

Louvain School of Management

Like, Comment and Share:

Which factors positively influence the engagement on the Instagram posts of cosmetic brands

Author(s): Beaurain, Sophie

Supervisor(s): Kervyn de Méerendré, Nicolas

Academic year 2021-2022

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INTRODUCTION

Instagram is currently one of the most used social media worldwide with over a billion active users. That number of users represents huge business opportunity for anyone willing to give time and energy to create a well thought strategy to face the different challenges that a fast-paced environment like social media imposes.

The different consumer-goods industries have developed specific strategies to adapt to the new type of communication required by social media. The cosmetic industry, for example, is very active on Instagram, as it is a good platform for the visual aspect that cosmetics usually need to convey their marketing campaigns.

The new key metric on social media is the engagement rate, because it is a concrete measure of the proportion of followers that actively interact with the brand. Brands are not the only type of professional users of the platform ; influencers have been ruling these lands for quite some time. The link between influencers and brands is essential for both and it keeps strengthening year after year as social commerce develops.

In this study, we will try to get a better understanding of the mechanism that can help a business account thrive on Instagram. We will focus on the cosmetics industry as we believe it to be a perfect fit for the audience and the type of content. In order to observe the different elements that can have an impact on the engagement rate, we will create our own frame of research and try to find potential elements that positively impact the interaction between the brands and the Instagram users

PART I: LITERATURE REVIEW

Chapter 1: Social media

1.1 Origin and current situation

The origin of social media can be traced back to 1979, when Tom Truscott and Jim Ellis created the Usenet, “a worldwide discussion system that allowed Internet users to post public messages” (Kaplan & Haenlein, 2010).

The first social network as we currently envision it would be “Open Diary”, a blogging network for people who write diaries. It was created by Bruce and Susan Abelson in 1998. The term “social media” started to be used around the time MySpace and Facebook, respectively founded in 2003 and 2004, gained in popularity (Kaplan & Haenlein, 2010).

A social media can be defined as the “use of web-based and mobile technologies to turn communication into an interactive dialogue” and a social network as “a social structure with people who are joined by a common interest” (Schuiling, 2020). A social network is a type of social media, but not all social media can be considered as social networks, so it’s correct to talk about Facebook, Instagram and Wikipedia as social media platforms, but only Facebook and Instagram can be considered as social networks. Wikipedia is not a social network because it doesn’t have the community aspect that characterizes them.

Users can be individuals, groups of people, institutions, brands or charities. We will see further that some social media are encouraging Business users to use their platforms.

Most social media have a minimum age requirement to create an account. Facebook and Instagram require their users to be 13 years old or more to sign up, same goes for twitter and Snapchat. WhatsApp requires 16 years old and YouTube users must be over 18 years old (Harper, 2020). In the United States, “digital service providers are obligated [by the Children’s Online Privacy Protection Act (COPPA)] to acquire verifiable parental consent for children under the age of 13, who may use their service” (Pasquale, Zippo, Curley, O’Neill, and Mongiello, 2022). There are different means to do that, namely “electronic scans, parental payment systems, video or phone conference, or through the use of government-issued IDs”. Because these means are expensive and complex, many service providers simply restrict their service to people over the age of 13 only. However, children under 13 have the possibility to bypass the age restriction simply by providing a false age when signing up (Pasquale et al., 2022). The European Commission is currently working on a new strategy to adapt the

regulations of the “European Strategy for a Better Internet for Children” (BIK) (European Commission, 2022).

According to Statista (2022), the first four most used social media as of January 2022 were Facebook, YouTube, WhatsApp and Instagram. In October 2021, there were approximately 4.55 billion active social media users worldwide, which represents 57.6% of the total population (Kemp, 2021).

There is an important difference in the use of social media between the different continents as some very popular social media and websites are completely banned in some countries, such as Facebook and Google -and by extension, YouTube- in China thus has other social media platforms such as WeChat, Douban, Renren and Tencent Weibo (Schuiling, 2020; Chiu, Ip & Silverman, 2012).

“Social media is a natural extension in the communications world” (Papasolomou & Melanthiou, 2012). As communication is a part of the marketing-mix, it makes sense that brands developed specific strategies for the new touchpoints that social media represents. Touchpoints can be defined as “moments where the consumer is in contact with the brand” (Schuiling, 2020). Social media are particularly relevant ones since social media users aged 16 to 64 spend on average 2 hours and 27 minutes on it. In addition, 43.2% of global internet users aged 16 to 64 research brands on social media (Kemp, 2021).

As explained by Kaplan and Haenlein (2009), it is difficult to create a classification of social media platforms as there are always new ones that appear and, according to them, “there is no systematic way in which different Social Media applications can be categorized” so we will not try to label or rank the different Social Media platforms.

1.2 Social media for the greater good

Social media has been studied a lot regarding its negative impact, including cyber-bullying, problems of self-esteem, mob mentality and many other joyful aspects (Beaton & Vullo, 2014 ; Giumetti & Kowalski, 2022 ; Muqaddas, Soomro & Ahmad, 2017). However, it would be unfair to say that social media has an exclusively negative impact in general. Social media has been proven to have a positive impact on various topics, education, business, society in general, “Youngsters”, women empowerment and cause involvement among other things (Kim & Um, 2016 ; Leong, Pan, Bahri, & Fauzi, 2018 ; Siddiqui & Singh, 2016). Sustainability also has an

ambiguous place in social media as it is sometimes hard to distinguish genuine commitment and cause-related marketing.

In the following sections, we will emphasize the impact of social media on empowerment and sustainability.

1.2.1 Empowerment

Empowerment can be defined in different ways but here we intend to discuss empowerment as “a process by which people gain control over their lives, democratic participation in the life of their community and a critical understanding of their environment” (Perkins & Zimmerman, 1995). Empowerment is enabled on social media by making accessible communities that would not necessarily be available in everybody’s surroundings. Of course, finding communities that accept and support marginalized people or minorities exposes individuals who need support to anonymous criticism and deformation. The same can be said for activists ; on the one hand, social media help them gain exposure, on the other hand, it exposes them to companies or political entities that oppose them (Uldam, 2018).

Social movements have gained some much-needed awareness over the past years. One of the most global social movements is gender equality. The United Nations’ Sustainable Development Goal n°5, Gender Equality, is more centered on women, as the goal is to “Achieve gender equality and empower all women and girls” (United Nations, n.d.). There is also a part of the movement that focuses on educating about what a considerable amount of people calls “toxic masculinity”. Harrington (2021) states that “[f]eminists have adopted toxic masculinity as shorthand for characterizing homophobic and misogynist speech and violence by men”. Gender equality on social media is also relayed through hashtags that concern different topics, such as the gender pay gap (#EqualPay)¹ and sexual harassment (#MeToo) (Kim-Brunetti, 2019).

