

QATAR UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

EXPLORING HOW BRAND-GENERATED CONTENT CREDIBILITY AND TYPE  
SHAPE CUSTOMER ENGAGEMENT ON SOCIAL MEDIA: EMPIRICAL EVIDENCE

FROM TWITTER

BY

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## ABSTRACT

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Title: Exploring How Brand-Generated Content Credibility and Type Shape Customer Engagement on Social Media: Empirical Evidence from Twitter.

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The thesis explores the phenomenon of brand-generated content on social media, explaining how its credibility and type shape customer engagement. The study examines how the source credibility (content generated independently by the brand versus content generated by brands in collaboration with celebrities), content type (informative, social, and entertaining), and content format (videos, links, photos and text) shape customer engagement on Twitter. This study adopted a qualitative and quantitative thematic content analysis methodology for analyzing 5086 tweets collected from Twitter using R and analyzed with the assistance of QSR NVivo 12 software. The findings suggest that when brands associate with celebrities in generating social media content, the generated content can attract higher user engagement and enable users to perceive it as more social and entertaining. Further, the findings suggest that associating with celebrities could negatively or positively affect brand credibility, depending on celebrities' actions and how users perceive the communicated content.

## DEDICATION

*I dedicate this thesis to my family, parents, wife and daughter for their unconditional support throughout my study period; their trust and continued support is highly appreciated.*

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## CHAPTER 1: INTRODUCTION

### 1.1 Overview

Social media has become an essential part of daily life for many individuals. About 57% of the world's population are internet users (Kemp, 2019). The number of active social media users was between 3.4 billion and 3.5 billion in 2019, representing 45% of the world's population (Kemp, 2019; Mohsin, 2020). On average, users spend 6.5 hours per day online, with social media use accounting for the greatest share of this time, averaging from 2.16 hours (Kemp, 2019) to 3.5 hours (Mohsin, 2020). As a result, social media provide marketers with avenues to communicate with consumers during different stages of the purchase-decision journey (Hudson & Hudson, 2013).

Brand-generated content on social media is considered an important source of information that affects the audience's awareness of new products (McClure & Seock, 2020). Many brands associate with celebrities and social media influencers to generate social media content. As celebrities' and social media influencers' credibility plays a significant role in building brand awareness and shaping purchase intentions, brands could benefit from collaborating with them to extend the influence to a wider focus (e.g., reach their followers' base; Bochenek, 2019; Lou & Yuan, 2019).

Users utilize brand-generated content to learn more about brands and products and develop pre-purchase information, such as reading product reviews on brand communities to make purchase decisions (McClure & Seock, 2020). The quality of the brand-generated content on social media has a significant impact on consumers' engagement (McClure & Seock, 2020). Customers witness several collaborations between brands and celebrities on social

media on a daily basis. According to Statista, 16% of internet users between the ages of 16 and 24 years old approach new brands through celebrity endorsements while 16% of users between 25 and 34 years old approach new brands through celebrity endorsements (Tankovska, 2021), indicating that the celebrity impact is higher among younger generations. Recent reports have shown that the most followed accounts on Facebook and Twitter are celebrities' accounts (Tankovska, 2021). The current study investigates how the content source's credibility shapes customers' engagement on Twitter by comparing content generated independently by the brand to content generated by brands in collaboration with celebrities; it further explores how content type and format shape customers' engagement on Twitter.

## **1.2 Research Problem**

The arguments laid that social media influencers and celebrity endorsers are becoming important content generators and a marketing instrument that helps the brands optimize their awareness and brand reach, brand credibility and trustworthiness, and customer engagement on social media. The majority of brands across different industries collaborate with celebrities in generating content on social media platforms such as Twitter, Instagram, Facebook, and Snapchat. For example, Adidas collaborates with celebrities like Mohammed Salah and Beyoncé Giselle. Nike, on the other side, collaborates with Michael Jordan and Rory McIlroy. UnderArmour also collaborates with celebrities like Dwayne Johnson and Stephen Curry. This example led the researcher to consider a new research gap related to celebrity endorsement in social media, as there is little known on the

celebrities' role in engaging customers in social media and how they benefit the brands through their generated content. This thesis responds to the gap focus by qualitatively examining the role of celebrities in generating credible content and positioning the commercial content in different types (e.g., social, entertaining, and informative) and how their fans and followers respond to their content.

### **1.3 Research Objectives**

This thesis aims to address three central questions: (1) How does source credibility (content generated independently by the brand versus content generated by brands in collaboration with celebrities) shape customer engagement on Twitter? (2) How does content type (informative, social, and entertaining) and content format (videos, links, photos, and text) shape customer engagement on Twitter? (3) What topics are communicated in the brand-generated content, and how does it shape the user-generated content topics in return? The study examines customer engagement forms on social media, determining the forms of users' engagement (e.g., likes, shares, comments) with different content types and formats. Finally, the study adopts a thematic framework to unpack the influences on user engagement in terms of attitudes, behaviors, and behavioral intentions.

### **1.4 Research Contributions**

Recent social media marketing studies have examined the importance and impact of using social media in marketing from several perspectives, such as credibility (Spry et al., 2011), interaction and engagement (Gillooly et al., 2017), sentiments, and emotions (Liu et al.,

2017). Scholars have focused on various social media-related topics, such as the importance of information discourse while collaborating with celebrities (Boerman et al., 2017; Childers et al., 2019), celebrity endorsement (Dwivedi et al., 2015; Spry et al., 2011), user- and brand-generated content (Müller & Christandl, 2019; Liu et al., 2017), content marketing (Leibtag, 2013), and content types (Gillooly et al., 2017). However, little is known about how the content generated independently by the brand compared to content generated by brands in collaboration with celebrities shapes customer engagement. In addition, there is a lack of research concerning how content type and format shape customer engagement. This thesis aims to address these gaps by exploring relatively new concepts, including source credibility on social media, social media content types and formats, and their influence on customer engagement in terms of attitudes, behaviors, and behavioral intentions. Businesses use social media to interact with customers daily and may receive different comments and feedback, including customers' opinions, emotions, and intentions. Employing these comments and interactions in the right context could improve the business intelligence and provide powerful insights into enhancing how firms understand and interact with consumers. The current thesis also offers refreshing insights for both scholars and marketing managers seeking to analyze and monitor user-generated content on social media, especially tweets.

Further, compared to other studies this study sheds light on the importance of qualitative inductive content analysis studies to explore the customers' engagement on social media platforms, as most of the studies focus on studying customer engagement from a sentimental point of view.

## **1.5 Research Context**

Social media empowers users to share their opinions, communicate with other users, and exchange information about different interest topics (Patino et al., 2012). Recent statistics indicate that Twitter has 145 million monetizable daily active users, of which 30 million users are between 18 and 24 years old (Cooper, 2021). This attracts many firms to engage with their customers on Twitter as statistics highlights that 58% of the top brands use Twitter and have more than 100,000 followers on average (Brooks, 2021). Moreover, 85% of small and medium businesses that use Twitter consider Twitter necessary for their customer service strategy (Brooks, 2021).

The attractiveness of using Twitter as a data source is related to Twitter's support for academics, researchers, and students by providing them with different access levels (products) to extract their required data (Twitter.com, 2021). Depending on their requirements, researchers could use different Twitter development plans. The standard plan for extracting data from the past 7 days is free while the premium plan for extracting 30 days of historical data or historical data dating back to 2006 is a paid plan (Twitter.com, 2021). Research and business enterprises can use the enterprise plan depending on their activities and business size (Twitter.com, 2021).

This thesis explores the content generated by Under Armour, one of the world's leading brands in the sports industry that is engaged in developing and distributing branded performance clothing, footwear, and accessories for women, men, and youth (Reuters.com, 2021). Under Armour targets segments in different parts of the world, including the United States and Canada, Europe, the Middle East, Africa, Asia-Pacific, and Latin America

(Reuters.com, 2021). Under Armour has different official accounts on social media for each segment. For instance, @underarmour presents the American segment while @UnderArmourArg presents the Argentinian segment.

Under Armour uses celebrities such as Dwayne Johnson (The Rock) and Stephen Curry as influencers in their marketing activities. Therefore, using Twitter as a data source to extract tweets publicly shared on Under Armour's feed, this study conducts an in-depth analysis of the content generated by Under Armour either independently or in collaboration with celebrities.

## **1.6 Research Methodology**

This study adopted a qualitative and quantitative content analysis, using a set of procedures including themes and codes to analyze textual content extracted from Twitter (tweets) to identify the frequently used keywords. The content analysis was conducted on a data set of 5086 tweets extracted from Twitter over 12 months.

## **1.7 Thesis Structure**

This thesis contains five chapters. Chapter one presents the introduction, research objectives, research contributions (including how the study will address the existing gaps), and methodology. Chapter two reviews the literature related to the central concepts of the study and the theoretical framework adopted in this study. Chapter three discusses the research methodology, including research type, data collection, and sampling techniques. Chapter four presents a descriptive and textual analysis of the data along with study



findings. Chapter five presents the conclusions, theoretical and managerial implications, limitations, and suggestions for future research.

## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

This chapter covers the study's theoretical background, providing the readers with a primary background of the covered topics related to this study. This chapter aims to provide the readers with snapshots of the study's constructs, presenting insights into what has been discovered in the literature's covered concepts. The topics covered in this chapter are consumer engagement on social media, influencer marketing, celebrity endorsement, user-generated content, brand-generated content, content type, and source credibility.

The literature review development emphasized addressing all the relevant customer engagement concepts on social media, content types and formats, celebrity endorsements, and influencer marketing. Social media marketing studies are pretty comprehensive and could include overlapping concepts. The customer engagement concept is related to users' interactions on social media, such as word-of-mouth and customers to business interactions (Hudson & Hudson, 2013). While the user-generated content is related to technical forms and styles of the users' interactions on the web applications and the characteristics aspects of the social media platforms (Kaplan & Haenlein, 2010).

Similarly, the concept of influencer marketing is related to using famous third-party associations to establish brand beliefs and equity (Childers et al., 2019). At the same time, celebrity endorsement is related to using famous figures to establish brand beliefs and equity (Abidin, 2018). However, the difference between the two concepts is that celebrities are famous figures who earned fame due to their achievements, unlike influencers who earned fame due to media coverage and content creation (Abidin, 2018). Since this study

investigates customer engagement on social media from credibility and content type aspects, the concepts of credibility (e.g., competence, trustworthiness, and goodwill; Wright, 2015), and the content types (e.g., informative content, entertaining content, and social content; Muntinga et al., 2011) and formats (e.g., videos, images, and texts; Crowcroft, 2019) were introduced in the literature review. Additionally, Table 1 below shows presents the definitions and terminologies addressed in the literature review.

Table 1. Definitions of constructs

<b>Constructs</b>	<b>Definitions</b>	<b>References</b>
Customer interaction on social media	Users' ability to share and seek opinion about different topics online.	Kaplan & Haenlein, 2010
Influencer marketing	The possibility of extending the brand reach through the use of famous figures who have already established equity in their audience's minds.	Childers et al., 2019
Social media influencers	Social media influencers are known as famous figures who are perceived as being credible to their followers.	Lou & Yuan, 2019
Celebrity endorsement	Developing brand equity by establishing brand credibility while collaborating with a recognized celebrity endorser.	Spry et al., 2011

Constructs	Definitions	References
Celebrities	Famous characters, such as actors, singers, and politicians, who have thousands of fans and legacy across the media industries, including cinema, television, radio, music, and print.	Abidin, 2018
User-generated content	User-generated content is known as allowing end users in participating in producing web content publicly.	Kaplan & Haenlein, 2010
Brand-generated content	The brand-controlled conversations intending to educate consumers about choosing and consuming products.	Leibtag, 2013
Content types	Social media content can be categorized into four major categories-entertaining, informative, integration, and social interaction, depending on the information presented in the content.	Muntinga et al., 2011
Content formats	Social media content could different formats such as images, text, videos, and audio.	Crowcroft, 2019

Constructs	Definitions	References
Source credibility	Credibility is a multi-dimensional phenomenon that includes three primary dimensions: competence, trustworthiness, and goodwill	Wright, 2015

## 2.2 Consumer engagement on social media

In 2018, 360 million users connected to the internet for the first time, indicating an average of one million new users per day, and 4.3 billion users were active internet users in 2019 (Kemp, 2019). The number of active social media users in 2019 was between 3.4 billion and 3.5 billion, which represents 45% of the world’s population (Kemp, 2019; Mohsin, 2020). About 3.2 billion users access social media through their mobile phones (Kemp, 2019). On average, a user spends 6.5 hours online per day, with social media accounting for the greatest share of this time as an individual spends on average 2.16 hours (Kemp, 2019) to 3.5 hours (Mohsin, 2020) on social media every day.

According to SimilarWeb and Alexa, the most visited websites in 2019 are YouTube and Facebook (Kemp, 2019). In January 2020, the number of active Facebook users was 2.449 billion compared to 2 billion for YouTube, 1.6 billion for WhatsApp, and 340 million for Twitter (Mohsin, 2020). A user might have an average of 8.9 accounts on social media, and users are more active on Facebook, YouTube, WhatsApp, WeChat, and Instagram than on Twitter, Snapchat, and Line (Kemp, 2019). The greatest search queries in Google in

2018 were related to social media platforms, such as Facebook and YouTube (Kemp, 2019).

According to Colby (2011), social media's uniqueness provides users with the choice to connect or disconnect on demand, as the connection process proceeds at an immediate time and with less effort than traditional media. This ease and convenience excite social media users to share their opinions with other users who have similar interests, expanding their communications (Patino et al., 2012).

Users could share similar opinions and discuss similar topics such as politics, social, business, and technology while forming online communities to exchange information (Patino et al., 2012). Online communities appear to be a useful social media tool, where users can express their emotions and loyalty toward brands (Hudson & Hudson, 2013). Online brand communities presented a new opportunity for marketers to showcase their services. For example, Sony, Nissan, and other retailers have established virtual shops and virtual communities where customers virtually acquire their products (Hudson & Hudson, 2013).

Social media platforms allow firms to interact with customers in real time at fewer costs (Kaplan & Haenlein, 2010). This advancement allowed marketers to communicate with consumers during different stages of the decision and evaluation journeys (Hudson & Hudson, 2013). Social media's real-time interaction affects consumers' word of mouth, resulting in brand awareness and encouraging future purchases (Hudson & Hudson, 2013).

The advancement of the social media role in brand communication, which allows users to communicate in different ways, has attracted marketers to foster customer engagement and

gain feedback online (Keller, 2013). Involving customers in generating new ideas and providing feedback could extend brand trust and identification as an important source of influence, especially when the members of brand communities are interested in the brand (Hudson & Hudson, 2013). The position of these users contributes to enabling them to be approached by other users seeking their advice (Patino et al., 2012). This interaction benefits the community members and enhances their knowledge (Patino et al., 2012). It also enables brands to develop customer engagement through others' suggestions (Blasco-Arcas et al., 2016).

The majority of social media platforms enables users to share images, texts, videos, audio, and links, but each platform has its uniqueness explaining its primary usage purpose. Twitter is the most suitable platform for sharing news due to the retweet feature and because tweets were originally restricted to 140 characters (Alsufyan & Aloud, 2017). Facebook is a better choice for networking as it engages users through events and groups (Alsufyan & Aloud, 2017). LinkedIn is the most suitable platform for professional communities as its users establish long-term professional relationships (Alsufyan & Aloud, 2017). YouTube is a video-sharing platform (Alsufyan & Aloud, 2017).

Customers' interactions on social media are verified according to the aspects of the platforms. Customer-to-customer interactions and personalization suggestions on social media platforms depend on the source of information and customers' learning from others' behaviors, inspiring customers to enhance their relationships with the platform and shape their behavior (Blasco-Arcas et al., 2016). Customer-to-customer interactions could shape the branding and consumer perceptions in social media; hence, brands could customize

and share online offers to provide customers with feelings of closeness and transparency to affect the brand image positively (Blasco-Arcas et al., 2016).

### **2.3 Influencer marketing**

Influence plays a major role in people's lives. Individuals can affect each other daily, which has attracted many firms to use some external figures or third-party endorsers to generate authenticity (Whatmough, 2018). Influencer marketing can be described as the possibility of extending the brand reach through the use of famous figures who have already established equity in their audience's minds (Childers et al., 2019).

Brand beliefs such as favorability and uniqueness can be established through the association of secondary sources (e.g., endorsers) who can transfer attitude and credibility (Keller, 1993), thereby advancing marketers' opportunities to establish trustworthiness and attractiveness to their brands by using endorsers (Keller, 1993). Endorsers could create a connection between consumers and the brand using their expertise, trustworthiness, and attractiveness (Keller, 1993).

Social media influencers can provide brands with marketing values by generating relevant content that contains both informational and entertainment substances (Lou & Yuan, 2019). Social media influencers' credibility plays a significant role in building brand awareness and shaping purchase intentions as the influencers are perceived as being credible to their followers (Lou & Yuan, 2019). Brands could benefit from influencers' campaigns to extend their influence beyond their usual focus as they are perceived more credible in their audience's eyes (Bochenek, 2019).



