the complexities of language. This could involve advancing beyond lexicon-based sentiment analysis, which relies on individual words, to machine-learning approaches that can comprehend the subtleties of human language more effectively.

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