For example, the #FreeTheNipple campaign tries to “deconstruct problematic highly sexualised and objectified representations of femininity through reclaiming and resignifying the female body” (Matich, Ashman & Parsons, 2018). It has been relayed with the hashtags on different social media such as Instagram. Instagram having a censorship algorithms that deletes publications of “female nipples”, women sometimes post topless pictures of

¹ Please note that hashtags are not case sensitive. For example, writing this hashtag #equalpay or #EqualPay makes no difference for the algorithm and will lead to the same content. The only difference is visual. In this thesis, all the hashtags were reported as we saw them in the articles they come from.

themselves with their nipples edited out and replaced by pictures of “male nipples” to show the absurdity of the censorship (Cfr. Appendix 1) (The Daily Edge, 2015).

The visual content-sharing aspect of some social media has been studied as a factor of body dissatisfaction in women. Instagram, for example, is a social media where users post a lot about themselves, and “given unlimited access to other users’ profiles, people are likely to engage in social comparisons” (Sherlock & Wagstaff, 2018). For example, the content that is posted with the #fitspiration features an important number of very thin and toned women. That can have a negative impact on women using the application. Sherlock and Wagstaff (2018) found in their study that “Exposure to content of idealistic beauty and fitness standards could be harmful in the long-term, considering the achievement of many of these ideals is unrealistic”.

It thus makes sense that the Body Positivity movement gathered an impressive engagement. As Cohen, Newton-John and Slater (2020) explained, for about a decade, the movement has developed as a reaction to “unrealistic and unattainable appearance ideals” (Cwynar-Horta, 2016), in the media. It has gained popularity on Instagram through hashtags like #bodypositive, #bodypositivity and #bopo. A study (Cohen et al., 2019) has shown that the posts show “diverse body sizes and appearances that are otherwise underrepresented in mainstream accounts”. 94% of the models have bodies in the content linked to body positivity hashtags are ranged from normal weight to obese and 40% show attributes that go against societal beauty standards like “cellulite, stomach rolls and stretch marks”. Other hashtags that can be attributed to the movement are #effyourbeautystandards (“eff” meaning the F-word), #fatspiration and #healthateverysize, the latter being directly based on the Health At Every Size principles, which encourage to approach health regardless of the weight by focusing on wellness rather than weight loss.

Figure 1: Celeste Barber as Body Positivity Advocate (Instagram, 2022)²



Among the public figures that are associated with the movement, there is Celeste Barber, an Australian star who found a comedic way to expose the underrepresentation of normal bodies (Jordan, 2022). Barber posts pictures of herself reenacting scenes from celebrities' and fashion industry pictures (Cfr. Figure 1). She didn't initially intend it as part of the Body Positivity movement, she says that "It was always like, this is how celebrities get out of the pools [and] I'm like no, *this* is how you get out of the pool" (Spring, 2017). She stated that she was happy about the positive message it sends, even if it was not a deliberate choice.

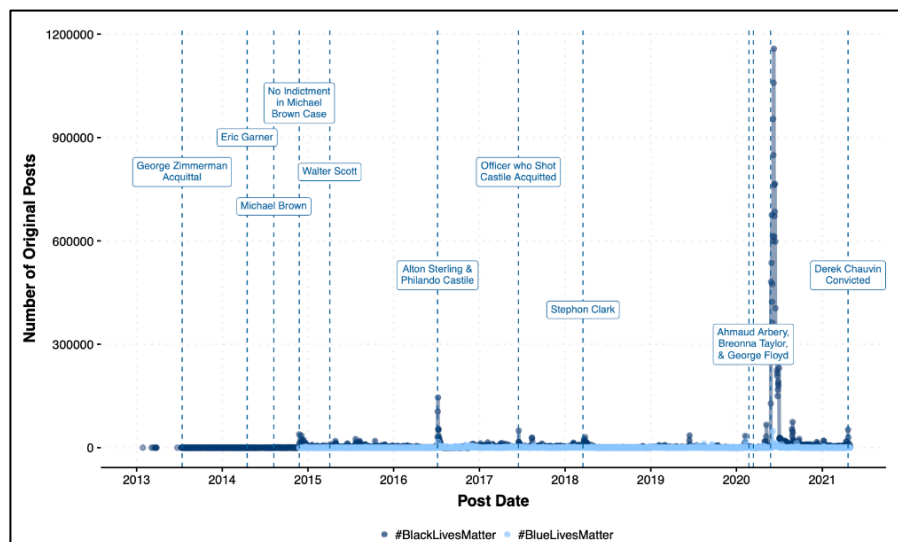
The movement Black Lives Matter was founded in 2013 following the acquittal of Trayvon Martin's murderer. It is not just a social media movement, it's a global organization called "Black Lives Matter Global Network Foundation, Inc." It is present in the United States, the United Kingdom and Canada. The website of the organization states that their mission is "to eradicate white supremacy and build local power to intervene in violence inflicted on Black communities by the state and vigilantes" (Black Lives Matter, 2022). The movement is present on social media with the hashtag #BlackLivesMatter and #BLM. Other hashtags are associated to the movement, such as #IfTheyGunnedMeDown and #SayHerName, the latter referring to

² Post of Celeste Barber from 2017 [Screencapture]. Instagram.

“police violence against Black women and girls” (Schuschke & Tynes, 2016). Following the death of George Floyd in May 2020, “the #BlackLivesMatter hashtag generated approximately 3.4 million original posts with 69 billion engagements” in 7 days. This is about 9 times the previous highest record for the hashtags. A different hashtag was also used a lot during that period: “#BlueLivesMatter, a hashtag movement expressing support for the police” (Cfr. Figure 2) (Wirtschafter, 2021).

The presence and influence of these movements on social media brings awareness about causes that can only benefit from exposure. We will see further that these causes can also be used by brands through marketing.

Figure 2: Total Original #BlackLivesMatter and #BlueLivesMatter posts (Wirtschafter, 2021)



1.2.2 Sustainability

Sustainability is often seen as a term that is exclusive to the environment topic, but that aspect should not be considered alone. Sustainability can be defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations Brundtland Commission, 1987). Natural resources are not the only concern regarding sustainability, social and economic resources are a necessity as well (Cfr. Figure 3) (What is Sustainability, n.d.). It covers a vast range of topics that may be difficult to define.

Figure 3: Venn Diagram (Dolphijn, 2021.)



Because the term is quite broad, it might be reasonable to consider the possibility that its use on social media differs from the academic and scientific literature. A study (Ballestar, Cuervo-Mir and Freire-Rubio, 2020) analyzed the “the different contexts and areas of knowledge where this concept is used” and if the “perceptions about the topic were attuned to other more formal fields, such as scientific research, or strategies followed nationally or internationally by agencies and organizations related to sustainability”. That study was based on Twitter. Their findings show that the way users on social media talk about environmental sustainability “coincides fundamentally with what is said in other more formal settings”. They also discovered that sustainability is discussed with a positive sentiment and that “dialogue ensues for the construction, improvement, and search of solutions”.