Influencer-generated content provides followers with information about brands with personal aesthetic touches that creates an enjoyable experience for the followers (Lou & Yuan, 2019). Influencers' perceived vicinity to followers would positively impact the influencer's generated brand-related posts (Lou & Yuan, 2019), which could improve brand awareness as followers tend to attend to the influencer's recommendations because followers can easily recognize their posts (Lou & Yuan, 2019). However, an influencer's influence is bounded over their sponsored content, and it cannot be expanded to make followers trust the content generated by brands (Lou & Yuan, 2019).

The number of followers is considered to be a key indicator of the effectiveness of an influencer in most influencer marketing activities (Whatmough, 2018). However, in some cases, the number of followers may not guarantee the achievement of the endorsement objectives of the endorsing brands as the followers might be fake or ghostwriters (Whatmough, 2018). In addition, influencer campaigns may have a negative impact while associating a product that has some level of uniqueness with an influencer who has a high number of followers (De Veirman et al., 2017). The high number of followers might diminish the perception of uniqueness as many consumers could be interested in the product instead of a niche group of consumers (De Veirman et al, 2017).

Firms could consider engagement frequency between an influencer and his/her audience as an indicator of the extent to which an influencer can influence the audience to adopt a certain behavior (Whatmough, 2018). Choosing the right influencer who adequately fits the brand can be determined by analyzing the previous content generated by the influencer

in terms of the number of impressions, number of engagements, and quality of the sentiments (Childers et al., 2019).

Childers et al. (2019) suggested that brands could manage influencer marketing strategies based on five factors:

- Perceived costs, which are the expenses that an influencer gains in compensation, are usually high so brands need to ensure the profitability of collaborating with influencers during influencer marketing campaigns.
- Legal considerations, such as brands in the United States needing to meet the Federal Trade Commission regulations whereby the influencer has to disclose the sponsorship innovatively (Childers et al., 2019), although these regulations may put brands and the influencer in a critical situation in cases of ignoring, forgetting, or denying such disclosure (Childers et al., 2019).
- Fit with the organization structure, meaning the brand has to fit the influencer into its structure (Childers et al., 2019); in some cases, the responsibilities may fall under the traditional editorial department, while in other cases, it falls under the modern talent departments (Childers et al., 2019).
- Choosing the right influencer should include analyzing the previous content generated by the influencer in terms of impressions (the number of views of the post), engagement (the number of interactions with the post, such as the likes, shares, and comments), and the sentiment (positive, negative, and natural feelings toward the post; Childers et al., 2019).

- Developing content is critical; when collaborating with influencers, brands have to ensure that the influencers generate content that describes the right messages, so brands have some creative command over the developed content to avoid any potential risk caused by influencers, such as saying something that does not fit the brand's goals (Childers et al., 2019).

#### **2.4 Celebrity endorsement**

Celebrities are famous characters, such as actors, singers, and politicians, who have thousands of fans and legacy across the media industries, including cinema, television, radio, music, and print (Abidin, 2018). The celebrity concept is associated with achievements, skills, and talents or a social position that could attract the public's attention toward celebrities' fundamental source of fame and personal life (Abidin, 2018). Public interest in celebrities depends on the quality of the media coverage of them, turning them into a specialty that could attract public interest (Abidin, 2018).

Many studies have demonstrated the relationship between celebrities and their audience through the para-social interaction theory (Abidin, 2018), which refers to the role of mass media in affording the impression of face-to-face interactions between performers and the audience to convince the audience that they are directly communicating with the performers (Horton & Wohl, 1956). Celebrity endorsement is a powerful technique for indirectly developing brand equity by establishing brand credibility while collaborating

with a recognized celebrity endorser (Spry et al., 2011). As a credible source, celebrities can establish brand credibility depending on their attractiveness, expertise, and trustworthiness (Spry et al., 2011). These three dimensions of endorsers' credibility could advance consumers' willingness to develop a higher level of engagement with the endorsed brand using their potential to address consumer self-definitional needs (Dwivedi et al., 2015). Credible celebrities have the ability to positively influence the endorsed brand equity in terms of four aspects, brand awareness, brand associations, perceived quality, and brand loyalty (Dwivedi et al., 2015).

The use of celebrity endorsers may cause a potential risk to brands because of the lack of control over celebrities' future behavior (Till & Shimp, 1998). Negative or controversial news about the celebrity may affect the endorsed brand (Till & Shimp, 1998). The risk is greater for unpopular brands due to their complete reliance on the self-brand association as an initial attribute to reach consumers (Till & Shimp, 1998). Another potential risk may occur when celebrities endorse more than one brand at a time, which may diminish the authenticity of endorsement (Keller, 2013). Thus, celebrities may fail to meet the expectations of brands if their reputation is damaged or consumers perceive the endorsements negatively because they believed the celebrity was endorsing the brand for monetary reasons (Keller, 2013). This may transpire when celebrities endorse brands that do not match their personality or specialty (Keller, 2013).

Illustrating the impact of the celebrity type on the endorsing brands, a study conducted in Germany found that about 25%–30% of Western advertisements use celebrities. Only 4.2% of these advertisements used local German celebrities (Schimmelpfennig, 2018). The study

explained that brands that operate in the personal care, cosmetics, accessories, and jewelry industries use well-known and international celebrities recognized by the public whereas brands in the apparel, retail, and fashion industries use local celebrities (Schimmelpfennig, 2018).

## **2.5 User-generated content**

In his article “Content is King,” Bill Gates explained how the advancement of the Internet would allow anyone to create and share different forms of content, such as news, games, entertainment, sports programs, advertisements, and online communities, around the globe using only a personal computer and a modem (Gates, 2019). Web 2.0 applications allow end-users to collaborate in producing web content publicly (Kaplan & Haenlein, 2010). The previous Web 1.0 applications restricted the content creation to the developers and restricted users to communicate through private channels such as personal pages and emails (Kaplan & Haenlein, 2010). Users can freely share their opinions about brands (Kaplan & Haenlein, 2010), products, and consumption experience (Hudson & Hudson, 2013). This activity is known as user-generated content. User-generated content must meet the following conditions: be generated publicly, show a minimum amount of creativity, and be generated outside the firm (Kaplan & Haenlein, 2010).

User-generated content could be presented in different forms, including collaborative projects, blogs, content communities, social networking, and virtual worlds (Kaplan & Haenlein, 2010). Collaborative projects, which allow users the joint and simultaneous creation of content (Kaplan & Haenlein, 2010). Blogs are considered the earliest form of

social media or the equivalent to the personal web page (Kaplan & Haenlein, 2010). Content communities are usually platforms that enable users to share different media types between users, such as texts, videos, photos, and presentations (Kaplan & Haenlein, 2010). Social networking refers to applications that enable users to connect to the network by registering their personal information, where users have to invite other users (friends) to access their profiles or send them messages (Kaplan & Haenlein, 2010). Virtual worlds are platforms that replicate a three-dimensional context or 3D environments where users can appear as personalized avatars, such as warriors, football players, and animated characters, while interacting with other users as they would in real life (Kaplan & Haenlein, 2010). Consumers can express their opinions and experiences and discuss their fears and problems related to products online, establishing wider networks (Hudson & Hudson, 2013). Engaging in discussions online makes users more logical and experienced as they spend more time online, seeking and sharing information (Hudson & Hudson, 2013). Consumer participation in generating brand-related content can occur in two ways: contribution to brand-related content, which is the lower level as users communicate with other users about brands, and creating brand-related content, which is the highest level of brand-related activities as empowerment motivation drives it (Muntinga et al., 2011). Both contributions and creations of brand-related content are largely driven by three motivations (Muntinga et al., 2011). First, personal identity includes three dimensions: (1) self-presentation, where users generate brand-related content to provide an image of their personality and to show that they are a member of brand communities (Muntinga et al., 2011); (2) self-expression, where users generate content that reflects their opinion about

brands (Muntinga et al., 2011); and (3) self-assurance, where users generate brand-related content to get recognized by other users and/or receive their feedback (Muntinga et al., 2011). Second, social integration also includes three dimensions: (1) social interaction, where users generate content to meet users with similar interests and interact about particular brands (Muntinga et al., 2011); (2) social identity, which refers to the critical detraction between members of a specific brand and members of other brands where users of common brand passion have a stronger connection between one another (Muntinga et al., 2011); and (3) helping, which refers to generating brand-related content to gain and provide help for other members (Muntinga et al., 2011). Third, entertainment refers to the situation when users generate brand-related content as they enjoy being part of social groups or brand communities where they can communicate with others, provide help, and share knowledge about common interests (Muntinga et al., 2011).

The advancement of social media provides firms with a new type of media based on user-generated content or electronic word of mouth, known as earned media (Keller, 2013). Electronic word of mouth occurs when customers communicate with brands across different social media platforms (Keller, 2013). Illustrating the power of user-generated content, a recent study found that about half of user-generated content on Twitter is product-related and one third of users discussed topics related to services or promotions such as news, competitors, and broadcasts (Liu et al., 2017). Marketers could benefit from the detailed information provided in each topic, and developing a better understanding of consumers' interests could help design effective marketing strategies (Liu et al., 2017).

Marketers should consider the power of electronic word of mouth in reducing uncertainty while building digital marketing strategies because customers share and seek brand-related information generated by other customers (Park & Lee, 2009). Electronic word-of-mouth effects are greater for negative circumstances than positive ones. In contrast, negative effects appear mostly when experiencing products rather than searching for goods (Park & Lee, 2009). This may damage the electronic word of mouth because negative information increases consumers' uncertainty and fear in situations of less product knowledge (Park & Lee, 2009). A prior study examined 1.7 million tweets of consumers' sentiments on Twitter by analyzing 20 brands operating in the fast-food, department store, footwear, electronics, and telecommunications industries and found that consumers with the most negative experiences tend to generate content more actively than customers with the most positive ones (Liu et al., 2017).

## **2.6 Brand-generated content**

Brand-generated content is the brand-controlled conversations intending to educate consumers about choosing and consuming products while transforming information into different formats of content such as blogs, videos, and website pages (Leibtag, 2013). Brand-generated content is introduced on owned media such as websites and email newsletters and paid media such as traditional and digital advertisements (Keller, 2013). These media types are similar to traditional media types, where brands have full control over the content generation and manage public relations and press activities (Kaplan & Haenlein, 2010). In the era of social media, brand-generated content plays an essential role



in engaging customers with brands in an inherent manner within social media communities (Plessis, 2017). This kind of engagement mainly depends on brand-generated content that could form content communities to attract users with brand interest, contributing to producing brand trust and credibility (Plessis, 2017).

The consumption of brand-related content is motivated by two elements: information and entertainment (McClure & Seock, 2020). Consumers may utilize information within their social environment following the updates in their community or business industry (McClure & Seock, 2020). Users are utilizing brand-related content to learn more about brands and products and develop pre-purchase information such as product reviews that could help in making purchase decisions (McClure & Seock, 2020). For example, consumers may search online for technical facts about cars or look for the latest fashion collections and read other users' experiences to know about upcoming brand events (McClure & Seock, 2020).

Customers may also utilize brand-related content to seek enjoyment as many individuals enjoy reviewing brand-related content or reviewing what other individuals think about their preferred brands (McClure & Seock, 2020). Users employ brand-related content to skip everyday pressure during break times or review brand community when bored (McClure & Seock, 2020). Users may consume brand-related content for remuneration purposes and to get rewarded during prize campaigns as the motivation behind consuming brand-related content is driven by possible monetary motivation (McClure & Seock, 2020). Previous studies have suggested that customer engagement with brand-related content in social media is associated with brand familiarity and the quality of information (McClure &

Seock, 2020). Information quality could enhance both current and potential customers' engagement in social media when customers consider the content to be important, relevant, and notable information (McClure & Seock, 2020).

Presenting high-quality information could provide brands with opportunities to attract and involve potential customers who are not familiar with brands (McClure & Seock, 2020). Brand-generated content leads to a higher positive attitude than sponsored content (Müller & Christandl, 2019). It also positively impacts brand's awareness, loyalty, electronic word of mouth, and purchase intention (Poulis et al., 2019). Customers feel more secure and comfortable when employing brand-generated content on a website, increasing customers' positive reaction to trust and marketing activities (Rahimnia & Hassanzadeh, 2013).

## **2.7 Content types on social media**

Social media content can include many formats. Audio content is related to content that includes sound or voice data (Crowcroft, 2019). Video content is known as the content that includes moving images with voice data (Crowcroft, 2019). Imagery content includes graphical or still pictures data while text contains human-readable data or textual data (Crowcroft, 2019). Social media content can be categorized into four major categories—entertaining, informative, integration, and social interaction—depending on the information presented in the content (Muntinga et al., 2011).

Entertainment content comprises information that helps audiences escape problems and presents emotional relief, relaxation, and enjoyment (Muntinga et al., 2011) through items such as quiz games and fun facts (Gillooly et al., 2017). Informative content covers

information, such as news to be shared, announcements of deals, and information about brands and business promotions (Gillooly et al., 2017; Muntinga et al., 2011). In contrast, integration and social interaction content includes information related to other people within social communities, such as families, friends, and community members (Muntinga et al., 2011).

Researchers have presented some rational reasons explaining why users follow a specific type of content. For example, the audience follows entertainment content because it provides enjoyment and relaxation, helping them unwind from their everyday routines (Muntinga et al., 2011). Informative content provides users with technical information about a particular product and covers four primary motivations: (1) surveillance, which refers to keeping up to date with the social environment; (2) knowledge, which is related to benefitting from other people's experiences to learn about brands; (3) pre-purchase information, which refers to seeking communities' brand reviews to make purchase decisions; and (4) inspiration, which refers to seeking brand-related content as the source of inspiration for new innovations and ideas (Muntinga et al., 2011).

Muntinga et al. (2011) proposed that integration content takes three forms: (1) social interaction, where users seek brand content to approach users with similar interests; (2) social identity, which refers to somebody noting critical segregation between users with shared passions and connections, and (3) help, which is related to users seeking or providing help to others (Muntinga et al., 2011). Social interaction content depends on personal identity content, which contains gratification related to self-motivation, such as self-values and gaining recognition from peers (Muntinga et al., 2011). Personal identity is

related to three motivations: self-presentation such as opinions or beliefs, self-expression such as fitment with brands, and self-assurance recognition from others (Muntinga et al., 2011).

Prior studies have found that entertaining content positively impacts online engagement in terms of liking, commenting, and sharing the content (Cvijikj & Michahelles, 2013; Gillooly et al., 2017; Le, 2017). Individuals usually consume entertaining content not to utilize the information directly, but to check posts or blogs out of curiosity (Le, 2017). On the other hand, researchers have found that informative content increases engagement in terms of likes and comments (Cvijikj & Michahelles, 2013). However, it does not affect the sharing because the informative content's value is limited to the brand community, and it may lose its value once it is shared outside the community (Cvijikj & Michahelles, 2013).

## **2.8 Source credibility**

Credibility is a multi-dimensional phenomenon that includes three primary dimensions: competence, trustworthiness, and goodwill (Wright, 2015). The benefits of obtaining information from credible sources imply that the audience relies on an external source rather than centrally processing it (Wright, 2015). According to the source credibility theory, the reliability of the source providing the information is a core factor for determining the trustworthiness of information based on the novel position that a person holds (Pallavicini et al., 2017). This theory is built on two factors: (1) source expertise, which is related to the reliability of the source's information, and (2) source trustworthiness, which affects the source of information (Pallavicini et al., 2017).

Credibility is associated with information quality; considering a source as a credible or trusted source of information depends on the quality of the information shared by this source (Kang & Namkung, 2019). Credible and trusted information is a critical element of shaping customers' attitudes and future intentions (Kang & Namkung, 2019). The information's truthfulness is associated with source credibility (Visentin et al., 2019). Consequently, false information will affect not only brand attitude and brand trust, but also behavioral attitude, such as generating word of mouth and purchase intentions (Visentin et al., 2019).

Processing the information depends on the customer's experience; a customer with more ample purchase experience would have more robust capabilities to process the information than a customer with a shorter purchase experience (Kang & Namkung, 2019). Some customers may perceive celebrities as a genuine source of information during brand endorsement, depending on two elements their authenticity when sharing personal content and their ability to drive their followers to participate and react positively (Kowalczyk & Pounders, 2016).

Celebrities can choose one of two main strategies for managing their authenticity. The first is the passionate authenticity strategy, in which they share enjoyable content that can genuinely satisfy the audience and select a lifestyle that fits their personality. This authenticity path provides celebrities with the creativity and freedom to be passionately motivated while endorsing brands (Audrezet et al., 2018). The second strategy is transparent authenticity, where celebrities choose to share facts about the endorsed brands

by disclosing sponsorship information, presenting it as a natural source in their audience's perceptions (Audrezet et al., 2018).

Prior studies have argued that celebrities cannot directly build brand equity by depending on their credibility, but their credibility could impact the brand's credibility, improving its equity (Spry et al., 2011). The endorser's credibility may influence the brand's equity if the participants receive promotional materials highlighting this endorser (Spry et al., 2011). For example, an endorser may be considered a credible source based on their expertise, attractiveness, and trustworthiness (Spry et al., 2011). Another study found that using celebrities as source credibility may directly impact brand equity (Dwivedi et al., 2015). The customer's perceptions of celebrities' attractiveness, trustworthiness, and expertise are jointly reflecting the brand's credibility, shaping positive attention to customers (Dwivedi et al., 2015). Credible endorsers own the capacity to impact the endorsed brand equity in terms of brand awareness, brand associations, brand perceived quality, and brand loyalty as they could transfer their valued meaning to the endorsed brands (Dwivedi et al., 2015). Brand credibility enhances the perceived quality and reduces the information costs and consumers' perceived risks, improving the utilization of product information as well as brand equity (Spry et al., 2011). Consumers consider firm-generated content to be a trustworthy source of information on which they can rely while looking for product information (Rahimnia & Hassanzadeh, 2013). The credibility of brands on social media platforms is noted by the blue verification badge on their profile across social media platforms, which indicates that the platform has verified the account (Alsufyan & Aloud, 2017).