1.3 Social media as a business tool

In 1973, Richard Serra said “If something is free, you are the product” (Brand Genetics, 2018).

The most popular social media are usually available for free, without any subscription plan or obligation to pay anything, which makes them an exceptionally available service. It also makes it exceptionally easy to reach almost anyone, anywhere, anytime. That ease of reach creates business opportunities for anyone willing to use social media as a business tool. As we will see further, some social media even insist on helping entities using their platforms for commercial purpose or are even designed for it.

E-commerce, short for Electronic Commerce, designates “the business of buying and selling goods and services on the internet” (Cambridge Dictionary, 2022). The first forms of e-commerce and social media appeared respectively in 1982 and 1979. E-commerce is used for Business-to-Business (B2B), Business-to-Customer (B2C) and Customer-to-Customer (C2C). There are a lot of possible applications of e-commerce. According to the IPIX website (2021),

these applications include retail and wholesale, online marketing, finance, manufacturing, online booking, online publishing, digital advertising and auctions.

With online shopping, it has become mainstream to use e-commerce applications on a daily basis. To illustrate with a few numbers, an estimated 85% of consumers worldwide have used online shopping in 2020, Amazon being the most used online shopping platform (Statista, 2022).

The development of e-commerce has led to its inclusion in social media. “The use of social media, in the context of e-commerce, to assist with buying and selling products and services online” is called Social Commerce (Lai, 2010). Lai writes that the trend of social commerce was made possible by the combination of Web 2.0 technologies, e-business opportunities and online communities. Web 2.0 is a term used to “describe(...) the current state of the internet, which has more user-generated content and usability for end-users compared to its earlier incarnation, Web 1.0” (Kenton, 2022). It can be understood as an “era” of internet.

In her article, Lai describes the characteristics of “Web 2.0 social commerce”, which are “harnessing collective intelligence, an architecture of participation, viral marketing, and market disruption”. She studied the case of Facebook to understand how successful social commerce works. Facebook being a free service, its revenue comes from sponsorships and banner advertising (advertisements on the side of the website) (Lai, 2010).

In 2010, social commerce was not as prominent as it currently is. But it is interesting to observe that Lai was right on what she saw as the key characteristics to use Social Media in an e-commerce context. “Harnessing collective intelligence” is used by brands to get feedback and new ideas through social media. The “architecture of participation” is used to encourage consumers to interact with the brand and for referral purposes. “Viral Marketing” refers to the use of Word-of-Mouth Marketing. “Market disruption” is an important element for Business to consider in their social media strategies as it’s a fast-paced environment.

To understand the current state of social commerce, it is important to know the tools that brands and companies can use on social media, and the different marketing strategies they use.

1.3.1 Choosing the right platform

As the different social media platforms have different features, it is important to choose the right platform for the right purpose. It’s important to consider the nature of the business,

because, for example, a Business-to-Customer company might find it hard to market its products on LinkedIn. They must also focus on who their target customers are, find where these are and go where the ideal audience is ; it is not about the largest audience, it is about finding the right audience. Finally, if a company is present on several social media platforms, they should have a coherent strategy between the different platforms but a specific communication adapted to the audience on the platform (Cowie et al., 2019).

Regarding the tools, the most important one is often the opportunity for brands to have a dedicated space in a place that gathers potential and existing customers. It can be compared to opening a shop in a big mall where it's easier to get exposure and awareness from the community. Depending on the social media platform, the page can have different functions and assume different responsibilities (Cowie et al., 2019). For example, a business page can assume a role of relay to the website of the brand, it can have a customer relationship function, it can be a source of information about the products and how to use them, it can even be directly a shopping platform.

The relay to the main website can be done easily by posting the link on the social media page, but some social media platforms like Facebook and Instagram have features that mimic online shops. Facebook has a tab called Marketplace that allows people to buy and sell almost anything as long as it respects the platforms legal terms. The buyer can contact the seller to discuss and negotiate the terms of the sale, but the financial transaction is not supported by Facebook (Facebook Marketplace, 2022). The Instagram application also has a shopping tab called Shop, where business accounts can create their own shop, but every product "page" directly refers to the shop of the brand. Again, the social network does not support financial transactions (Instagram application, 2022). Etsy, an online shopping network where users can buy and sell artisanal products, differs from the previous 2 as users can personally contact the sellers and the platform supports the financial transaction between the 2 parts (Etsy, 2022).

Thanks to social media, customers have become more "sophisticated" and have new means of researching information, evaluating and choosing the products. The customers can now have interactions with brands like nowhere else. The engagement has become the foundation of social media marketing strategies because brands must be able to engage customers through their social media activity (Constantinides, 2014).

1.3.2 Social media marketing strategies

Cause-related marketing, influencers marketing, viral marketing, and hashtags are strategies that can have a positive influence on engagement.

To begin with, as we have seen earlier, social media help social movements and causes through the visibility that hashtags offer by gathering all the publication containing them in a common place. According to, “cause-related marketing (CRM) is defined as the process of formulating and implementing marketing activities that are characterised by contributing a specific amount to a designated nonprofit effort that, in turn, causes customers to engage in revenue providing exchanges”(Mullen, 1997). It is not a new concept, but social media makes it easier for the community that feels involved with the cause has easier ways to connect directly with the content posted by the brand. It can be a great strategy for marketers to have a good relationship with the audience because it makes the brands look more “sensitive, trustworthy and relevant” (Simcic Brønn & Belliu Vrioni, 2001). In their article, Simcic Brønn and Belliu Vrioni mention the fact that cause-related marketing should be used carefully as it is not a strategy that can be used lightly: it ties the brand to a cause so this is a strategy that can only be used in the long term.

Influencers marketing is a tool that stems from the already existing strategy of brand ambassadors. An influencer is “a person or group that has the ability to influence the behaviour or opinions of others” (Cambridge Dictionary, 2022). Haenlen et al. (2020) explain that social media and influencer marketing are inherently linked concepts because influencers need the facility of reach offered by social media to become famous and the platforms profit from the activity of influencers in terms of appeal. In their article, de Brito Silva, Alencar de Farias, Kovacs Grigg, and de Lourdes de Azevedo Barbosa (2020) report that “Companies already recognize digital influencers as opinion leaders who mediate the transmission of information, facilitating its dissemination to their online followers (Uzunoglu & Kip, 2014)”.

Chapter 2: Instagram

2.1 History and characteristics

The official website of Instagram (2022) describes it as a photo- and video-sharing application.