## CHAPTER 3: RESEARCH METHODOLOGY

### **3.1 Introduction**

This chapter presents the research design along with how the data were collected and analyzed, and how the results were attained. This chapter includes four sections, including research methodology, data collection, sampling, and a description of data analysis.

### **3.2 Research type**

This research examines the trending topic of social media content including both brand-generated content and user-generated content by comparing how the source, type, and format of the content shape customer engagement on social media. Multiple aspects of generated content were considered in this study. First, source of the content; the study compares how customer engagement and interaction differ when the content is independently generated by the brand versus when the content is generated by the brand in collaboration with a celebrity. Second, the study explores how different content types, such as social, informative, and entertaining, shape customer engagement and interaction. Third, content format, the study unpacks how different media formats such as links, videos, images, and text shape customer engagement and interaction on social media.

This study adopted a qualitative approach for data analysis and interpretation. This study involves content analysis, which can be defined as a set of procedures for studying written or transcribed text that enables the researcher to include a large amount of textual information and systematically identify the frequently used keywords (Klenke, 2008). Content analysis can also be identified as a systematic, objective quantitative analysis of

message characteristics, including human-coded analysis and computer-aided analysis. (Neuendorf, 2020). According to Kondracki & Wellman (2020), textual data may be presented in different forms including verbal, print, or electronic texts, that can be obtained from different sources such as interviews, focus groups, observations, open-ended surveys, and printed media, including books or articles (Klenke, 2008). Additional forms of content may be news media, political speeches, advertising, blogs, and interactive content such as video gaming and social media (Neuendorf, 2020). Content analysis focuses on systematically describing the meaning of the data by using a coding frame (Schreier, 2013). Building a coding frame consists of several steps, including, selecting material, generating categories, defining categories, revising, or expanding the frame (Schreier, 2013).

The qualitative content analysis methodology is the most suitable methodology to analyze a set of textual data (tweets) extracted from Twitter. Since deploying content analysis procedures on transcribed tweets advances the study with an in-depth understanding of customer engagement on Twitter. As mentioned in the literature review, Twitter is the most suitable platform to share news due to the retweet feature (Alsufyan, & Aloud, 2017). As a result, Twitter has become increasingly popular among academic communities, as it provides different types of information depending on the source of tweets, such as individuals, organizations, and groups (Twitter.com, 2020). Originally, the tweets were restricted to 140 characters, while recently, users can compose tweets up to 280 characters where the tweets are mainly focusing on textual content, and they may contain photos, videos, and links (Twitter.com, 2020).



### **3.2 Data collection**

The data collection was done through Twitter API for the extraction of publicly published data. Any individual who registered on Twitter can access user profiles through the Application Programming Interface (API), with the required authentication mechanism (O Auth). This protocol provides a framework for verifying the identities of the entities involved in the secure transactions. Twitter allows users who obtaining the required authorizations models and authentication methods of O Auth to communicate with the application (Twitter.com, 2020). Twitter API includes 16 resources including, timeline, tweet, search, streaming, direct messages, friend and followers, users, a user suggested, favorites, lists, saved search, places, trends, spam reporting, O Auth, and help (Twitter.com, 2020). There are two types of Twitter authentication methods based on the O Auth protocol, 1) O Auth 1.0 which defines the application-user authentication that includes an HTTP authorization that communicates what the application is making the request on behalf of the user. 2) O Auth 2.0 which is related to the defined application authentication where the application encodes its consumer key, secret key in a set of encoded credentials then performs an HTTP POST request to endpoint `oauth2/token` to validate the credentials with a bearer token (Twitter.com, 2020). The Twitter Search API allows user to execute real-time queries on recent tweets with the past seven days, and the Twitter Premium search provides users with two options, 1) Full Archive search which supports searching tweets since 2006, and 2) 30 Day search which supports searching tweets posted within the last 30 days, both Full Archive and 30 days search allows users to extract 500 tweets at a single search (Twitter.com, 2020).

Through the use of O Auth 2.0, Full Archive search APIs and R programming language besides R studio, we began with a couple of trials for searching and extracting a tweet set for this study. The study also employed R in the data collection process. R is a language and environment for statistical computing and graphics. It provides a variety of statistical, linear and nonlinear modeling, classical statistical tests, time-series analysis, classification, clustering, and graphical techniques. R is also an integrated suite of software facilities for data manipulation, calculation and graphical display (R-project.org, 2020). RStudio is an integrated development environment (IDE) for R software. It includes a console, syntax-highlighting editor that supports direct code execution, as well as tools for plotting, history, debugging, and workspace management (RStudio.com, 2020).

This data collection process included several steps: 1) setting up a Twitter account, 2) using the Twitter account for applying for Twitter developer access, 3) after the developer access was obtained, the researcher used the R package for tweets searching and extraction, 4) to extract a set of historical tweets, the researcher had to subscribe to a paid plan and create both a development application and an environment to gain the required permission to utilize the premium products section (this step was only required for historical tweet searches, such as Search Tweets and Full Archive Search), and 5) using Twitter premium APIs, we extracted a set of 5319 generated *from* and *to* @UnderArmour account covering twelve months.

### 3.3 Sampling

There is no perfect sample (period or size) of extracting tweets set. Previous research extracted datasets for different periods and sizes based on the events they are exploring. Gillooly et al. (2017) extracted 1502 tweets related to London 2012 Olympic and Paralympic Games between January 2011 and September 2012 as a sample. Winand et al. (2019) extracted 5389 tweets from FIFA official accounts between August 2014 and January 2015. This thesis was not built on exploring a single event but exploring different events of Under Armour. Therefore, the researcher chose 12 months to cover all the possibilities and events of brand-generated content and user-generated content during this period.

The sample used in this study was extracted from Twitter in two phases. The first phase stands for the data set extracted *from* @Under Armour account which represents the tweets generated by the Under Armour brand over the period of one year from 2019/03/21 to 2020/3/21, where a sample of 422 tweets was drawn.

The second phase of sample extraction stands for the tweets *to* @Under Armour which represents the tweets generated from users to Under Armour including both replies and non replies tweets. During this phase, due to the limitation of 500 tweets extraction at a single extraction, the researcher extracted the data on a monthly basis for the same period of one year from 2019/03/21 to 2020/3/20. For example, an extraction for 500 tweets was conducted for March 2019 from 2019/03/21 to 2019/04/20, and another extraction for 500 tweets for April 2019 from 2019/04/21 to 2019/05/20 and so on until 2020/03/21.

The reason behind adopting month-by-month extraction is to get most of the tweets written to @UnderArmour during that period, noting that in the events where more than 500 tweets were generated, 500 tweets are captured only. At the end of the second extraction phase, a total of 4897 tweets was extracted. The total number of the extracted sample in the two phases was 5319 tweets. Additional details of the tweet's extraction are shown in tables 2 and 3.

Some of the captured tweets were written in other languages such as French, German, and other languages. Thus, we have conducted a cleaning process to exclude such tweets. At the end of this process, in the end of this process the total number of the extracted tweets was 5086. The dataset extraction included date filter to obtain the primary tweets information for the study, including 1) Tweet information such as date and time, Tweet type (original tweet, replay, retweet, and tweet with comment), number of likes, number of retweets, and source of tweets (iPhone, Android, auto tweeting system, and computer), 2) information related to the author such as the name, location, profile description, number of followers, and verification status, and 3) media included in the tweets if any, such as photos, videos, URLs.

This study conducted further manual work to collect the brand-generated content (tweets from @UnderArmour) to address the research questions. To address the first question of the study, the researcher chose @UnderArmour because they collaborate with athletes such as Dwayne Johnson (The Rock) and Stephen Curry for their social media communications and influencer marketing activities. Consequently, the tweets generated by

@UnderArmour contain both independently brand-generated tweets and tweets generated through the collaboration with celebrities, which can address the first question.

To address the second question, the researcher manually collected other media types such as videos and links, which were missing attributes of the extracted tweets due to the limitations of Twitter as the only captured media types were text (the textual characters in a tweet) and images if a tweet contains an image in it.

Table 2. First phase of tweets sample extraction

<b>From date/time</b>	<b>To date/time</b>	<b>Generated by</b>	<b>Tweets</b>
2019/03/21 00:00:00	2020/03/20 23:59:00	@UnderAroumr	422
Total number of extracted tweets			422
Total number of extracted tweets after filtering			410

Table 3. Second phase of tweets sample extraction

<b>Month</b>	<b>From date/time</b>	<b>To date/time</b>	<b>Generated to</b>	<b>Tweets</b>
March 2019	2019/03/21	2019/04/20	@UnderAroumr	436
	00:00:00	23:59:00		
April 2019	2019/04/21	2019/05/20		351
	00:00:00	23:59:00		
May 2019	2019/05/21	2019/06/20		500
	00:00:00	23:59:00		
June 2019	2019/06/21	2019/07/20		477
	00:00:00	23:59:00		

Month	From date/time	To date/time	Generated to	Tweets	
July 2019	2019/07/21 00:00:00	2019/08/20 23:59:00	@UnderAroumr	365	
August 2019	2019/08/21 00:00:00	2019/09/20 23:59:00		336	
September 2019	2019/09/21 00:00:00	2019/10/20 23:59:00		500	
October 2019	2019/10/21 00:00:00	2019/11/20 23:59:00		500	
November 2019	2019/11/21 00:00:00	2019/12/20 23:59:00		483	
December 2019	2019/12/21 00:00:00	2020/01/20 23:59:00		310	
Jan 2020	2020/01/21 00:00:00	2020/02/20 23:59:00		391	
February 2020	2020/02/21 00:00:00	2020/03/20 23:59:00		248	
Total number of extracted tweets				4897	
Total number of extracted tweets after filtering				4676	

### 3.5 Data analysis

A thematic content analysis of 5086 tweets was conducted using QSR NVivo 12 software. A framework of the content typology proposed by Gillooly et al. (2017) was adopted. Three key themes including informative content, entertaining content, and social content in addition to three sub-themes for each of the major themes were identified to better classify the content. This classification was used as the generic thematic structure for the analysis

of the brand-generated content (tweets captured from @UnderArmour). Table 4 shows the themes and sub-themes of the analysis framework.

Another analysis framework was carried out to analyze the tweets generated by the users (tweets captured to @UnderArmour). This framework included three major themes: attitude, behavior and behavioral intentions. A fourth category was assigned to unclassified themes. It also included and three sub-themes: positive, neutral, and negative. It is worth noting that each tweet was manually coded within one of the sub-themes with the Nvivo software's support to keep track of all the tweets and the detailed thematic structure that emerged. The percentage of coverage was calculated for each theme and sub-themes from the total number of tweets during a period of 6 months. Tables 4 and 5 present the analysis framework including the themes and sub-themes with supportive identifications and examples.

Table 4. Themes and sub-themes of brand-generated content framework

Theme	Identification	Sub-themes	Examples
Informative content	News sharing, events, announcements, product and promotions.	Events	#TheSpeedProject with @trainEFC. LA Vegas. 340 miles. 10 Runners. No rules. #TeamUA <a href="https://t.co/yW23sJR0Lj">https://t.co/yW23sJR0Lj</a>
		News	International icon. @JordanSpieth helps #TeamUA open a new brand house in Shinjuku, Japan. <a href="https://t.co/J3dXIx7WHH">https://t.co/J3dXIx7WHH</a>
		Promotion	The #UAINfinityBra is designed to move with you, not against you. Shop now. <a href="https://t.co/nZyUtvr5SW">https://t.co/nZyUtvr5SW</a> <a href="https://t.co/SJITGuj33d">https://t.co/SJITGuj33d</a>



Theme	Identification	Sub-themes	Examples
Entertaining content	Information that escaping problems and presents emotional relief, relaxation and enjoyment, quiz games and fun facts.	Fun facts	Sweet kicks. Sour defenders. @StephenCurry30 teamed up with his favorite candy to create new flavors of his latest signature shoe. Get a taste of the #Curry7 @SourPatchKids collection on 11/29. <a href="https://t.co/MxzRYDR84r">https://t.co/MxzRYDR84r</a>
		Games	@anthonyfjoshua learned the importance of being a champion through his only defeat. He told @playerstribune why he knew he would rise again. <a href="https://t.co/MLVcWF15Be">https://t.co/MLVcWF15Be</a> <a href="https://t.co/F1lnwkk09Q">https://t.co/F1lnwkk09Q</a>
		Relaxation	The only way to achieve greatness is through the work. Shop the latest #ProjectRock collection now. <a href="https://t.co/wax8mGkuX0">https://t.co/wax8mGkuX0</a> <a href="https://t.co/xeKGoP2uVF">https://t.co/xeKGoP2uVF</a>

Theme	Identification	Sub-themes	Examples
Social content	Information related to friends, families and communities such as birthday celebrations, friends' celebrations and national celebrations.	Social events	Inspired by classic Chinese water paintings and designed to commemorate new beginnings, the latest #Curry7 'Chinese New Year' is available now on <a href="https://t.co/566gs1MplU">https://t.co/566gs1MplU</a> .
		Social Interaction	Every time you write @StephenCurry30 off...he finds another reason to get better. Embrace being UNDRTD in the #Curry7. Shop now. <a href="https://t.co/F2iZTOqBZx">https://t.co/F2iZTOqBZx</a> <a href="https://t.co/5sHZn49TIB">https://t.co/5sHZn49TIB</a>
		Social Responsibility	We are pledging up to \$2M to support communities impacted most by COVID-19 pandemic; \$1M to @FeedingAmerica and up to \$1M to @GoodSportsInc through a 30-day Healthy at Home fitness challenge on UA's apps, @MyFitnessPal and MapMyRun. #TheOnlyWayIsThrough <a href="https://t.co/LFPpXrnffv">https://t.co/LFPpXrnffv</a>

Table 5. Themes and sub-themes of user-generated content framework

Theme	Identification	Sub-themes	Examples
Attitude	Affective attitudes such as feelings and emotions and cognitive attitudes such as beliefs, knowledge and perception.	Positive	@UnderArmour I finally found a shoe that I LOVE after trying sooooooooo many brands! If you need or want the most comfortable athletic shoe (in my opinion) you must try the #hovrinfinite by #UnderArmour this shoe fanatic is impressed! They're like walking on clouds! <a href="https://t.co/Rm0PBrlDr4">https://t.co/Rm0PBrlDr4</a>
		Neutral	@UnderArmour Will these make a reappearance? <a href="https://t.co/vRDY7jnM2u">https://t.co/vRDY7jnM2u</a>
		Negative	@UnderArmour Just wanted to point out that your tv ad campaign in the UK has a flash frame right in the middle. (Just after dunk!) Might want to have a word with your agency on that one!!
Behavior	Actual response towards objects and consuming experience for both products and services.	Positive	@UnderArmour @goodsportsinc @MyFitnessPal On behalf of the people we serve, thank you for this incredible gift - especially during this critical time of need.

Theme	Identification	Sub-themes	Examples
Cont. Behavior	Actual response towards objects and consuming experience for both products and services.	Neutral	@UnderArmour I purchased these bottoms on Thursday in Istanbul. Put them in the wash today and this has happened? I don't have receipt but it's clear on my bank statement. Can I exchange? <a href="https://t.co/3zNsAlGaJG">https://t.co/3zNsAlGaJG</a>
		Negative	@UnderArmour absolutely disgusted by your customer service in the UK! Spoken to about 3 different sections and nobody has helped! Disgusting
Behavioral intentions	Intentions towards specific object such as searching or inquiring about products.	Positive	@UnderArmour @UAFootball hey do you guys know where I can find these in a youth 5 or 6 thx. <a href="https://t.co/Z3Ipyd0qst">https://t.co/Z3Ipyd0qst</a>
		Neutral	There was no tweet related to neutral behavioral intentions in the dataset.
Unclassified	User-generated content (tweets) that we couldn't classify.	Negative	@UnderArmour use to be one of my fave brands. Now I defo won't spend another penny with them
		Unclassified	@UnderArmour @GlowyChloe26

### **3.6 Framework analysis reliability**

Content analysis reliability has two forms: intracoder reliability which comprises a coder's consistency across time, and intercoder reliability, which comprises consistency across coders (Lacy et al., 2015). Content analysis requires that intercoder reliability necessity be tested and reported (Lacy et al., 2015). Content analysis intercoder reliability assessments examine the degree to which two or more coders employ the same coding protocol or framework to classify content units into the same categories (Lovejoy et al., 2016).

This study adopted both deductive and inductive content analysis. On the one side, the study replicates a thematic analysis framework used in dealing with related phenomena in the deductive case (Vaismoradi et al., 2013). The Gillooly et al. (2017) thematic framework used in this study presented acceptable intercoder reliability of 0.732, therefore, using the same framework advances the reliability of this study.

On the other side, the inductive thematic analysis framework was developed in this study due to the lack of previous studies dealing with the phenomenon (Vaismoradi et al., 2013). In detail, most sentiment analysis frameworks were based on emotions lexicon or sentiment lexicon and given the lack of pre-existing attitudes, behaviors, or intentions frameworks. The researcher adopted Braun & Clarke, 2006 thematic data analysis process of six steps as cited in Vaismoradi et al., 2013. This process was implemented on a sample of 100 tweets before conducting the study as follows,

- Familiarising with data: the researcher reviewed a small random sample of 100 tweets of the user-generated content to familiarize with the data.

- Generating the initial: this step included generating the primary codes (themes), e.g., attitude, behavior, and behavioral intentions.
- Searching for themes: the sub-themes were identified as negative, positive, and neutral.
- Reviewing themes: the themes were thoroughly reviewed to ensure the fitment with the meaning of the themes and the sub-themes.
- Defining and naming themes: each theme and sub-theme was given a clear definition and name (label) to ensure the accuracy of the analysis.
- Producing the report: the used examples were compiled with the research questions and aims of the study to ensure the accuracy of the analysis.

## CHAPTER 4: DATA ANALYSIS AND FINDINGS

### **4.1 Introduction**

This chapter presents the results and discussion related to the extracted data. The analysis is divided into two sections: descriptive analysis and textual analysis (narrative discussion). The descriptive analysis incorporates the key themes and sub-themes that emerged from the data set. The textual analysis presents the findings of the content analysis.

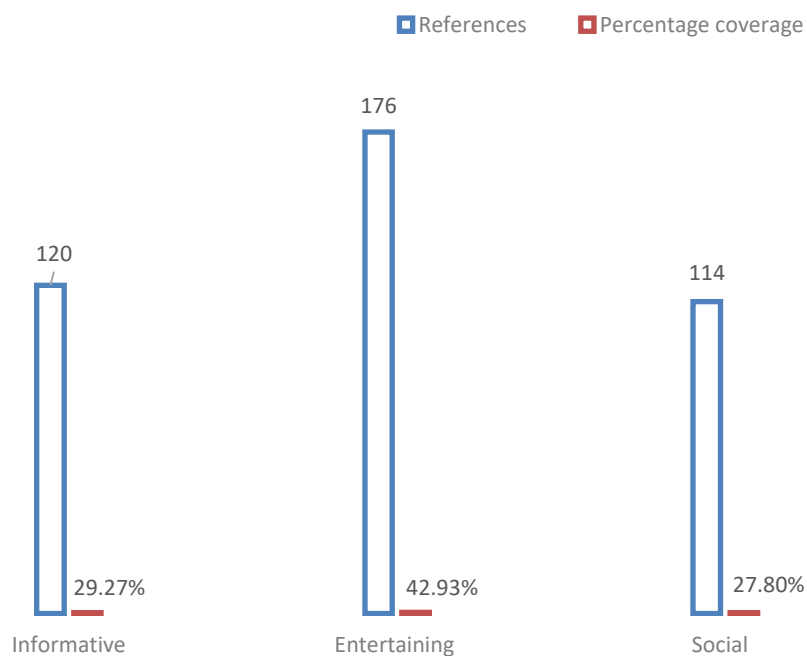
### **4.2 Descriptive analysis**

This section aims to address the first and the second research questions of the thesis. In detail, RQ1. How does source credibility (content generated independently by the brand versus content generated by brands in collaboration with celebrities) shape customer engagement on Twitter? RQ2. How does content type (informative, social, and entertaining) and content format (videos, links, photos, and text) shape customer engagement on Twitter?

The descriptive analysis is divided into three parts. The first part includes the analysis of brand-generated content (tweets from @UnderArmour). The second part includes the analysis of user-generated content (tweets to @UnderArmour). The third part includes the matching between the brand-generated content and the user-generated content. All parts include percentages of the themes and sub-themes coverage relative to the total number of the data set. These figures and percentages were calculated based on the content coded on Nivio 12. The matching between the brand-generated content and user-generated content conducted was using a Microsoft Excel pivot table.

### 4.2.1 Brand-generated content descriptive analysis

Figure 1. highlights the results of the major themes of the brand-generated content (tweets from @UnderArmour). The brand-generated content was coded into three major themes, 120 tweets were coded as informative content representing 29.27%, 176 tweets were coded as entertaining content representing 42.93%, and 114 tweets were coded as social content representing 27.8% of the brand-generated dataset.



*Figure 1.* Themes of brand-generated content references and percentage

Figure 2. highlights the detailed analysis results of the sub-themes of the brand-generated content (tweets from @UnderArmour). The informative sub-themes included 6 tweets coded as events, representing 1%, 49 tweets coded as news, representing 12%, and 45 tweets coded as promotions representing 16% of the data set. The entertaining sub-themes included 45 tweets coded as fun facts representing 11%, 69 tweets coded as games



representing 17%, and 62 tweets coded as relaxation representing 15% of the data set. The social sub-themes included 24 tweets coded as social events representing 6%, 75 tweets coded as social interaction representing 18%, and 15 tweets coded as social responsibility representing 4% of the data set.

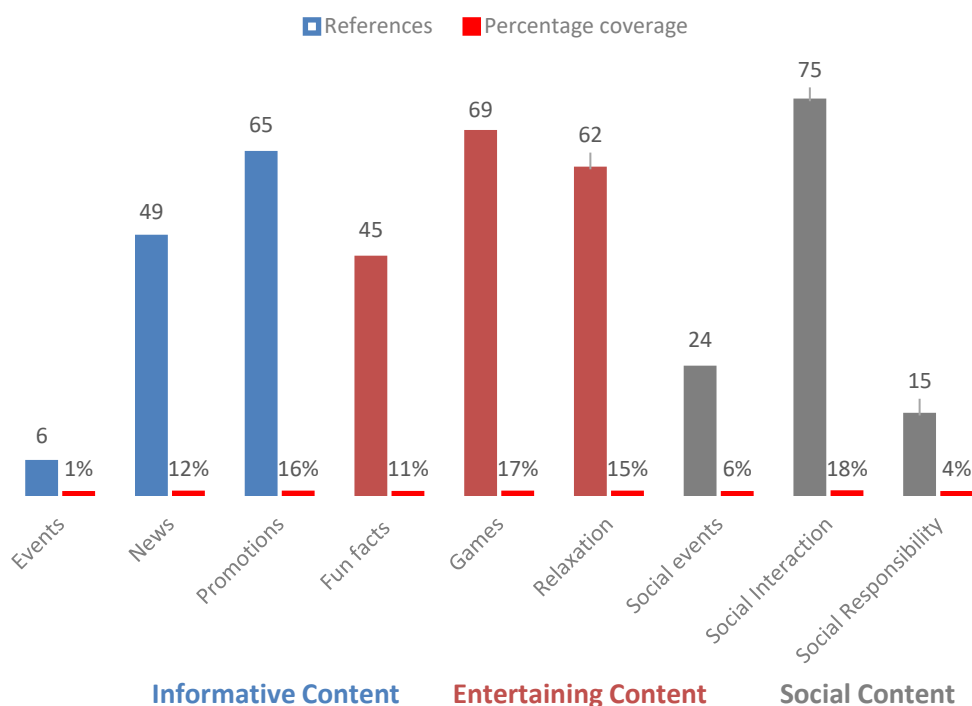


Figure 2. Sub-themes of brand-generated content references and percentage

Table 6 presents the user engagement with the brand-generated content. This engagement included three forms: likes, shares (retweets), and comments (replies). The engagements were compared against 1) themes of the analysis framework: informative, entertaining, and social contents, 2) media formats including photos, videos, links, and text, 3) association, whether the tweet was generated purely by the brand or whether the brand associated with celebrities.

Table 6. Users engagement towards themes, media format and generation source

Labels	Media format	Sum of Likes	Sum of Retweets	Sum of Replies
<b>1. Association (Without celebrity)</b>		<b>25758</b>	<b>3860</b>	<b>598</b>
		<b>9809</b>	<b>1337</b>	<b>257</b>
<b>Entertaining content</b>	Photo	4131	637	94
	Link	1145	51	30
	Text	164	18	0
	Video	4369	631	133
		<b>8118</b>	<b>1338</b>	<b>203</b>
<b>Informative content</b>	Photo	5815	1052	164
	Link	543	13	1
	Text	0	0	0
	Video	1760	273	38
		<b>7831</b>	<b>1185</b>	<b>138</b>
<b>Social content</b>	Photo	4575	689	74
	Link	2406	332	52
	Text	61	0	0
	Video	789	164	12

<b>Labels</b>	<b>Media format</b>	<b>Sum of Likes</b>	<b>Sum of Retweets</b>	<b>Sum of Replies</b>
<b>2. Association (With celebrity)</b>		<b>159200</b>	<b>26186</b>	<b>1670</b>
		<b>60814</b>	<b>9624</b>	<b>440</b>
	Photo	46923	7867	150
<b>Entertaining</b>	link	2911	122	151
	Text	2582	345	14
	Video	8398	1290	125
<b>Informative</b>		<b>37227</b>	<b>5494</b>	<b>265</b>
	Photo	20651	3672	61
	link	6992	481	152
	Video	9584	1341	52
<b>Social</b>		<b>61159</b>	<b>11068</b>	<b>965</b>
	Photo	34698	8871	130
	link	22814	1759	738
	Text	130	12	4
	Video	3517	426	93
<b>Total</b>	* For both with and without association of celebrities.	<b>184958</b>	<b>30046</b>	<b>2268</b>

The extracted data indicated that customer engagement towards the brand-generated content was as follows: 184958 likes, 30046 shares, and 2268 replies. As shown in table 6, the number of likes is significantly higher compared to other forms of engagement. In other words, more users tend to like the tweets generated by the brand, while fewer users tend to share these tweets and fewer users tend to comment on the brand-generated content.

Interestingly, the study found a significant increase in the levels of engagement with the content generated when the brand collaborates with a celebrity compared to the content generated only by the brand. For example, the sum of likes of the brand-generated content with the use of celebrities was 159200, the sum of shares was 26186, and the sum of comments was 1670. While the sum of likes of the brand-generated content without the use of celebrities was 25758, the sum of shares was 3860, and the sum of comments was 598.

Regardless of the type of content (informative, entertaining, and social content), the level of engagement is significantly higher towards the content generated with the collaboration of celebrities. This indicates the power of celebrities in establishing brand credibility (Spry, et al., 2011; Dwivedi, 2015).

The results illustrate that user engagement towards content types of the brand-generated was 9809 likes, 1337 shares, and 257 comments for the entertaining content. The informative content recorded 8118 likes, 1338 shares, and 203 comments. The likes of the social content were 7831, while the number of shares was 1185, and the number of comments was 138. On the other hand, interestingly, the level of engagement of the social

and entertaining content were relatively close. In detail, the social content recorded 61159 likes, 11068 shares, and 956 comments. Whereas the entertaining content recorded 60814 likes, 9624 shares, and 440 comments. The informative content recorded 37227 likes, 5494 shares, and 265 comments.

In this study, we found that users tend to highly engage with the tweets that contain photos more than other formats of content regardless of the source of the content. The sum of likes for the tweets contained photos was 116793, the sum of shares was 22788, and the sum of comments was 673. The engagement with tweets contained videos was 28417 likes, 4125 shares, and 453 comments. User engagement with tweets contained links was 36811 likes, 2758 shares, and 1124 comments. Lastly, the engagement with tweets contained text was 37036 likes, 155 shares, and 18 comments.

The detailed comparison between the brand-generated content *without* the use of celebrities towards the media format was as follows: 14521 likes, 2378 shares, and 332 comments for tweets contained photos; 6918 likes, 1068 shares, and 183 comments for tweets contained videos; 4094 likes, 396 shares, and 83 comments for tweets contained links. The tweets contained text recoded 225 likes without any shares or comments.

The detailed comparison between the brand-generated content *with* the collaboration with celebrities towards the media format was 102272 likes, 20410 shares, and 341 comments for the tweets contained photos; 21499 likes, 3057 shares, and 270 comments for the tweets contained videos; 32717 likes, 2362 shares, and 1041 comments for tweets included links; 2712 likes, 357 shares, and 18 comments for the tweets contained text. From the discussion above, it is noticeable that users tend to engage with likes more than other forms of

engagements such as shares and comments. The numbers show higher level of engagement in terms of likes, shares, and comments with the content generated when brands collaborate with celebrities compared to the content generated purely by the brand, especially with the social and entertaining content. Lastly, users tend to engage more with tweets that contained photos as media format compared to other media formats regardless of whether the tweet was purely generated by the brand or in collaboration with a celebrity.

#### 4.2.2 User-generated content descriptive analysis

Figure 3. illustrates the results of the content analysis of 4676 tweets of the user-generated content. It shows that 53% of the user-generated content was attitude related content (2459 tweets), 31% was behavior-related (1453 tweets), 13% was behavioral intentions-related (616 tweets), and 3% (148 tweets) was considered unclassified content.

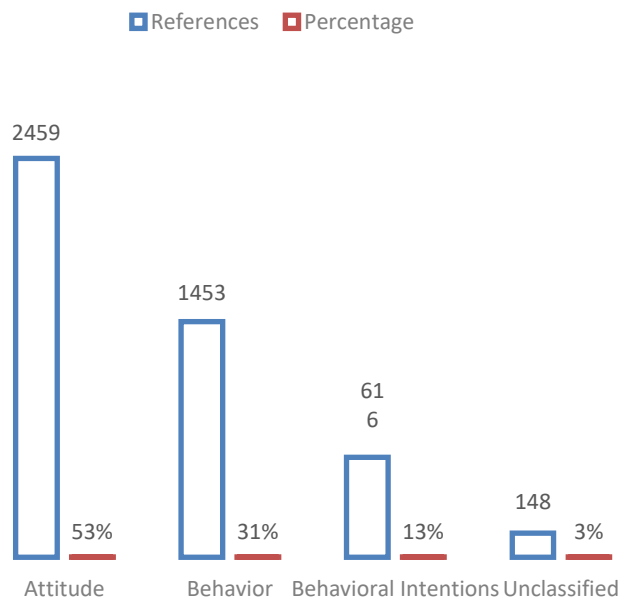


Figure 3. Themes of user-generated content references and percentage

Figure 4. demonstrates the sub-themes of the user-generated content. The user-generated content included 887 tweets that contained negative attitudes which represents 19%, natural attitude included 108 tweets representing 2%, and positive attitude included 1464 tweets representing 31% of the data set. The behavior sub-themes included 981 tweets that contained negative behavior representing 21% of the data set. 68 tweets were coded as neutral behavior representing 1% of the data set. 404 tweets contained a positive behavior representing 9% of the overall data set. The behavioral intentions sub-themes included 44 tweets that contend negative behavioral intentions representing 1% of the overall data set. The positive behavioral intentions included 572 tweets contributing to 12% of the overall percentage. While there were no neutral behavioral intentions references, and the unclassified tweets remain as are 148 references and a contribution of 3% of the overall percentage as there are no sub-themes.

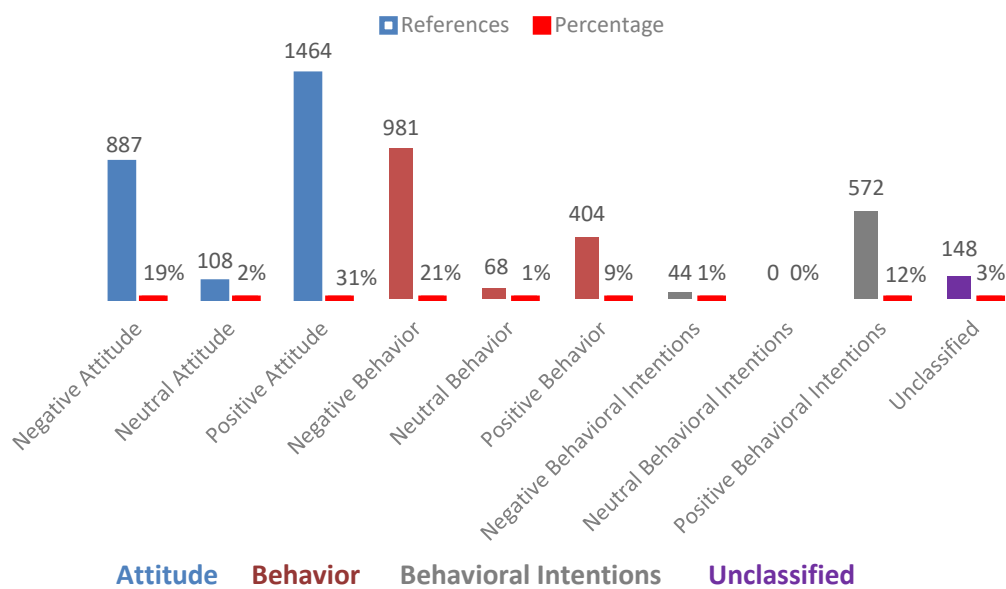


Figure 4. Sub-themes of user-generated content references and percentage

From the discussion above, this study found that users with positive attitude highly engage with the brand compared to the users with a negative attitude. Further, users with negative behavior are highly engaging with the brand compared to users with positive behavior. Lastly, users tend to share their positive purchasing intentions online compared to those who discuss negative intentions on Twitter.