Instagram was launched for iPhone Users in October 2010 by Kevin Systrom and Mike Krieger. It was originally a photo-sharing application. 2 months after being launched, the application counted one million users. A year and a half later, in March 2012, the application counted 27 million users. Instagram became available for Android phones users a month later in April 2012. The company was bought soon after by Meta (formerly known as Facebook) for 1 billion dollars (Blystone, 2022; Harrison, 2020).

In 2021, there were 1.21 billion active accounts on Instagram, which represents over 28% of internet users worldwide (Statista, 2022).

The potential advertising audience is “the potential audience that marketers can reach using adverts on Instagram”. That audience is estimated at 1.39 billion people, 51.6% reporting as male and 48.4% reporting as female. The biggest age groups for this audience are the 25 to 34 years old (16.4% male, 14.8% female) and the 18 to 24 years old (17.9% male, 14% female) (Kemp, 2021). The 25 to 34 age group is also the largest portion of Instagram users, representing 31.2% (Statista, 2021 ; Omnicore, 2022)

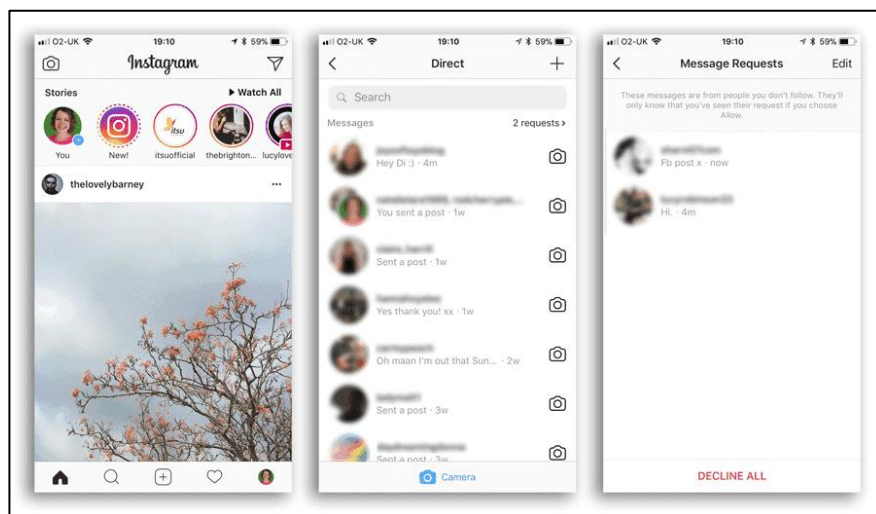
The company is aware of its attractiveness for businesses and encourages users to use the logo, the font, the colors of the brand when referring to the application. Indeed, they made available a website called “Brand overview” (Cfr. Appendix 2) where all the guidelines are explained. The guidelines cover the use of the Instagram name and the contexts in which it should be avoided, the approval process if any entity wants to show visuals of the application or elements of the brand in a commercial, TV or web series, a weekly show, any video not part of a series, or in a movie or film. The brand elements section (Cfr. Appendix 3) of the website explains in great details how to use the Instagram glyph icon, how to place it and what modifications are not allowed. A file containing every official logo can also be downloaded (Instagram, 2022).

The company does its best to keep a clear and coherent brand image. The control that Instagram exerts over its intellectual property is strict and they make very clear that they will not allow any misuse. The legal mention at the bottom of the website states that “In addition to seeking registration of its trademarks and logos around the world, Meta enforces its rights

against people who misuse its trademarks” (Instagram, 2022), Meta being the parent company that owns the Instagram brand.

Apart from enabling content sharing in the various formats described later in this section, the application also has a messaging feature broadly called Instagram Direct (Cfr. Figure 4). It can be used for sending text messages, pictures, videos, but also to call other users, either with or without the camera of the device.

Figure 4: Instagram Direct example (Morandi, n.d.)³



Until March 2022, there also existed a standalone application linked to Instagram called “IGTV” (Cfr. Appendix 4), which is short for “Instagram TV”. It had to be downloaded separately but was partly supported by the main application. Its function was to be a platform for “watching long-form vertical video” and it had its own tab on the home page of the main application (Newton, 2018). The videos could be as lengthy as 60 minutes (Haenlein & al., 2018). Meta announced in 2022 that they would stop supporting IGTV in an effort “make video as simple as possible to discover and create” (Malik, 2022).

2.2 Different types of formats

Instagram has evolved since its launch from a photo-sharing application to a platform where users can post in different formats: Feed Posts, Stories, Instagram Live and Reels. With each format, users can choose to Like, Comment, Share, and for the permanent formats, they can also Save the content. Saving something means adding the content to a file containing the

³ Source: Morandi, C. (n.d.). *Comment utiliser Instagram Direct pour le service client*. Callbell. Retrieved from <https://www.callbell.eu/fr/instagram-direct-pour-service-client/>

contents the user wants to keep at your disposal without having to fetch them on the page of the user who posted the content. It is like adding a link to the favorites on a browser.

The original format is called “Feed” (Cfr. Appendix 5). It used to be square pictures. That format now allows users to post “photo[s], video[s] with sound lasting up to 60 seconds, (...) series of 2-10 photos or (...) combination[s] of photos with videos (Carousel)” (Staletić, Štrbac-Savić & Jevremović, 2021). A Korean study (Kim & Ok, 2018) has analyzed the impact of the type of Feed post on engagement and their findings show that in terms of loyalty, Feed posts are preferable to carousel posts, but informativeness is deemed higher for carousel posts than for other types.

The second, and most popular format, is the Story format (Cfr. Appendix 6). It was introduced in 2016. That format was directly based on the “My Story” format that already existed on Snapchat since 2013 (Staletić, Štrbac-Savić & Jevremović, 2021; IONOS, 2019). The Stories can be pictures, videos, texts, polls, questions, links to others Feed posts or to external content. They are sequenced and a sequence lasts maximum 15 seconds. It is ephemeral and will stay for 24 hours, after which it is deleted and disappears, unless the user decides to pin it on its account in an “Album”.

The Instagram Live format (Cfr. Appendix 7) is a streaming format that is used to share in real time an event or any content the user wishes with its followers (Staletić, Štrbac-Savić & Jevremović, 2021).

The latest addition is the Reels format (Cfr. Appendix 8). Users can “record and edit 15-second multi-clip videos with audio, effects, and new creative tools” (Instagram, 2020). This format was launched in August 2020. It is very close to the main format that TikTok popularized (Moriuchi, 2021).

These formats are all available for every user, whether the account is public or private, whether they are individuals, content creators, brand accounts or any other professional accounts.

However, the application has features that are not available for every type of user. Indeed, the application offers its users to switch from a personal account to a professional one.