#### **4.2.3 User-generated content: motivations and styles**

The user-generated content used in this analysis included two styles of tweets depending on the users' motivation while composing tweets. The first is commentary motivated, which occurs when the user generates a comment on the brand's page in response to brand-generated content. The second is mention motivated, which occurs when the user generates a message on their wall and mention the brand's username. The difference between both styles is that the comment can be seen by any user who is browsing the brand's tweets, while the mentions can be seen by users who are browsing the users' page.

Table 7. presents the user-generated content styles and the motivations behind composing a tweet. 1569 of the user-generated tweets were composed as comments, which represents 34% of the user-generated content and 3107 tweets were composed by users as messages to the brand (mentions), which represent 66% of the user-generated dataset.



Table 7. Users motivations to generated content percentage coverage

<b>Motivation</b>	<b>References</b>	<b>Percentage coverage</b>
Commentary	1569	34%
Mention	3107	66%
Total	4676	100%

Table 8. Commentary engagement themes and sub-themes

<b>Theme</b>	<b>Sub-Theme</b>	<b>References</b>	<b>Percentage coverage</b>
	Positive Attitude	364	23%
Attitude	Neutral Attitude	64	4%
	Negative Attitude	184	12%
	Positive Behavior	67	4%
Behavior	Neutral Behavior	27	2%
	Negative Behavior	682	43%
	Positive Behavioral Intentions	174	11%
Behavioral Intentions	Neutral Behavioral Intentions	0	0%
	Negative Behavioral Intentions	1	0%
Unclassified	Unclassified comments	32	2%
<b>Total</b>		<b>1595</b>	<b>100%</b>

Table 8 illustrates commentary engagement themes and related sub-themes. Based on the analysis, users' comments towards the brand tweets reflected on different themes of the analysis framework. In detail, users' comments contained attitude sub-themes as follows: 364 comments contained positive attitude representing 23%, 64 neutral attitude comments representing 4%, and 184 negative attitude comments representing 12% of the comments. On the other side, users' comments contained behavior sub-themes as follows: 67 comments included positive behavior representing 4%, 27 comments contained neutral behavior representing 2% and 682 comments included negative behavior representing 43% of the comments. Positive behavioral intentions sub-themes included 174 comments representing 11% of the user comments, while negative behavioral intentions comments included one comment and no neutral behavioral intentions were captured.

In addition to the classified comments, the sample included 32 unclassified comments representing 2% of the users' comments. Those comments did not reflect on any sub-theme during the analysis phase as they did not contain any matching tweet identifier to relate with brand-generated tweets. The explanation of this incident is that some users comment on other users' tweets. In this case, the tweet type remains as comment tweet (reply), but the tweet matching identifier will relate with user-generated tweet.

Analyzing the commentary style, it is noted that users tend to express their negative behavior in a comment to voice their negative experience on the brand's wall. The study found that 43% of users' comments contained negative behavior. Users also tend to express their positive and negative attitude towards the brand-generated content in a commentary style as the study shows that 23% of the user comments included positive attitude, and 12%

of the users' comments included negative behavior. In addition, users tend to express their positive behavioral intentions in a commentary style as 11% of users contained positive behavioral intentions. However, low percentage of users expressed their positive or neutral behavior, neutral attitude, or negative behavioral intentions.

Table 9 indicates users' comments towards brand-generated content. The researcher has exported the results from Nvivo and matched the comments (user-generated content) with the original (brand-generated content) to explore users' comments towards the themes and sub-themes of the brand-generated content using the reply tweet identifier. In other words, the figures shown in table 9 explain the users' comments toward different types of brand-generated content.

Table 9. Commentary user-generated content towards brand-garneted content

Users comments (User-generated content)			Brand- generated content	
Comment style (Sub-themes)	References	Percentage	Tweet type (Themes)	Tweet sub-type (Sub-themes)
Negative Behavior	13	1%	Informative Content	Events
Negative Attitude	11	1%		Promotion
Negative Behavior	18	1%		

<b>Users comments (User-generated content)</b>			<b>Brand- generated content</b>	
<b>Comment style (Sub-themes)</b>	<b>References</b>	<b>Percentage</b>	<b>Tweet type (Themes)</b>	<b>Tweet sub-type (Sub-themes)</b>
Negative Behavioral Intentions	1	0%	Cont. Informative Content	Cont. Promotion
Neutral Behavior	1	0%		
Positive Attitude	43	3%		
Positive Behavior	6	0%		
Positive Behavioral Intentions	8	1%		
Negative Attitude	62	4%		
Negative Behavior	18	1%		
Neutral Behavior	9	1%		
Positive Attitude	105	7%		
Positive Behavior	19	1%		
Positive Behavioral Intentions	5	0%	Entertaining content	Games
Negative Attitude	8	1%		
Negative Behavior	12	1%		
Neutral Attitude	7	0%		

<b>Users comments (User-generated content)</b>			<b>Brand- generated content</b>	
<b>Comment style (Sub-themes)</b>	<b>References</b>	<b>Percentage</b>	<b>Tweet type (Themes)</b>	<b>Tweet sub-type (Sub-themes)</b>
Positive Attitude	42	3%	<b>Cont. Entertaining content</b>	Cont. Games
Positive Behavior	6	0%		
Positive Behavioral Intentions	8	1%		
Negative Attitude	20	1%		Fun facts
Negative Behavior	40	3%		
Neutral Attitude	2	0%		
Positive Attitude	14	1%		
Positive Behavior	5	0%		
Negative Attitude	49	3%		
Negative Behavior	129	8%		
Neutral Attitude	49	3%		
Neutral Behavior	14	1%		
Positive Attitude	43	3%		
Positive Behavior	24	2%		
Positive Behavioral Intentions	32	2%		

<b>Users comments (User-generated content)</b>			<b>Brand- generated content</b>	
<b>Comment style (Sub-themes)</b>	<b>References</b>	<b>Percentage</b>	<b>Tweet type (Themes)</b>	<b>Tweet sub-type (Sub-themes)</b>
Negative Attitude	4	0%	Social content	Social events
Negative Behavior	1	0%		
Neutral Attitude	2	0%		
Neutral Behavior	3	0%		
Positive Attitude	22	1%		
Positive Behavior	3	0%		
Positive Behavioral Intentions	15	1%		
Negative Attitude	15	1%		
Negative Behavior	451	28%		
Neutral Attitude	4	0%		
Positive Attitude	70	4%	Social interaction	
Positive Behavior	4	0%		
Positive Behavioral Intentions	101	6%		
Negative Attitude	15	1%	Social responsibility	
Positive Attitude	25	2%		

<b>Users comments (User-generated content)</b>			<b>Brand- generated content</b>	
<b>Comment style (Sub-themes)</b>	<b>References</b>	<b>Percentage</b>	<b>Tweet type (Themes)</b>	<b>Tweet sub-type (Sub-themes)</b>
Positive Behavioral Intentions	5	0%	Cont. Social content	Cont. Social responsibility
User's Comments	32	2%	Unclassified	Unclassified

In this study, we found that users comments on informative content sub-themes as follows: events content contained negative behavior represent 1% of the total users' comments. Promotion content contained 1% of each of the sub-themes negative attitude, negative behavior, and positive behavioral intentions comments. for each sub-theme, in addition to 3% of positive attitude comments. The news content contained 4% of negative attitude comments, 7% of positive attitude comments, and 1% of negative behavior, positive behavior, and neutral behavior comments for each sub-theme.

Entertaining content included different types of user comments as well. Games content contained 3% of positive attitude comments, while negative attitude, negative behavior, and positive behavioral intentions comments represented 1% of users' comments for each of them. Fun facts content contained 3% of negative behavior comments, 1% of each negative attitude and positive attitude comments were also captured in this theme. Relaxation content included 8% negative behavior comments, 3% of negative attitude comments, and another 3% of both neutral attitude and positive attitude comments, neutral

behavior comments represented 1% of the comments, positive behavior, and positive behavioral intentions included 2% of the comments for each theme.

Social content comments included a higher percentage of users' comments. Social events included 1% of the positive attitude comments, 1% of positive attitude comments, and 1% positive behavioral intentions comments. Social interaction included 28% of negative attitude comments, 4% of positive attitude comments, and 6% of positive behavioral intentions comments. Social responsibility included 1% of negative behavior comments, 2% of positive attitude comments, and another 2% of positive behavioral intentions comments. As mentioned, 2% of the users commented on other users' comments, and we have considered them as mentions since we could not match them with the brand-generated content. The reason for our consideration is that they were written for other users while mentioning the brand's username.

From the discussion above, it is noticeable that users are highly engaging with social interaction content. The explanation of this engagement is the heavy use of the celebrities in the social interaction content by the brands. Interestingly, users tend to express their negative behavior while commenting on the brand's content specially when the content is generated with association with a celebrity, as 28% of the users' comments was on social interaction content. Not only that, a higher percentage of positive behavioral intentions comments has been posted on social interaction content, as 6% of the comments included positive behavioral intentions. Users' comments towards news content contained mainly positive attitude, as 7% of the users' comments reflected a positive attitude. This can be



explained as users consider the brand's official account as a trustworthy source of information; thus, they trust the news generated by the brand's account.

The other themes of user-generated content were relatively close to each other. However, the major percentage of the users' comments was related to negative behavior, as mentioned earlier, users tend to express their negative experience with the brand in a commentary style.

#### **4.2.4 User-generated content: mentions and styles**

Table 10 presents the detailed themes and sub-themes of users' mentions to the brand. The sample used in this study contained 3081 mentions tweets to the brand. Based on the analysis, we found that 29% of the users' mentions to the brand contained a positive attitude, 2% contained a neutral attitude and 9% contained a negative attitude. 29% of the users' mentions to the brand contained negative behavior, 12% were positive behavior related, while 2% contained neutral behavior. 15% of users' mentions were related to positive behavioral intentions mentions and 1% was negative behavioral intentions mentions to the brand.

The study found that users' mentions represented 66% of the sample. Positive attitude mentions represent 19%, neutral attitude mentions represent 1%, 6% negative attitude mentions, 8% positive behavior mentions, 1% neutral behavior mentions, 19% negative behavior mentions, 10% positive behavioral intentions mentions, 1% contributed to the negative behavioral intentions mentions.

We found that users expressed their positive attitude, negative attitude, and positive behavioral intentions towards the brand as mentions. This implies that users engage with the brand to express their feelings and emotions about the marketing objects and stimuli they witness outside Twitter. These stimuli may be communicated by the brand offline or online on different channels such as google ads, Facebook, or other social media platforms. The figures show that 29% of users expressed their positive attitude towards the brand, 9% of users expressed their negative attitude towards the brand, while 12% of users expressed their positive behavioral intentions towards the brand. This result wasn't not expected in this study as we assumed that users would express their attitude and behavioral intentions towards the brand-generated content within the platform itself, which is Twitter in our case. We found that users use Twitter to express their emotions and intentions toward the brand-generated content across offline and online channels. Indicating, that online communities are considered as a useful communication tool that is used by users to express their emotions and loyalty towards the brands (Hudson and Hudson, 2013).

Table 10. Mentions engagement themes, and sub-themes

<b>Theme</b>	<b>Sub-Theme</b>	<b>References</b>	<b>Percentage</b>	<b>Percentage of Coverage of total sample</b>
Attitude	Positive	899	29%	19%
	Neutral	51	2%	1%
	Negative	283	9%	6%
Behavior	Positive	365	12%	8%
	Neutral	63	2%	1%
	Negative	890	29%	19%

<b>Theme</b>	<b>Sub-Theme</b>	<b>References</b>	<b>Percentage</b>	<b>Percentage of Coverage of total sample</b>
Behavioral Intentions	Positive	460	15%	10%
	Neutral	0	0%	0%
	Negative	43	1%	1%
Unclassified	Unclassified	43	1%	1%
<b>Total</b>		<b>3081</b>	<b>100%</b>	<b>66%</b>

Users also expressed their behavior in a mentions style. This was expected since the behavior depends on experience, therefore, we expected users to share their experience with the brands' products or services on Twitter. 29% of users shared their negative experiences with the brand while 12% of the users shared their positive experiences with the brand. This advances the previous studies' findings that users with negative experiences tend to share their experiences online more than users with positive experiences (Park, and Lee, 2009).

### **4.3 Textual analysis**

This section aims to address the third research questions of the thesis. In detail, RQ3. What topics are communicated in the brand- generated content, and how does it shape the user-generated content topics in return?

The textual analysis aims to discuss the qualitative analysis of the brand-generated content and user-generated content, highlighting the discussed topics in the used dataset and giving examples of each topic. This section is divided into two parts. The first part includes a

discussion of the brand-generated content analysis of tweets from @UnderArmour. The second part includes the discussion of the user-generated content analysis (tweets to @UnderArmour).

#### **4.3.1 Textual analysis of brand-generated content**

This section aims to understand the major topics covered in the brand-generated content on Twitter. Based on the textual analysis results, we identified the word frequencies and related topics of the brand's tweets, including informative content, entertaining content, and social content. This section advances the study examples of UnderArmor's tweets on Twitter.

Based on the analysis of brand-generated content, we found that UnderArmour uses three content types in their social media communications - namely: informative content, entertaining content, and social content. This content strategy allowed the brand to position their promotional activities while communicating with their customers instead of following a generic promotional style. The results of the textual analysis contribute to discovering the communicated messages in each theme and provide interesting insights to the study.

##### **4.3.1.1 Brand-generated informative content**

Figure 5 projects the word frequency queries of the informative content. This figure presents an overall idea of the most frequent queries used by UnderArmour while generating informative tweets.



Similarly, Under Armour promoted their new collection in tweets, for example, “Conquer the beaten path and beyond. The #UAHOVRSummit features a unique split-lace design paired with a Michelin outsole. Reach your peak now. <https://t.co/IJ8HfAOhiZ> <https://t.co/dHBukYu7Na>”, “Reach peak performance on any surface. The UA Trek Collection keeps you warm without weighing you down. Experience the benefits of Polartec recycled fleece. Shop now. <https://t.co/J2EPO7sP88> <https://t.co/bsV9ZeSVOv>”, and “Dropping dimes and darts. @StephenCurry30’s “Range Unlimited” collection blends the two-time MVP’s off-court and on-court vibes. Shop now. <https://t.co/JMRzJ22ZbD> <https://t.co/pF2rTmEhfi>”. In these examples, Under Armour promoted UAHOVR, ProjectRock, and Range Unlimited collections. Under Armour also promoted their new services to customers, such as promoting personalized coaching “Here to equip you with the tools you need to reach your 2020 goals. Introducing the #UAHOVRMachina, featuring real-time form coaching to help you become a better runner. Pre-sale available in North America now. Coming globally on 2/7. <https://t.co/RAdviSBqn8> <https://t.co/QsjOC8YDVk>”

The news messages communicated by Under Armour contained information about the innovations and product testing, new stores opening, new collections, and new partnerships. For example, Under Armour shared updates about their innovations and product testing on Twitter as follows: “Introducing UA RUSH, mineral-infused workout gear for enhanced blood flow and improved performance. Scientifically tested. Athlete Proven. #UARush #FindYourOnePercent”, “ What will you do with 1% more? Our #UARUSH technology was scientifically tested on athletes like @StephenCurry30 and

proven to enhance results. Our innovative fabrics recycle the body's energy during moments of performance leading to gains. Shop now. <https://t.co/ryKX2GMsPe> <https://t.co/z58kRQrmiG>", and "Rent's due. We're outworking the competition mentally and physically in @TheRock's new #BendBoundaries Collection. Train harder in the latest #ProjectRock gear. <https://t.co/BdFYrPfmh2> <https://t.co/RU7mcaxTEy>". Another good example of announcing Under Armour's news is opening new stores, where Under Armour tweeted about their new locations, "On a mission to make all athletes better all over the . @MichaelPhelps introduces the newest member of our global family, @UnderArmour\_ind. #INDIAWILL <https://t.co/fUi3DqS0hd>", and "International icon. @JordanSpieth helps #TeamUA open a new brand house in Shinjuku, Japan. <https://t.co/J3dXIx7WHH>".

Lunching a new collection and communicating the dates when the products will be available in the markets was also found in Under Armour news communications such as, "Beware the UNDRTD. @StephenCurry30 uses the doubt as fuel. Season 11 starts now. <https://t.co/WMvjXC3d0v>", and "Power through the winter elements with ease. The UA Trek Collection launches 12/6. <https://t.co/IJGrICa5Iv>". Introducing new partners was also found in Under Armour news, for instance, "JUST ANNOUNCED: Under Armour partners with Samsung on a special edition of the Galaxy Watch Active2, designed to help runners reach their goals. Learn more here: <https://t.co/R81iCw93TY> <https://t.co/YmH3EHBsiC>", and "Defining the future of spacewear. In partnership with @virgingalactic, we used our most groundbreaking and





We found that Under Armour was more active in producing entertaining content especially in both the games and relaxation content. This is logical since Under Armour is a sports manufacturer brand, and they are sponsoring many sports activities in the United States. They are also a manufacturer of clothing, footwear, and accessories for gym, fitness, and yoga, all of which are related to relaxation.

In games tweets, we found that Under Armour positioned their content based on the game's trends and activities within the community through the use of their sponsored athletes and sports teams. For example, "She's been to 2 Final Fours and has won 2 National Championships but this season is different for @ndwbb coach @MuffetMcGraw. On our latest podcast the Hall of Famer talks about turning a difficult season into a growing experience. <https://t.co/CgfEuSNbG8> <https://t.co/IQURobeWme>", "@anthonyfjoshua learned the importance of being a champion through his only defeat. He told @playerstribune why he knew he would rise again. <https://t.co/MLVcWF15Be> <https://t.co/F1lnwko9Q>", and "@HailieDeegan proves that the right training and mindset yield results. Congrats to Hailie on finishing 2nd at ARCA for her Daytona debut! <https://t.co/2SBPKH26OU>". These examples indicate how the association between athletes like Anthony Joshua, and Hailie Deegan, and Under Armour benefitted them to use the game trends in their favor, and thus generating games related tweets.

In other instances, Under Armour used their sponsored sports clubs to generate gaming-related tweets, such as, "#TeamUA on the hunt for [redacted] in October. Bring on the Fall Classic. <https://t.co/wNpL6BSWP5>", "Crushed. @willya02 puts the Rays up 4-0. #TeamUA <https://t.co/emUra61QK7>", "We bet Vlad Guerrero Jr. he couldn't hit a [redacted] ball over the

bridge. It's still in the air. <https://t.co/8eYcO5jJOJ>", and "When the ball is in the air...it's ours. 2019 season coming <https://t.co/2LewIvVKFY>". In these examples, we can see how the strong association between Under Armour and the sponsored teams in different sports fields including, basketball, baseball, tennis, and American football.

Under Armour positioned their workout, gym, and fitness collection in a relaxation context. The relaxation tweets produced by Under Armour are associated with their fitness application (MyFitnessPal) and fitness clothing collection such as Project Rock. The following examples present some relaxation related tweets: "The only way to achieve greatness is through the work. Shop the latest #ProjectRock collection now. <https://t.co/wax8mGkuX0> <https://t.co/xekGoP2uVF>", and "Getting better isn't easy. There are no shortcuts. No cheat codes. No quick fixes. It's only work. #TheOnlyWayIsThrough", "Getting better each day through the work and support of the team at the UA Human Performance Summit. #TheOnlyWayIsThrough <https://t.co/ZTtsbqsWK0>", "Stay light and warm in any environment. Imke Salander experienced the performance enhancing results #UARUSH ColdGear. Available now. <https://t.co/VKBNP02zvP>", and "Don't waste your body's energy. Recycle it. Our #UARUSH technology converts body heat in order to increase temporary localized circulation and improved performance. Elevate your training now. <https://t.co/722yN9Iv6g> <https://t.co/mOEMHxDD4R>". These examples explain the logical collaboration between relaxation, enjoyment, positive spirit and sports that has been used by Under Armour. Sports are considered as an escape for many people as it maintains a healthy routine and

reduces pressure. Thus Under Armour, as a sports brand, can support their customers to gain their aims of relaxation and enjoyments.

Under Armour used fun facts in their tweets while associating their products with the recent trends in the sports industry. In this context, we found that Under Armour linked the great achievements of their sponsored athletes to the brand showing that they were the reason behind these achievements and presented them to their customers as fun facts. For instance, Under Armour tweeted, “Dedicated to underrated players fighting to fulfill their on-court potential, the 'Underrated Tour' #Curry7 is now available on <https://t.co/566gs1MplU>.”, “@StephenCurry30’s jump shot is just like his favorite childhood toy. Get the splash party started in the #Curry7 Nerf “Super Soaker” on 12/27. <https://t.co/7WStClMOcu>”, “On court candy. @StephenCurry30 linked up with @SourPatchKids for two new colorways of his latest signature shoe. Snack on buckets in sweet & sour #Curry7 flavors now. <https://t.co/2Ja9zdqp3w> <https://t.co/nbwVOHrJLY>”, “Temps are dropping but we're still bringing the . New #UAHOVR Phantom SE's out now. <https://t.co/NZVoKKIShL> <https://t.co/dosI2gcy5>”, and “ □ to his own legacy. The Vlad Jr. era begins in Toronto. He’s just getting started. #WEWILL <https://t.co/7SRdToIbnJ>”.

These examples highlighted how Under Armour used Stephen Curry’s jump shot in their favor claiming that the Curry7 shoes are the reason behind it. They also called the shoes candy which represented the fact in a fun manner. In another example, Under Armour tweeted the great achievements of Vlad Jr. in a fun context tweeting that it’s his time to write his own legacy. In fact this was a clear true fact about Vlad Jr., however it was presented in a fun way. Yet Under Armour linked this fact to their WEWILL collection.

These examples projected the strong association between Under Armour's quality and how it benefited athletes to reach great achievements presenting Under Armour's offerings to customers as a fact in a joying way.

#### 4.3.1.3 Brand-generated social content

Figure 7 presents the word frequency queries of the social content which introduces an overall idea of the most frequent words used by Under Armour while generating social tweets.



Figure 7. Social content word frequency query

The textual analysis of the social content generated by Under Armour indicates that Under Armour highly focused on social interaction, compared to social events and social responsibility content. Under Armour interacted with their sponsored athletes during their

social events or achievements such as media coverage, career achievements, and medical recoveries. For instance, Under Armour tweeted about media coverage of Natashaha Stings and Geeorrgiaa, “As a new parent, @natashahastings was told that qualifying for the 2020 Olympics wasn't possible...but she has a habit of proving people wrong. Hear more in the latest episode of our new podcast, The Only Way Is Through. <https://t.co/mjlA1UchlL> <https://t.co/qloqIdEYDD>”, and “Hear how the world’s most elite athletes train, compete and recover in our new podcast, The Only Way Is Through. Listen to the first episode with @Geeorrgiaa now. In partnership with @iHeartRadio. #TheOnlyWayIsThrough <https://t.co/4A4iMI0Fam> <https://t.co/y6oUGwIpaW>”. These examples included a medical recovery of the athletes due to health conditions such as pregnancy and accidents. Under Armour also tweeted about health recoveries in events that were not covered by media such as, “Every time you write @StephenCurry30 off...he finds another reason to get better. Embrace being UNDRTD in the #Curry7. Shop now. <https://t.co/F2iZTOqBZx> <https://t.co/5sHZn49TIB>”, and “Natasha Hastings knows how important recovery is in her pre-natal training. Watch now to learn about why she wears UA Recover innovative mineral-lined fabric.”

In other instances, Under Armour interacted with endorsing athletes congratulating them for their achievements and career acceleration such as, “Elite company. Congrats to @kelley mohara on being named one of the top four defenders in the at the #FIFPro! #World11 <https://t.co/oi21o4F43F>”, “Congratulations to a true legend! @RealBillRussell <https://t.co/dUBNZkTwqn>”, and, “Houston's ace does it again. After throwing his 3rd career no-hitter and leading the league in wins, @JustinVerlander is your AL Cy Young

Award winner. <https://t.co/2pweZlAxkQ>". It appears that Under Armour also benefited from their association with the athletes to create social interaction between Under Armour as a sports brand and the sponsored athletes' as human brands. This allowed them to generate interaction among their customers and brand community. These interactions also put Under Armour in the center of the athletes' personal life which can be noticed by their followers.

Under Armour socialized their tweets by linking them with social events such as, birthdays, special days, new year's, and community marathons. Under Armour tweeted about Stephen Curry's 32nd birthday, "To commemorate Stephen Curry's 32nd birthday, we designed a special off-court #Curry7 'Pi Day' PE. Shop at <https://t.co/l0cYVOpSyV>." Where they associated this personal event with Curry7's collection.

In other events, Under Armour tweeted about special days such as holidays, anniversaries, ".@StephenCurry30 celebrates Black History Month with a colorway inspired by David Adjaye's iconic architectural design. Pay homage to the heroes and pioneers that have shaped American culture as we know it with the #Curry7 "Our History". <https://t.co/wuoYAIEMVU> <https://t.co/v5WeEKgA22>" , "This one's for you, Dad. Vlad Guerrero Jr. & @bryceharper3 celebrate #FathersDay with special editions of the #UAYard + #Harper4. Learn more about the inspiration behind Bryce's spikes <https://t.co/vdreoLUapB> <https://t.co/i0hxZX21mM>", and ".@DistrictRunning is out here celebrating #GlobalRunningDay the best way they know how—with a run. How did you celebrate today with your crew? <https://t.co/I8AJ9LYixP>". These examples projected the use of the social days and community events such as Father's Day, global running day, and

black history month to interact with the community by offering special products for the audience while celebrating these events.

Under Armour participated in holidays and anniversaries by generating tweets such as, “Inspired by classic Chinese water paintings and designed to commemorate new beginnings, the latest #Curry7 'Chinese New Year' is available now on <https://t.co/566gs1MplU>.”, “History’s homecoming. To commemorate the 150th anniversary of college football this season we unveil our special throwback uniforms that highlight historical program moments. Get gameday ready now <https://t.co/qEwFjcm58D> <https://t.co/tgUqvyPYvi>”, and “Home of the brave. On this national holiday, we salute those who have sacrificed to serve the <https://t.co/kDc00MxSYi>”. These examples presented how Under Armour were actively participating in national holidays, and new year’s including the Chinese new year while interacting with the community online to benefit from these trends. Associating these trends with products and collection would position the brand in a meaningful social context in the eyes of their customers. Under Armour considered social responsibilities and community support in their media coverage and marketing activities. In this study, we have captured some examples of Under Armour tweets that included social responsibilities content such as women's support, community supports, and disaster support. Under Armour announced their women support in twitter such as, “In collaboration with Storm Reid, the #Curry7 'Bamazing' celebrates inspirational young women and supporting their dreams through higher education scholarships. Shop at <https://t.co/10cYVOpSyV>.”. This example indicates the higher education scholarship provided by Under Armour and Storm Reid. Interestingly this

scholarship was linked to Curry7 collection, which promotes the collection among young women segment and informs other segments that Under Armour is involved in the community's critical issues.

Under Armour organized training camps for young generations of athletes with Stephen Curry as part of their social responsibility program, providing them with the opportunity to train with Under Armour, as this tweet shows, "Success in the season is a result of the work you do in the summer. @StephenCurry30 linked up with the future stars of the game for 3 days of training, community give back and more at the SC30 Select Camp. <https://t.co/oOboa72z9y>", and "We shoot to score at the SC30 Select Camp. @StephenCurry30 invited the top high school male and female players to the Bay Area for elite training and skill development. <https://t.co/L5Jz74R41L>". It appears that such tweets would increase the brand awareness among the younger generation since the brand supports their interests.

At the beginning of the Covid-19 pandemic, Under Armour started their awareness activities on Twitter, by advising their customers to maintain a healthy lifestyle and use their fitness applications. They also announced that they will start producing masks to overcome this pandemic especially when there was a high demand on masks. These examples show this meaning " We are pledging up to \$2M to support communities impacted most by COVID-19 pandemic; \$1M to @FeedingAmerica and up to \$1M to @GoodSportsInc through a 30-day Healthy at Home fitness challenge on UA's apps, @MyFitnessPal and MapMyRun. #TheOnlyWayIsThrough <https://t.co/LFPpXrnffv>". In this example, Under Armour introduced a socialized promotional content that is related to



the consumers' daily issues and worries, thus informing them that the brand is part of the society.

#### **4.3.2 Textual analysis of user-generated content**

This section aims to understand the major topics covered in the user-generated content on Twitter. Based on the textual analysis results, we identified the word frequencies and related topics of the users' attitude, behavior, and behavioral intentions. This section advances the study with an understanding of the events and incidents behind users' interaction with UnderArmour on Twitter.

##### **4.3.2.1 User-generated attitude-related content**

Figure 8. presents the word frequency queries of users positive attitude, which introduces a general idea of the most frequent words used by users while expressing their positive attitude on Twitter.

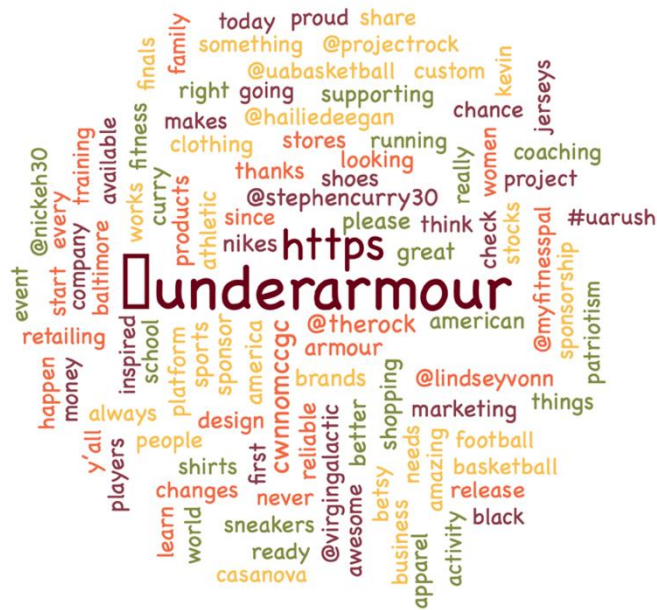


Figure 8. Positive attitude word frequency query

The positive attitude sub-themes included various forms of positive engagement with Under Armour on Twitter. The positive attitude towards Under Armour was a result of the like of the brand's services or products in some events, suggesting new ideas or products to the brand, offering support to the brand, seeking sponsorships and discounts, and sharing the brand's news. This confirms Hudson and Hudson, 2013 is finding that customers use social media to seek and share their opinion about the brands. This could also include showing a positive attitude to the brand as a result of a negative experience with other brands.

One of the major examples of the user positive attitude towards the brand was coming from the users' admiration of the products and services offered by the brand. This admiration creates an attachment with the brand, which motivates users to express their positive attitude on social media.

For example, some users expressed their passion towards Under Armour in general, such as, “@Under Armour my favorite brand”, and “@Under Armour I have joined the #Under Armoury”. These examples highlight the admiration for the brand as a result of being a member of Under Armour’s brand community.

In other instances, users explained the reasons for considering Under Armour as their favorite brand, such as, “@Under Armour Love the Recovery Sleepwear and all, but now would be a great time to start producing medical scrubs ♀ #HealthCareThroughAction #weareathletestoo”, and, “@Under Armour I finally found a shoe that I LOVE after trying soooooooo many brands! If you need or want the most comfortable athletic shoe (in my opinion) you must try the #hovrinfinite by #Under Armour this shoe fanatic is impressed! They're like walking on clouds! <https://t.co/Rm0PBrIDr4>”. These examples explain how a previous experience with products or services such as the fitness application of Under Armour created a positive attitude towards Under Armour in the forms of favoring and admiration.

Suggesting new business ideas to the brand was found as another form of positive attitude towards the brand. This can also consider as a manifestation of loyalty towards the brand. In other words, users maintain their loyalty towards Under Armour by suggesting new products, services, or entering new markets. Instead of looking or using alternative products or services offered by competitors, users seek the brand to meet their needs and expectations by introducing new products. Many examples included product suggestions were found in the dataset such as, “@Under Armour @FeedingAmerica @goodsportsinc @MyFitnessPal @Under Armour @drsanjaygupta why can't you use your factories and

materials to make #medicalgear #FightCOVID19 #kevinplank could redeem himself!”, and “@UnderArmour should make waterproof leggings”, “@UnderArmour why do you not offer more tactical gear in woman’s styles or boots?! You are aware women serve in the army as well?! Can’t find a single shirt in a woman’s style in coyote and your boots aren’t even small enough for 90% of women!”.

Business recommendations for the brand were also communicated by the users as an additional form of positive attitude towards the brand. For instance, opening new geographical locations and acquiring new customers, “@UnderArmour @FeedingAmerica @goodsportsinc @MyFitnessPal Please also try to support your Canadian customers by helping out those important to us, such as @FoodBankWatReg and other great agencies!”, and ““@UnderArmour It will be available in your store in Saudi Arabia Because honestly I like it very much I want to buy it” “@UnderArmour would make a lot of money from Utes fans if they made these for Utah.... <https://t.co/8zbdcYdmh6>”.

Sharing the brand news and participating in promoting the brand’s products was another form of positive attitude towards the brand. Examples of sharing the brand’s news within the community included, “@UnderArmour @stormreid @StephenCurry30 Week Ending 3.6.20 Congrats on your new 52 week low \$12.49 UAA stock dropped \$1.73 NKE down 0.014% LULU down 0.0029% What did UAA do...down 0.12% Did U reports earnings again this week? At this pace you'll be \$0 by May Oh, and congrats on delivering a new crappy product. FIRE KP! <https://t.co/MQZcx1IRma>”, and “@UnderArmour under armour schools doing some good work for Nashville!! <https://t.co/gNvn5hZNi6>”. These

examples elaborate how the users tend to share the brand news as form of loyalty to the brand which is translated into a positive attitude towards the brand.

Further to this, business users tend to participate in the brands' marketing activities while generating promotional related tweets. In this study, we found that this segment tend to express a positive attitude towards UnderArmour by positively tweeting about UnderArmour's new collections available at their stores. Not only this segment, regular consumers participated in promoting UnderArmour within their network through the share of promotional related tweets within the community. For example, “@UnderArmour @emily\_durgin America’s most reliable Shopping Platform Shop Now <https://t.co/cWnnOmCCgC> <https://t.co/cWnnOmCCgC> <https://t.co/cWnnOmCCgC> <https://t.co/cWnnOmCCgC> <https://t.co/cWnnOmCCgC> <https://t.co/cWnnOmCCgC>”, and ““@UnderArmour have the perfect leggings to stay cool and comfy in the heat Was £65.00 // Now £40.00 <https://t.co/V7dIzW9B5f> <https://t.co/K5iPmnVvZ3>”. The given examples present how the users participate in spreading positive word of mouth towards UnderArmour on Twitter.