2.3 Professional accounts

There are 2 aspects of Instagram accounts ; an account can be either public or private, and it can be either personal or professional.

If an account is public, it means that any other user of the application can access the account, like, comment, share or save its content. If the account is private, only users enabled by the account can do these. Users that have not been granted access to the content created by the account have to request access to do so (Al-Kandari, 2016).

In addition, users can choose who can see their stories, and, if they have a public account, they can also choose for each post the degree of exposure (accounts they follow, close friends list, everyone). Restriction and blocking options exist for different situations. Instagram is not a social network users choose for privacy, as it is intended as a content-sharing social media.

A personal account is the standard type of Instagram account. A professional account is a public account that has been turned from a personal to a professional one to gain access to specific tools. Professional accounts can be created only if the user agrees to switch to a public account (Instagram, 2022).

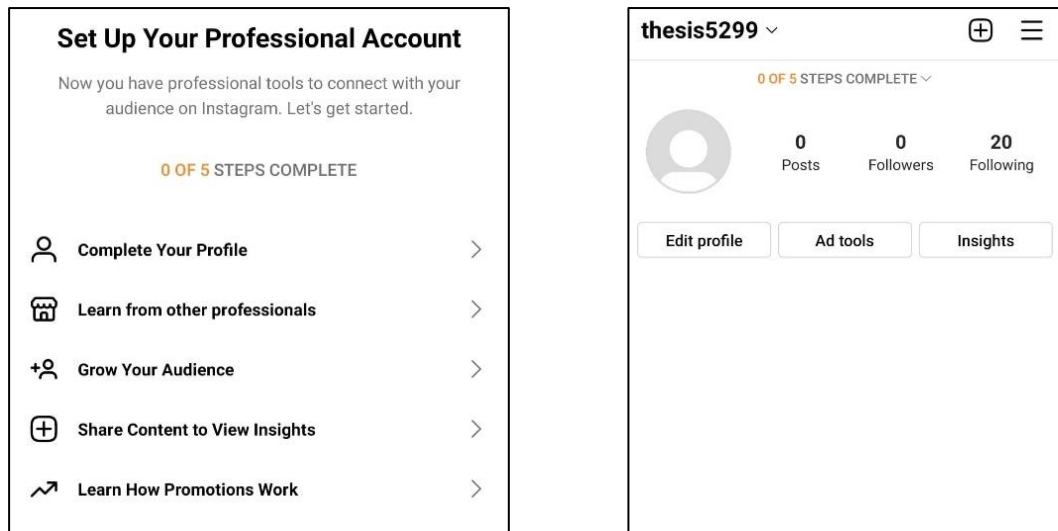
When a user confirms his decision to switch to a professional account, he is asked to choose between Creator or Business, stating that the user can decide to change that anytime. The choice screen recommends choosing Business for “retailers, local businesses, brands, organizations and service providers” and Creator for “public figures, content producers, artists, and influencers” (Cfr. Appendix 9).

2.4 Instagram for Business

A user can choose to switch to a Business account if he wishes to create an account dedicated specifically to its commercial activity. The user of the Business account then has access to features designed only for professionals. “[The user] also [has] access to the Professional Dashboard, where [they] can track [their] performance, access and discover professional tools, and explore educational information curated by Instagram” (Instagram, 2022).

For illustration, these are the “first step to take” screen and an example of what a Business account looks like:

Figure 1: Business account first steps⁴



To see what a business account looked like from the inside, we decided to create a new account and to switch it from personal to professional, and we chose the business account option. That account will be called thesis5299 throughout this thesis.

Upon arrival on the website page dedicated to Instagram for Business (Cfr. Appendix 10), it is obvious that the platform offers every tool a Business willing to advertise on Instagram could think of. The page is filled with links to guide documents, examples of Instagram for Business success stories and other useful tools for Business accounts, of which there are currently over 200 million (Instagram, 2022).

Two booklets called “How to grow and scale your small business” and “Instagram for Business brand building playbook” are available. The first one is aimed at small and medium companies, the second one is broader regarding its audience. They both offer a lot of advice about where to start, how to choose partners, different tools and strategies, statistics. Both documents have a user-friendly interface, they are full of colors and pictures.

The main tools and strategies Instagram promotes for the Business accounts are the following: Stories, Explore, Branded Content, Creative Optimization and Creative Marketing Partners (Instagram, 2020).

One of the tools only available for Business accounts is the Shop. The headline of the shop one the Instagram for Business page reads as follows :

⁴ Source: Author’s pictures (2022). *Insights overview* [Screenscaptures]. Instagram application.

“Turn Instagram communities into customers by helping them easily discover and buy products they love - right in the moment.”

That tool allows Companies to create “Shoppable posts” (Cfr. Appendix 11). In these posts, the brand can tag the photos with links that lead to an internal page of Instagram. That page “includes a product description, price, and a “Shop Now” button that will take a user to the merchant’s online store”(Keyes, 2017). These posts are not meant to be an intermediate which supports transactions on behalf of the retailer. They only serve as a relay between the consumer and the brand’s online shop.

Instagram is very supportive of Business accounts, and they actively encourage them to partner with Creators, the other type of Professional Instagram account (Instagram, 2022).

2.5 Instagram for Creators

There is no specific requirement to switch from a personal account to a professional Creator account. It enables the user to use “a set of tools that makes it easier to control [their] online presence, understand [their] growth and manage [their] messages” (Instagram, 2022).

There is also a specific website dedicated to Creators (Cfr. Appendix 12), similar in its structure to the one aimed at Business Account users.

By having a specific status for Creators, Instagram empowers individuals to be creative. The website is full of advice. There are 5 main topics that are highlighted: Create, Grow, Earn Money, Stay Safe and Creator Lab. The first 4 are mainly advice, the last one is an educational tool filled with video testimonies of Creators on various topics.

Apart from the specific advantages of Creator accounts and Business accounts, having a professional account is mutually beneficial for both. Companies can create partnerships with content creators and benefit from the creators’ exposure. The creators can become ambassadors for the brands and earn money from the partnerships.

Any user willing to use Instagram in a professional way could benefit from switching to a Creator or a Business account. The choice between the 2 depends on the needs of the professional activity the user aims at creating, as the tools offered by the 2 types are different and specific.

2.6 Verification check

On Instagram and on other social media such as TikTok or Twitter, users have the possibility to have their account verified. If the few mandatory requirements are fulfilled, anyone can apply for their account to be verified. The vaguest condition is the fact that the account must be “notable” (Instagram, 2022).

If the account is verified, it is signaled by a blue check mark (Cfr Appendix 13), also called verification check, next to the name of the account.

The verification check means that “the account has been vetted and the user’s identity has been confirmed”. However, the verification check appears to be more associated with celebrity than authenticity (Schipani, 2022).

2.7 Culture of perfection

A topic that never fails to appear in trends regarding Instagram is the obsession of the perfect picture. We saw earlier that movements like Body Positivity gained popularity on the platform because their opposition to traditional beauty standards can be relayed more efficiently on social media, giving the users who feel involved in the movement a voice due to their number.

However, the spotless pictures still exist, and they are not a minority. Instagram is famous for its filters that have existed for more than a decade. Sherlock and Wagstaff (2018) explain that “these filters allow Instagram users to manipulate their photographs to be more visually appealing”. Filters can be seen as a way to avoid the complicated photo editing tools usually used by experts, such as “red eye removal, sharpness adjustments and automatic cropping” (Bakhshi, Shamma, Kennedy & Gilbert, 2015). Bakhshi et al. point out the fact that “filters can can age a photo, make colors more vibrant, or give photos a cooler color temperature”. In their article, they studied the impact of filters of Flickr, a different photo-sharing application, on engagement and found out that the filtered photos were “21% more likely to be viewed and 45% more likely to receive comments, compared to non-filtered ones”. They also observed that the types of filters who have a positive impact on the likelihood of being noticed are the filters that set a warmer temperature, increase exposure and boost the contrast.

To illustrate these adjustment, we edited a picture with Instagram following the findings of Bakhshi et al. (Cfr. Figure 5). The image on the left is the original unfiltered photograph and image on the right is the same photograph edited on Instagram with the warmth, brightness and contrast all set at +50%.

Figure 5: Pictures edited according to the findings of Bakhshi et al. (author's photographs, 2022)



In a later study, Bakhshi et al. (2019) supported their previous analysis with new findings regarding pictures including food and people. They found out that pictures including people are more engaging and are “27% more likely to be viewed and 22% more likely to receive comments”. Again, the engagement increases if the photos are filtered.

Faces are one of the most common elements in Instagram pictures. Bakhshi, Shamma and Gilbert (2014) conducted a study about the impact of pictures of faces on engagement. Their findings include the following observations: a higher activity in terms of number of pictures posted and older age groups (over 35) represented on pictures has a negative impact on engagement, and the presence of a face in a photo has a significantly positive impact on the engagement. “Photos with faces are 38% more likely to be liked and 32% more likely to be commented on”.

The three previous studies have been conducted based on the Flickr application so we cannot be certain to find similar trends on Instagram but we can keep in mind their findings.

Considering the previous findings, it is reasonable to assume that filtered pictures of faces should see a higher engagement. Apart from filters that are imbedded in the application, a lot of editing applications have gained popularity over the past decade, such as FaceTune2, Airbrush and VSCO (Collins, 2021). Influencers can be blamed for retouching their pictures and creating unattainable expectations, but it is important to consider the effect of edited pictures of “ordinary” Instagram users (Kleemans, Daalmans, Carbaat, & Anschütz, 2018).

A study (Kleemans et al., 2018) centered on girls aged 14 to 18 showed that “the common practice of Instagram users to manipulate and tweak their appearance in pictures can have

negative consequences, at least for the girls who are prone to make social comparisons". Filters and perfect pictures are part of the common trends on Instagram, but these traits don't have a positive impact on the users, as they instigate social comparison.

Chapter 3: Customer engagement on social media

3.1 Definitions and key metrics

Customer engagement can be defined as “the total value provided by customers who value the brand through purchase transactions and non-purchase transactions” (Boucau, 2021).

Instagram allows all types of users to interact, with regards to the privacy settings decided. This means that engagement in general can be observed between the application and the users, but also between Business accounts and users, between Creator accounts and users, and between personal users.

There are different metrics that can be used to measure the customer engagement. Some are observable with a Personal Instagram account or even without having an account, some are visible only from the Professional account (Instagram, 2022). The data that can be observed without a professional account is the number of Likes, Comments, and Followers. The number of times a post of another user has been saved or shared is not observable.

The metrics provided by Instagram for Business are more specific. They are presented in the Insights tab of the account (Cfr. Appendix 14).

There is one general metric that can be computed based on information available for all types of users. That metric is the engagement rate, which can be obtained by dividing the number of interactions for a post by the number of followers of the account. The number of interactions is the sum of likes and comment for the posts. Ideally, it would be optimal to include the number of times the post is saved and the number of times it is shared but these data are not available from an external perspective.

$$\text{Engagement rate (decimal number)} = \frac{\text{Number of likes} + \text{Number of comments}}{\text{Number of followers}}$$

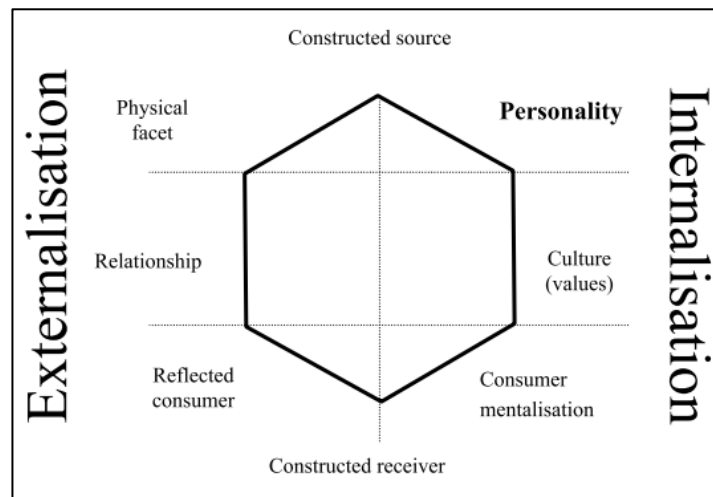
In this thesis, the engagement that is most relevant is the customer engagement observable between Business accounts and users. As mentioned earlier, Business accounts are appropriate for “retailers, local businesses, brands, organizations and service providers”.

3.2 Customer engagement strategies

3.2.1 Brand Image

The brand image can be defined as the “set of mental, cognitive and affective representations that a person or a group of persons has of a brand or a company”⁵ (Lambin & de Moerloose, 2012). It is a concept that takes the perspective of the consumer. Brand identity, on the other hand, is a producer perspective concept. Brand identity is defined by 6 aspects: physique, personality, culture, relationship, reflection and self-image. They constitute the brand identity prism, developed by Kapferer (Cfr. Figure 6).

Figure 6: Identity prism (Azoulay & Kapferer, 2003)



In a few words, the brand image is how the brand identity is perceived by the consumer. That image cannot be fully controlled by the brand (Kervyn, n.d.). It is particularly relevant on social media where users can communicate about their opinions of brands very easily.