Some users expressed a positive attitude toward the brand as a result of seeking sponsorships. This was found as another motivation for positive interaction with the brand as a result of the sponsorship program offered by UnderArmour. In their sponsorship program, UnderArmour provides a sponsorship opportunity for talented sports practitioners and school players, which leads to a positive attitude among sponsorship seekers. For example, “@UnderArmour Can I get a free pair since it's my birthday too”, and “@UnderArmour Hey Under Armour! How would you like to sponsor the next gold

medal gymnast from Turkey? She is a very talented hard working little gymnast. She holds the city championship since she was 4 yrs old and holds even though she only has matt to practice on. Please help her!”.

Some users expressed a positive attitude in their tweets towards Under Armour as a result of the endorsement provided to athletes and sports clubs. In other words, the association between the brands and famous athletes participated in shaping users’ interaction on social media as the athletes could extend their users’ attachment to the brand (Spry, et al., 2011). We found many instances in the dataset that motivated users’ positive attitude to Under Armour as a result of their admiration for the favorite athletes or sports club such as, “@Under Armour @StephenCurry30 I would love to have him to meet my lil nephews I'm the outcast but I would like that never gonna happen but still positive bout the dreaming” and “@Under Armour So she’s pregnant and running wow ” “@Under Armour She runs the 40 faster than Brady does.” “@Under Armour Wow I’ve never seen anyone run like that while pregnant. That’s brave.”.

The last form of positive attitude towards the brand that we found in the analysis was expressed as a result of negative experiences with other brands, thus leading users to look for alternatives. This means that users would switch to other competitors if they experienced a negative or a bad experience with their existing brands. In the analysis, we found examples related to this form when Nike discounted the manufacturing of National Day sneakers that they used to present to their customers every year, which made many users approaching other brands including Under Armour to introduce this product.

Examples of this type of positive attitude include, “@UnderArmour any way I can trade in all my @Nike for Under Armour stuff? I've been Nike supporter forever and since they stood with Kaepernick, I've joined the UA brand. You now have a UA fan for life and will only buy UA! Thank you for standing up for our country and our Vets!” and “@UnderArmour I see your cleats. Please let me know when you release sneakers. I would like to buy in bulk. @Nike @benshapiro @RepDanCrenshaw”.

Figure 9. presents the word frequency queries of users neutral attitude which introduces a general idea of the most frequent queries used by users while expressing neutral attitude towards the brand.

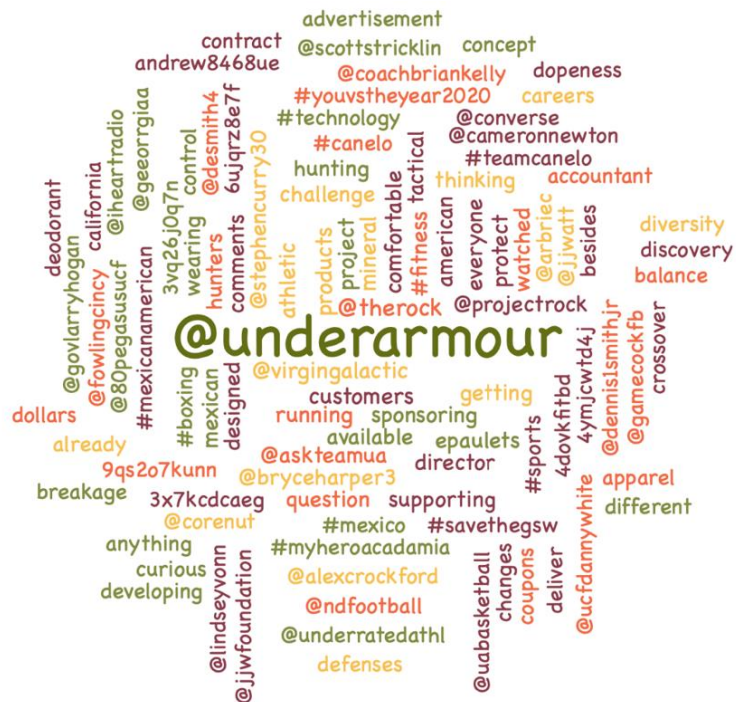


Figure 9. Neutral attitude word frequency query

In this study, we found that users mainly expressed a natural attitude in the events of inquiring about products or services, such as, “@UnderArmour Made in Asia?”, “@UnderArmour @virgingalactic Is the shoe comfortable for plantar fasciitis?”, and “@UnderArmour @ProjectRock @TheRock Are the new project rock true wireless only available for American customers now through an app not available in the U.K.? If so I’ll stop waiting for something that’s never gonna come.”.

Figure 10. presents the word frequency queries of users negative attitude which introduces a general idea of the most frequent queries used by users while expressing a negative attitude towards the brand on Twitter.

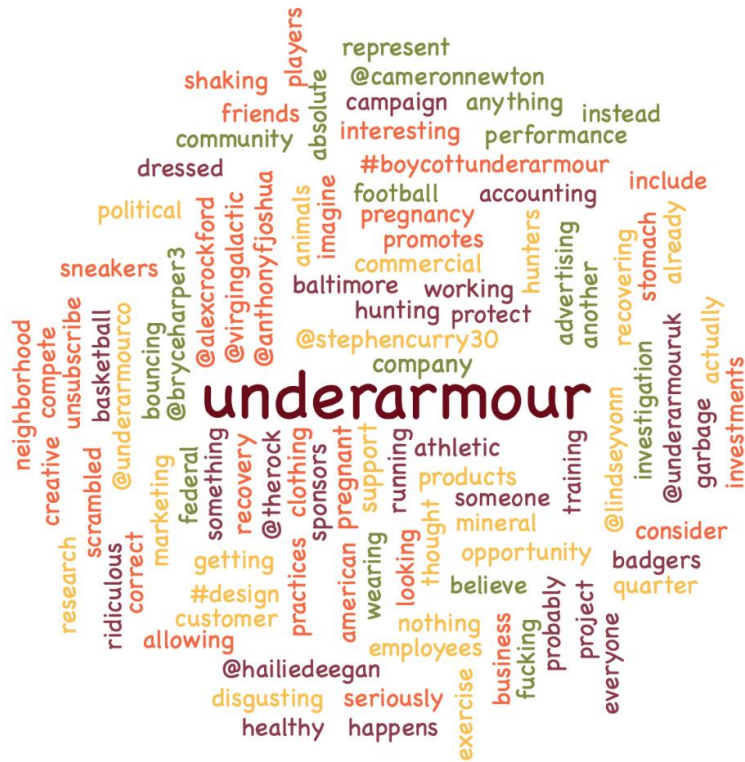


Figure 10. Negative attitude word frequency query



In the analysis, we found various styles of negative attitude. Users expressed a negative attitude towards Under Armour in different situations such as negative perception of advertisements that contained false information, negative attitude towards some endorsed athletes, and negative attitude towards Under Armour as a result of political and legal situations.

One of the major reasons led to a negative attitude in customers' tweets on Twitter was the perception of the brand's advertisements and promotional activities. This included two aspects: the first was the inconvenience caused by repeated advertisements and the second was the unconvincing information associated with the advertisement.

In the first aspect, some users were negatively perceiving the brand's advertisements since the coverage of these advertisements was very extended, thus they were not happy to be objected to Under Armour advertisements repeatedly. Examples of users tweets related to this aspect are, “@UnderArmour 8 emails since Friday, you're bordering on spam. Can you tell marketing to tone it down a bit or unsubscribe gets hit”, and “@UnderArmour has a commercial with the tag, "The only way is through." The actual phrase is, "the only way out is through." The other quote is pretty much meaningless.”

In the second aspect, some users were negatively perceiving the brand's advertisements because the information associated with these advertisements was not true or contained inaccurate information. An example of this aspect is the event when Under Armour advertised that they are arranging a training camp for their endorsing athletes Darnell Savage and Riley Ridley in Alaska to prepare for the cold climates. However, users knew that the weather was not cold as communicated during that period, which made users

negatively interact with this news, “@UnderArmour Chicago is colder than Alaska. Last two years in a row.”, and “@UnderArmour I’m pretty sure Alaska was warmer than Chicago last winter, lol.”.

Similarly, UnderArmour ran a campaign for their recovery collection while associating it with news of Cam Newton recovery of sports injury, which made many users perceive this advertisement negatively given the fact that Cam Newton had a major sports injury. Examples of users tweets on this event are, “@UnderArmour That's funny cause I never see him wearing any of this. He's always dressed like Madea.”, and ” @UnderArmour recovery speed? This guy may not even be in the NFL in the next 12 months”.

Another interesting example of this aspect was running an online campaign but associating it with wrong prices on the actual e-commerce website of UnderArmour, which made users negatively interact with it as well, users tweeted, “@UnderArmour you guys crossed out the wrong prices on your email <https://t.co/WTXHbrhmMM>”, and “@UnderArmour Not feeling great about these “Semi annual sale” prices <https://t.co/bBjR9D6K6M>”.

Apart from customers’ perception of UnderArmour advertainments, this study indicated another important reason for the negative attitude from users which is related to the endorsed athletes. Many users negatively interacted with UnderArmour on Twitter as a result of their sponsored athletes’ behavior, profession, or actions. In the analysis we found many instances where an endorsed athlete negatively impacted UnderArmour by bringing a negative engagement and interaction on social media. A good example of such instances is when UnderArmour sponsored Lee Lakosky who is a professional trophy hunter to promote their hunting clothing and gears. Many users were not happy for this sponsorship

which negatively affected customers attitude towards Under Armour. Users tweeted “@Under Armour Getting better? Really??? You will never 'get better' until you stop your links to killing animals for so called Trophy Hunting”, and “@Under Armour I have no interest in your adverts for the simple reason that you endorse Trophy Hunting. You will never 'get better ' until you stop this”.

Similarly, users showed a negative attitude towards Under Armour on Twitter as a result of the endorsed athlete’s behavior towards a dog while exercising. The athlete was filmed while kicking a dog that came on his way as a try to get it out of the way. This video was published on social media. This action brought a huge negative attitude towards the brand because Jamie Alejandro’s hasty and inappropriate behavior was associated with Under Armour, which meant to many users that Under Armour is adopting this behavior in a way or another while keeping their sponsorship contract with Jamie Alejandro. This confirms the previous results of the risks of using celebrities (Childers et al., 2019), as using celebrities may not achieve the endorsement goals. (Whatmough, 2018).

Users’ tweets on this incident contained the following examples, “@Under Armour sponsoring this thin, anorexic, pencil neck of a human being while my gains go unnoticed??? Where my sponsors!?! <https://t.co/B5gdPfMhb1>”, and “@Under Armour this individual <https://t.co/V2bJesgP7u> is one of your "Ambassadors". A few days, while competing and wearing your gear, he viciously attacked a dog. Video of the attack <https://t.co/1ly9VgXv8X>”.

The sponsorship between Natasha Hastings and Under Armour was another reason causing negative attitude on Twitter. Users negatively perceived the idea of sponsoring Natasha

Hastings during her pregnancy due to exercises and activities she had to perform while making the advertisements materials for Under Armour. The idea of practicing sports during pregnancy was not accepted by users as this may harm the health of the fetus.

Examples of this event included, “@UnderArmour Idc what nobody says no pregnant woman should be running that hard. I’m all for working out and doing YOGA to bring forth a healthy baby and after health but no. Another propaganda campaign to make black women masculine strong and independent. #Hideous #SaveIt” , and “@UnderArmour No lie if I’m that baby I’m like “Yo SON! Chill tf out you dead ass buggin. I’m tryna take a nap before I gotta come deal with this ol fuck up ass world and you wanna do empowerment shit fuck outa here b!”.

The political support was another key reason for shaping a negative attitude towards Under Armour on social media. As known Under Armour is an American brand and it has its business strategies, which may include some political activities such as supporting one of the political parties or politicians. For instance, some users didn’t like that Under Armour was supporting Donald Trump, which made them interact with this event negatively on social media as follows: “@UnderArmour All my gym gear is under armour but since your Mr Pratt has said the Donald Trump is an asset to your company I will no longer be buying your gym wear.”, and “@UnderArmour Under Armour pours money into racists like trump, then features African Americans in their adds like they aren’t all about backing bigots in real life. Why pretend you are something you are not, ArmourAll?”.



new kicks fit beautifully over her Sure Steps! <https://t.co/HDOquIPxxg>”, and “@UnderArmour let us know if you need a magazine cover <https://t.co/qdbuqIW4HV>”, all of these tweets contained users’ images while consuming UnderArmour products, and many users’ considered themselves as brand ambassadors.

Some users showed a positive experience with UnderArmour’s products, such as, “@UnderArmour The Men’s Tribase Reign 2.0 Cross Trainer! Wow! Love them! Thanks for making great products! Sturdy as a MF-er and great for leg day! Thank you! <https://t.co/XPGGr7fLEy7>”, and “@UnderArmour I actually created a tweeter account just to say this, you had a NL company xmas outing in Amsterdam, I was the skipper, your tip was a jacket. I can't begin to tell you how incredible it has been, I would like to thank you! I underestimated your UnderArmour.”.

Similarly, users expressed their positive experience with UnderArmour’s fitness application, such as, “@UnderArmour @goodsportsinc @MyFitnessPal On behalf of the people we serve, thank you for this incredible gift - especially during this critical time of need. ”, and “ @UnderArmour I have 4 of your apps, I just ordered a pair of the HOVR™ Sonic 2 running shoes, and a workout outfit. I think I’m pretty set to run my first 5K in August let the training begin.”.

Figure 12. presents the word frequency queries of users neutral behavior which introduces a general idea of the most frequent queries used by users while reporting a neutral behavior towards the brand on Twitter.

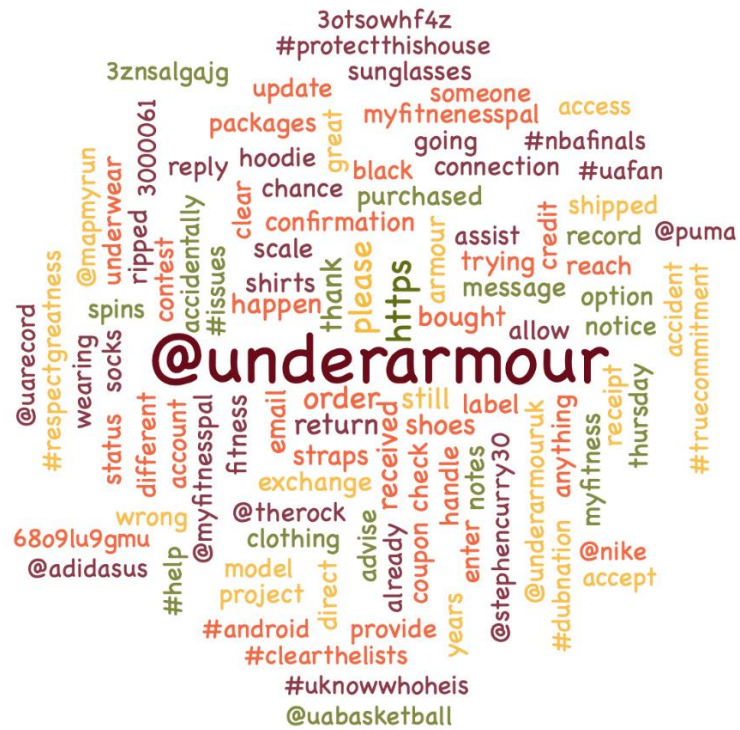


Figure 12. Neutral behavior word frequency query

Users tend to communicate with UnderArmour in case of facing usage or consumption difficulties of products, services, coupons, and discount codes. For example, users interacted with UnderArmour on Twitter inquiring about the authenticity of product exchange policy, such as “@UnderArmour I purchased these bottoms on Thursday in Istanbul. Put them in the wash today and this has happened? I don’t have receipt but it’s clear on my bank statement. Can I exchange? <https://t.co/3zNsAlGaJG>”, and “@UnderArmour my husband purchased a sweatshirt for me in Florida, we live in Canada and the size is wrong. Are we able to return to a Canadian UA store? What are options? Thank you!!”.





Under Armour users reported a negative behavior on Twitter for various reasons, such as negative consumption experience of products and services, negative online shopping experience including payments, returns, and fulfillments, and negative experience with customer service.

Product experience was one of the major elements for customer evaluation of the brands' promise and quality. Many customers expressed their negative experience with Under Armour products for many reasons such as the quality and sizing issues where the product performance wasn't as they expected, or when the product components were not suitable for them such as the product packaging. Users shared their negative experience of the products as follows, “@Under Armour @TheRock I purchased rock headphones about 9 months ago and the left side is no longer working. Is there anything you can do?”, and “@Under Armour just bought the sports wireless heart rate headphones and they don't charge — no light turns on when plugged in. Confirmed that the charging cord works, tried different sockets, no response. What am I doing wrong? #frustrated”.