There is no unique style that every brand should copy to create engagement on social media. Instead, Professor Singh (2020) states that great Instagram posts are a result of the way brands can create a distinctive identity and image. According to him, “[D]eveloping a unique visual style for the brand within the confines of the Instagram platform is critical to create a strong identity and high consumer recall. Strong visual character differentiates a brand”. Singh gives these 5 key components on how to build a winning Instagram Strategy :

“1. Choose a simple promise and deliver a sophisticated message”

⁵ The definition was translated using Deepl. In the original text: «L'ensemble des représentations mentales, cognitives et affectives, qu'une personne ou un groupe de personnes se fait d'une marque ou d'une entreprise.» (Lambin & de Moerloose, 2012)

“2. Create a unique visual [brand] narrative (...) on Instagram”

“3. Build your story on the four pillars of visual storytelling”

“4. Pick your storytelling themes”

“5. Occasions”

There are 2 very distinctive elements that can help customers easily identify brands: colors and logos. Colors are important elements in terms of packaging but also for the aesthetics of the marketing communication. A study (Hunjet & Vuk, 2017) studied the psychological impact of colors in marketing and found that “colors create strong influence and cause reactions. [A well-chosen color attracts attention, relaxes while other colors used in the same context can even irritate”. Hunjet and Vuk also explain that for a new product, designers are more careful with colors to deliver a specific message to customers. The alignment between the colors and the message the brand wants to convey should be considered on social media, especially if the platform is centered on visual elements such as photos. The right color can have an impact on the success of the communication (Hunjet & Vuk, 2017).

In the cosmetics industry, it has been observed that, depending on the target of the brand, colors are different. The younger population reacts more positively to vibrant colors while the middle-aged population prefers pastel colors. Facecare products are advertised using light green and light blue, implying that they are targeting an older population (Hunjet & Vuk, 2017). Black and white are present in a lot of brand images, often combined with other colors. The color black in advertising suggests elegance and secrecy. White, on the other hand, doesn't suggest any particular message but is often combined with other colors.

A different study (An & Lee, 2012) has been conducted to determine how colors on cosmetics websites influence the effective communication. The figure 7 summarizes their findings in term of associations.

Figure 7: Color association (An & Lee, 2012)

Color	Association & Symbol
Red(R)	stimulating, passion, exciting, affection, danger, voluptuous
Yellow(Y)	joy, hope, pleasure, pleasant, light
Green(G)	peace, refreshing, hope, rest, stability, calm, freshness
Blue(B)	young, cool, meditation, clearness, transparent, cold
Purple(P)	creation, loneliness, mystery, arts, dignity, provocative, brilliant, elegant
White(W)	purity, virginity, sacred, honesty, simple, clean
Gray(N)	common, modesty, sorghum, gloomy, lethargy, urban
Black(K)	creation, luxury, mystery, elegancy, dignity, polished

Along with colors, logos are an important part of the brand image. Schaefer (2018) observed in her thesis that the visibility of the logo had a positive impact on the engagement.

3.2.2 Interaction

Instagram is a fast-paced social media where thousands of new content is posted every minute. To be more accurate, “over 500 million accounts use Instagram Stories every day” (Omnicores, 2022). If we supposed that these 500 million accounts only post one story per day, this represents a minimum of 5787.04 stories per second. This number doesn’t take into account the Feed posts, nor the Reels and we can suppose that a proportion of people posting stories are posting several per day.

As a result, brands willing to create engagement must create strategies based on Real Time Marketing and Right Time Marketing. Real Time Marketing is “the ability to engage with your customers or fans instantly based on real-time information - like their actions and behavior, changes to your own data or external news or events” (Agnihotri, 2020). This means that marketers must adapt to what is going on at any given time, online and offline. By being more personal and relevant, brands can boost the engagement of their customers. The four aspects deemed important by Agnihotri are the trigger (what subject presents opportunities), the audience (what group of people can be reached with certain messages), the method (what is the best way to communicate the message) and the outcome (what result is expected from the message). Real time marketing can also be observed through events coverage on social media. For example, the Met Gala is an annual event that receives a lot of coverage on social media every year. It is covered by influencers as well as brands that participate in the elaborate outfits and make-up looks.

Right Time Marketing is about adapting to uncertainty. Professor Agnihotri (2012) states that it is not enough for brand accounts to have strategies for special occasions like Mother’s and

Father's Day, it's also necessary to pay attention to the interests of their fanbase and to what is trending at any given time. Agnihotri believes that having a "dedicated in-house social media team, a fast approval process (...) and an urge to create that big moment" are important elements that can lead to successful campaigns.

Not understanding the specific environment they are a part of can result in unfortunate decisions and draw attention to the brand in an unfavorable light. An astounding number of cases of inappropriate posts and responses from brands can be found online. These cases of poor understanding of the environment are not necessarily voluntary, some are simply genuine mistakes or bad timing. There are strategies that can be implemented to rectify such situations (which go as far as crisis management communication) but "perhaps the best defense is not to commit a crime in the first place" (Grégoire, Salle & Tripp, 2015).

The tone of communication can also be a powerful tool. Kaplan and Haenlein (2010) encourage brands to be "unprofessional" by adapting their communication to a more familiar and human tone. They say that social media users are "people like you, who understand that things do not always go smoothly".

Another way to create interactions with social media users that a lot of brands use is the concept of giveaway. On social media, a giveaway is a type of publication announcing that the brands will give free products or services. It usually requires fulfilling some criteria such as liking the post, tagging friends, following the pages of the account and possibly partners' pages or sharing the post. This is a quick and easy way to boost the engagement as there is a potential material counterpart to the actions that are requested (Schwehm & Prigge, 2022).

Chapter 4: Cosmetics industry

The Cambridge Dictionary (2022) defines cosmetics as “substances put on the face or body that are intended to improve its appearance or quality”. The term cosmetics covers a large range of product split in 5 categories : skincare, haircare, make-up, perfumes and hygiene products (Statista, 2022). The most ancient found traces of cosmetics were used in Ancient Egypt (Stewart, 2017). Throughout History, cosmetics have played and still play very diverse roles, being used namely for hygiene, religious ceremonies, camouflage, beauty enhancement, healthcare, status (Hunt, Fate & Dodds, 2011).

The global Cosmetics market grossed 80.74 billion dollars of revenue in 2021 and is expected to keep growing as it currently knows an annual compounded growth rate of 4.75%. The leading categories is skin care (42% of the global market), followed by haircare (22%) and make-up (16%). The last 20% represent perfumes and hygiene products). In terms of market share, Asia represents the largest portion with a staggering 46%. North America and Western Europe respectively represent 24% and 18% (Roberts, 2022; Statista, 2022).

Regarding distribution, cosmetics are sold both online and offline. Offline distribution keeps on being dominant, but it started declining a few years ago along the growth of online distribution (Roberts, 2022).

It's important to make the difference between 2 concepts: e-commerce and online distribution.