Similarly, the product size was another indicator of the product's quality, especially when customers experience the inconsistency of sizing of the brand's products. For example, “@Under Armour completely disappointed in your plus size clothing. Bought a "loose fitting" zip up jacket in a size 2X and it didn't even go all the way around my body. Before you say I'm bigger than 2X, i have other workout clothes size 2X and fits.”, and “@Under Armour Hi! Your Undeniable bag is great. I owned L & M size. It is flexible, good shape, cute logo, nice pockets. One HUGE problem with M size - net (see-thru)

pocket is VERY small on size M. Please redo it & give a free bag to current owners. FYI: @Nike @adidas @PUMA”.

Users also shared their negative experience with product components such as the packing of the products on Twitter as mentioned in the following examples, “@UnderArmour thanks for packaging your socks in such a way that I have to put a hole in them to use them. Have you ordered your own products before?”, “@UnderArmour Why is it necessary to have this many tags in a sports bra? Seriously...why? <https://t.co/tfNG2UCEht>” , and “@UnderArmour that's a LOT of plastic. Time for a change #ClimateCrisis <https://t.co/EW8CIkxouO>”.

From a consumer perspective, the quality of the products is the actual value that consumers get as an exchange for their purchases. Thus when the quality of the items they purchase doesn't meet their expectations, a negative behavior towards the brand is expected. Further, sharing such negative behavior online creates negative word of mouth among other customers, which may bring a negative impact on the brand's overall image.

Another aspect of negative behavior towards UnderArmour on Twitter was customer service experience. This aspect is related to customer support in terms of solving customers' issues or responding to their complaints. In this study, we found that a large segment of users expressed their negative behavior on Twitter as a result of the improper response to their concerns, for example, “@UnderArmour I accidentally placed two orders of the same item at the same time less than 10 mins ago. Your representative just told me there's nothing I can do, and I have to accept both orders? How is that possible? I don't need 14 socks before my deployment!”, and “ @UnderArmour after being a loyal UA customer for

many years, I've had a terrible experience with your awful customer service. I bought an £85 top for my husband for Xmas and was told I could return it, you have now changed your story and are ignoring my emails? #noloyalty". These examples indicate how customers share their negative experience online doubting the brands' capability of handling customer complaints, which may also negatively impact the overall image of the brand.

The online shopping experience was another stimulus of negative behavior on Twitter. A negative online shopping experience that we captured on our data set included website issues, payment issues, fulfillment, and shipping issues. UnderArmour online customers experienced bad shopping experience online as a result of website performance such as website navigation and functionality, such as, "@UnderArmour #BaseBall didn't even make the website navigation under "Shop by Sport"? <https://t.co/4R1gmWWfUC>", and "@UnderArmour Your website needs updating. There's no way to add or update an address or credit card. I didn't know you had saved my credit card from my previous order. I put an order in tonight and it used my old expired credit card. Didn't even ask me to update it."

Payment issues were another element of shaping negative behavior. Usually the e-commerce business relies on digitations with payment gateways and banks, and sometimes these payment gateways are tight to restrictions or subjected to technical issues, which lead to usage difficulties among online shoppers. Examples of such cases are, "@UnderArmour I tried to make some online purchase, due to other country credit card I will not able to complete the online purchase, . but I got charged twice from my creditcard. can you please

check this? and return my amount asap please? dont know why I could not use Amex card”, and “@UnderArmour # return an item I paid for with visa, and then the credit is a Under Armour credit # if I returned it why do I want an Under Armour Credit# warning they only issue returns # Under Armour Credit# BUYER#BEWARE”.

Orders fulfillment, shipping, and returns were other issues faced by online shoppers. Customers experienced delays in delivering their orders, or difficulties while trying to return or exchange a product. Users expressed their negative experience with order shipping on Twitter as follows, “@UnderArmour yall gotta stop using @FedEx for yalls shipping needs. They're the worst.”, “@UnderArmour why does it take SOOOO freaking long to get 2 pairs of sneakers? No wonder Amazon is taking over. Sad.”, and “@UnderArmour I’m still waiting for my Christmas delivery! I’ve messaged and been given the brush off that it’s @UPS fault someone needs to be accountable!”.

Users also shared their negative experience while trying to refund or exchange a product on Twitter, examples of this aspect are, “@UnderArmour @UnderArmourUK I returned 2 separate orders with the same label which was a mistake from me & from this your customer service are refusing to refund or replace the item which wasn’t fit for sale as it started peeling after 7 days, you guys having a laugh?”, and “@UnderArmour I have been ordering online since 2009 and I ordered last Tues a pair of pants and paid express shipping and lost in shipping 2 times ive been told! Tonight they say they will reship and give me a future credit! Never ordering online from them again!”.

#### **4.3.2.3 User-generated behavioral intention-related content**



purchasing desire could be pure like of the brand or the desire to switch to Under Armour due to negative experience with other brands.

Users used Twitter to communicate with Under Armour to inquire about products while showing positive purchasing intentions to those items in many instances such as, “@Under Armour @UA Football hey do you guys know where I can find these in a youth 5 or 6 thx. <https://t.co/Z3Ipyd0qst>”, @Under Armour any way I can trade in all my @Nike for Under Armour stuff? I've been Nike supporter forever and since they stood with Kaepernick, I've joined the UA brand. You now have a UA fan for life and will only buy UA! Thank you for standing up for our country and our Vets!”, and “@Under Armour I see your cleats. Please let me know when you release sneakers. I would like to buy in bulk. @Nike @benshapiro @RepDanCrenshaw”.

Figure 15. presents the word frequency queries of users negative behavioral intentions which introduces a general idea of the most frequent queries used by users while expressing their negative behavioral intentions towards the brand on Twitter.

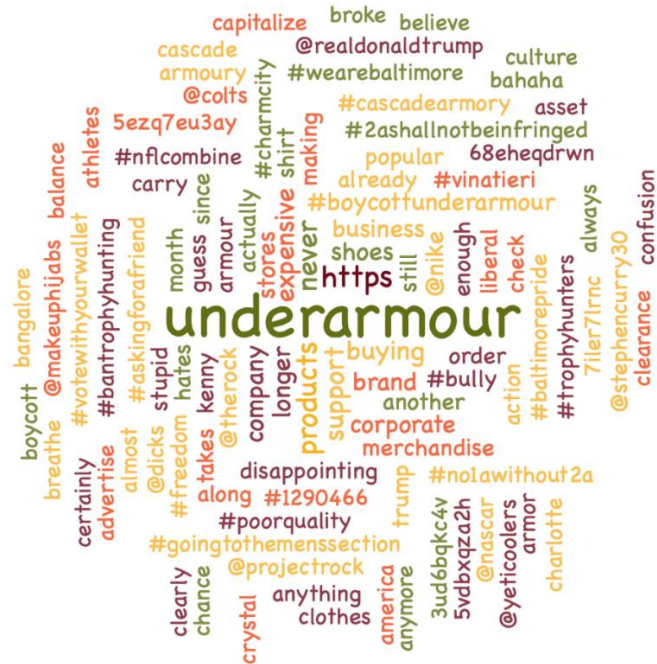


Figure 15. Negative behavioral intentions word frequency query

Users used Twitter to express their negative behavioral intentions because of a current negative experience with Under Armour. In some instances, users associated their current bad experience with Under Armour’s products and services performance with their future intentions towards the brand. We found that users who projected bad performance tend to express their intention not purchase from the brand in the future, for example, “@Under Armour was always a @Nike guy but heard great things about the UA HOVR. Well, less than 90days after purchase I can see my own feet thru the sides because the lining has been falling out and separating from the shoe. So, the experiment is over, looks like it’s back to Nike <https://t.co/jR2CIYuzKN> , “@Under Armour I’m thoroughly disappointed in your tights. Especially the cold gear. It’s not as warm as it use to be. Plus now it’s see through. Oh I’m constantly pulling them @ip cause the waist is too big! I use

to buy you brand exclusively buy now they fit just like NIKE!", and "@UnderArmour Your customer service sucks. After weeks of making up reasons for the delay, you're sending me a GC for about half what it will cost for me to get the correct size. Not worth your time to send the email. I will never buy a product from #UnderArmour again".



## CHAPTER 5: CONCLUSIONS, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

### 5.1 Introduction

This chapter presents the conclusions as well as theoretical and managerial implications. It also identified some avenues for future research.

### 5.2 Research conclusions

This study aimed to address the following questions: (1) How does source credibility (content generated independently by the brand versus content generated by brands in collaboration with celebrities) shape customer engagement on Twitter? (2) How does content type (informative, social, and entertaining) and content format (videos, links, photos, and text) shape customer engagement on Twitter? (3) What topics are communicated in the brand-generated content, and how does it shape the user-generated content topics in return?

The findings indicated a significant increase in the levels of engagement with the content generated in collaboration with a celebrity compared to the content generated only by the brand. Such collaborative content attracts more engagement in terms of likes, shares, and comments. This finding supports the argument that celebrities contribute to establishing brand credibility using their attractiveness, expertise, and trustworthiness (Spry et al., 2011). This finding applies to all content types (e.g., informative, entertaining, and social), meaning that utilizing celebrities enhances users' engagement regardless of the content type or context.

The study also found that utilizing celebrities to generate content on social media helps brands socialize (e.g., interact with celebrities during their events, such as birthdays). Both social and entertaining content attracts more user engagement in terms of likes, shares, and comments than informative content. This finding may be attributed to the notion that celebrities can add a personal touch while generating brand content in social or entertaining content, presenting the brand-generated content in a personalized way to the brand's followers and attracting more engagement in return.

The study also found that users tend to engage more with tweets containing images than tweets containing videos or links. Two reasons may explain this finding. First, most of the examined brand's (Under Armour) used media is images compared to the other media types, and usually those images are celebrities' images. Second, the images take less effort for users to see, whereas videos may take a longer time to play and links require users to open them to see what they contain.

This study found that most of users' comments are mention motivated, meaning that users use Twitter to interact with brands and comment to respond to stimuli they encounter outside of Twitter, such as digital stimuli (e.g., Google and Facebook ads) and offline stimuli (e.g., stores' visual merchandise, billboards, and other offline communications). This study found that users' comments on Twitter included a higher percentage of negative behaviors, followed by a positive attitude, a negative attitude, and positive behavioral intentions. The study also found that users' mentions included a high percentage of positive attitude, followed by negative behavior, positive behavioral intentions, positive behavior, and negative attitude. These findings indicate that users employ Twitter to express their

feelings and previous experiences with the brand on Twitter in two ways, depending on their experience or feelings toward the brand. Users could share their brand experiences or feelings with their followers by mentioning the brand on their Twitter page. Users can also share their brand experiences or feelings with their followers by composing a comment on the brand's page.

Expressing negative behavior in a comment context means that the users aim to post their comments on the brands' wall to show it to other users, including the endorsing celebrities. The users' comments are usually written on social interaction content, which most celebrities present. These comments usually contain negative behavior and positive behavioral intentions. Positive attitude comments are usually written on news content while negative behavior comments tend to be written on relaxation content.

This study explained the motivations and topics of users' sentiments on Twitter. The positive attitude sentiments are related to the brands' admiration, including liking services or products, suggesting new ideas or offering support, seeking sponsorships and discounts, and sharing their news. Natural attitude sentiments are related to the inquiry of products or services. Negative attitude sentiments are reactions to advertisements, false information, endorsed athletes, and the brand's political and legal actions.

Positive and negative behavior sentiments include consumption experience of the products and services. At the same time, neutral behavior sentiment is related to the usage or consumption difficulties. Both positive behavioral and negative intention sentiments are related to purchasing desire, including the desire to acquire or not new products from the brands.

### **5.3 Theoretical and managerial implications**

The study findings provide interesting insights to scholars investigating topics such as influencer marketing and social media marketing. The findings also provide refreshing insights for marketing managers when planning influencer marketing or social media campaigns.

#### **5.3.1 Theoretical implications**

This research advances customer engagement on social media literature in different aspects. First, it confirms the benefits of obtaining a credible source of information on which the audience relies (Wright, 2015). This research found that users consider celebrities to be a more credible, reliable, and trustworthy source of information than brands (Pallavicini et al., 2017). Associating celebrities with social media content influences customers' engagement as the celebrities' attractiveness, trustworthiness, and expertise may contribute to the endorsed brands' credibility (Dwivedi et al., 2015). Moreover, collaborating with celebrities to develop Twitter content significantly increases users' engagement compared to the content generated without celebrities' collaboration. Thus, collaborating with celebrities to develop Twitter content can socialize the content or position it in an entertaining context.

Second, the study confirms previous studies' findings that celebrities have the capacity to impact the endorsed brand's equity (Dwivedi et al., 2015). This impact could be both positive or negative depending on two major elements: (1) celebrities' actions during the endorsement projects (i.e., any positive or negative actions taken by the celebrity will

negatively or positively impact the endorsed brand) and (2) brand fit (i.e., associating the brand with inappropriate celebrities could negatively impact the endorsed brand).

Third, the study found that using celebrities does not diminish the importance of the quality of the content generated. This confirms previous studies' findings that source credibility is associated with the quality of information, which affects customers' attitudes and purchase intentions (Kang & Namkung, 2019). Information processing depends on the audience's perceptions (Kang & Namkung, 2019). Users can identify wrong or fake information even when it is associated with celebrities on social media content (Kang & Namkung, 2019). Thus, brands cannot use celebrities to reduce users' attention to fake or false information. Furthermore, fake information could affect brand attitude, brand trust, and behavioral attitude (Visentin et al., 2019).

Finally, this study presented a thematic analysis framework for analyzing tweets and other social media content that may help other scholars conducting similar research. The framework used in this study classified users' sentiments as attitudes, behaviors, or behavioral intentions. This framework could benefit scholars conducting in-depth content analyses for marketing attitudinal or behavior research.

### **5.3.2 Managerial implications**

This study provides fresh insights for marketing and brand managers in the social media and influencer marketing fields. Marketing and brand managers could enhance their customer engagement on social media by collaborating with celebrities to develop social media content. Marketing and brand managers could bring more credibility to their social

media content by involving celebrities in generating their content. Brand managers could collaborate with celebrities to increase customer engagement on social media channels and generate a positive attitude for the brand by creating social and entertaining content.

When planning celebrity endorsement, marketing managers should review celebrities' previous content to predict their ability to generate social and entertaining content and explore how their followers engage with such content. Marketing managers should consider this an essential task for matching brands' identities with appropriate celebrities. In some cases, celebrities may not generate suitable content that matches a brand's identity, leading to less engagement.

The findings reveal that long-term associations with celebrities can advance a brand's credibility, which enhances customer engagement on social media. Brand managers may use celebrities in visual merchandising activities, similar to Under Armour naming their collections after the ongoing collaborations with celebrities (e.g., Project Rock and Curry). Managers should consider using celebrities when attempting to extend their brand reach as celebrities have the power to influence a large customer base in multiple platforms. For example, Under Armour used celebrities in their offline and online communications, which positively influenced customers' engagement because they could link the celebrities to the brand and engage with them on social media.

Marketing managers should avoid short-term endorsements with celebrities as celebrities' actions may negatively impact brand credibility. Inappropriate celebrities' actions could negatively impact customers' attitudes and purchase intentions and damage the brand's credibility, especially if the celebrity is newly associating with the brand. Customers may

not accept celebrities' malicious actions even if they are small or do not have a significant adverse impact. In short-term celebrity endorsement cases, marketing managers should pay attention to celebrities' adverse actions to avoid any potential negative influences on their customer engagement.

Marketing managers can use Twitter and other social media platforms to monitor users' sentiments, attitudes, and behaviors. Such an exercise helps managers identify the significant issues or challenges facing their customers, including positive and negative feedback. In addition, social media monitoring enables managers to evaluate celebrities' influence, which can help them select the celebrities who can positively influence the brand by enhancing credibility and customer engagement.

#### **5.4 Limitations and future research**

The study has a number of limitations, some of which provide avenues for future research. This study compared the credibility of brand-generated content associated with a celebrity and without the association of a celebrity. The study employed NVivo for the content analysis, which has some limitations in presenting the results, such as comparing the engagement forms (e.g., likes, shares, comments) for the content or media types; therefore, these comparisons were examined using Excel. Additional research limitations are related to the data extracted from Twitter. While extracting the tweet sets, the only media types captured were images and textual media included in tweets' characters. This required the researcher to conduct further manual extraction for the other media types, such as videos and links.

The study compared brand-generated content on Twitter only. Thus, the dataset represents users who use Twitter but not other social media platforms. Twitter is also known as a news-sharing platform that is mainly used by older generations; other social media platforms may include users from different demographics. This study is also limited to the sports industry, sports fashion, and clothing industry in particular, as it analyzed tweets generated from and to @UnderArmour. Replicating this study in other industries and comparing more than one brand may discover further customer engagement insights for social media.

Drawing on the presented limitations, future research can compare brand-generated content with celebrity-generated content to investigate which content obtains greater credibility and customer engagement. Replicating this study on other social media platforms could advance the literature of customer engagement on social media to understand how credibility shapes user's engagement on other social media platforms. Scholars may compare celebrity-generated content on different platforms, such as Instagram and Facebook, to understand the role of the platform's characteristics in influencing users' engagement. Replicating this study in other technologically advanced industries, such as computing, telecommunications, and software industries, is recommended to explore how the content generated by the technical users differs from the content generated by ordinary users.



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