We have already seen that E-commerce is “the business of buying and selling goods and services on the internet” (Cambridge Dictionary, 2022). The definition of distribution channels that Lambin and de Moerloose (2012) provided can be roughly translated as “a structure formed by the partners involved in the process of competitive exchange in order to make goods and services available to consumers or industrial users”⁶. Offline means that internet doesn't play a role in the method used to bring the product or service to the consumer. Online means that the method used include internet as a means of distribution.

Online distribution allows consumers to find products that are not available in stores or at least not in stores available to some potential consumers. Some very successful cosmetic brands have decided to keep an exclusively online distribution, like ColourPop (Roberts, 2022).

⁶ The definition was translated using Deepl. In the original text: «Une structure formée par les partenaires intervenant dans le processus de l'échange concurrentiel en vue de mettre les biens et services à la disposition des consommateurs ou utilisateurs industriels» (Lambin & de Moerloose, 2012)

are Johnson & Johnson, Estée Lauder Companies, Shiseido, Procter & Gamble, Coty and Unilever (Cfr. Figure 8). These large companies own a lot of successful and famous brands but not all of them as some are still owned privately like Anastasia Beverly Hills, a makeup brand (Berg, 2018).

In terms of specific elements, there is very little information in the academic and in the scientific literature as to what works fine for cosmetic brands, and even less to none that study multiple elements. But a benchmark to keep in mind through this study is the average engagement rate that Social Insider posted in 2022. They stated that the average engagement rate on Instagram for all industries was 0.83%. For the beauty industry, it was between 0.54% and 0.61%.

PART II: METHODOLOGY

Chapter 1: Research question

Through the literature review, we saw that there is an extensive amount of information available for brands and creators on how to build strategies designed to grow and engage communities on social media, especially on Instagram. The company even dedicated very complete websites to that effect, as it is providing resources to improve the quality and effectiveness of content produced. The alliance between Instagram Creators and Business accounts is also helping each gain engagement from partnerships. We saw that brands can use already existing elements such as cause-related marketing and brand ambassadors, but they also had to develop new strategies to adapt to the nature of social media. We briefly talked about the cosmetic industry.

There is a great deal of peer reviewed publications, books, blogs, about social media, social media marketing strategies, the cosmetics industry, about how important of a media Instagram is. Finding generic information on how to grow an Instagram community is easy, there are also a lot of case studies about brands and factors that impact the engagement, either positively or negatively.

However, we observed that the existing literature doesn't usually generalize their findings to the industries. Therefore, we decided to conduct an exploratory research about potential factors that can have an impact on the engagement on the Instagram posts of cosmetic brands.

Our research question can be stated as follows:

“Which factors could positively impact the engagement on the Instagram posts of cosmetics brands?”

We chose a specific industry and a specific social media to focus on posts that could have the same audience. The social media is Instagram, which was chosen because it is one of the most popular, and because it has specific features designed for Business. The cosmetic industry was a good fit for this study because the communication of cosmetic brands is usually very visual and uses a lot of representation, and that is something we can observe easily on Instagram.

1.1 Type of research strategy

To observe the engagement on the posts of different brands inside the same industry, we decided to build a database of 400 posts, or 20 posts from 20 brands. The posts were chosen based on external criteria that we will detail further in Chapter 3. The posts were then encoded in the database and observed based on internal criteria, with nominal variables and binary variables.

We then processed the data to find the proportion of the sample that incorporates the elements that we suspected could have a positive impact on the engagement. We also computed basic statistic metrics such as the means and standard deviations for the nominal variables. We also created a tool to compare the observation within each brand with the other brands.

After the construction of the database, the trends observed for the posts were compared to the findings of the literature to determine whether some elements seemed to be more present and if these were observed to have a better engagement.

The objective of this study is to observe and discuss the presence of the chosen elements in the cosmetic industry marketing. Because this is an exploratory research to find potential leads regarding the engagement on cosmetic brands, we chose to keep our focus on observations rather than analysis. We did not perform statistical tests for this research. However, to figure whether some variables seemed to be observed conjointly more than others, we used a multidimensional scaling tool.

Chapter 2: Construction of the sample

2.1 Selection of brand accounts

We looked in the literature for similar studies to find the number of brands that had been chosen and discovered that the usual number of brands was quite small. We believe that observing posts from too few brand accounts would not have reflected general trends in the industry. Because we did not initially have a specific idea for the number of brands to select, we decided to take a closer look at the platform and see how many brands could fit the criteria we decided on. We created a new Instagram account to avoid having any automated suggestions from the account of the author.

We decided to look for international brands sold in Western Europe and North America. We saw earlier that Asia holds the highest market share in the cosmetic industry with a market share of 46% (Roberts, 2022) so it might sound peculiar that we decided to keep Asia out of the equation for the choice of brands. But we also saw earlier that the Chinese population, the biggest worldwide, uses other social media platforms and they don't have access to Instagram (Schuiling, 2020 ; Chiu, Ip & Silverman, 2012). Considering this, we decided to focus on the next 2 poles in terms of market share: Western Europe and North America. The resulting criteria was "the brand must be sold at least in Western Europe and North America".

We discussed earlier the findings about the verification check and as it is a sign of authenticity, we decided that we would only take verified pages to have official brand accounts (Instagram, 2022). The resulting criteria was "the account must be verified".

Through our research on the platform, we discovered that some brands have several Instagram accounts to adapt to their audience, some have country-specific pages, others have gender-specific pages. We decided to exclude from the research brands that bear different names depending on the country. For example, Rexona, a deodorant brand sold worldwide has different names in other countries ; it is called "SURE" in the United Kingdom, "Degree" in the United States and Canada, "Rexena" in Japan and South Korea and "Shield" in South Africa (Nwobodo, 2014). Since this study is not about the cultural impact of the brand name, it was an exclusion criteria. The resulting criteria was "the brand must have the same name worldwide".

Regarding the brand accounts which are gender-specific, it usually represented different brands or lines (for example, Nivea has specific accounts for Nivea Men), we decided to focus

on the most followed one if there was a clear difference. For country-specific accounts, we decided to exclude the brands if there were too many different accounts with no clear difference for the number of followers. If among several accounts for the same brand, there was an official account that mentioned no specific country, we excluded the others and concentrated on the general account. This decision was not based on literature, as no similar selection has been mentioned previously. Our decisions were based on the general concern to find the accounts that were engaging as many users as possible, regardless of culture. The resulting criteria were “if there are several brand accounts for the same brand name, the general account will be preferred to others”, “if there is no general account, the account with the highest following will be preferred, provided that there is a clear difference with the next most followed (at least 10% more)”.

We decided to focus on accounts that were posting their content in English exclusively. Here, by exclusively, we mean that the posts must all contain at least English if there is a caption and at least English if there is text on the posts. If the captions were translated in other languages but still included the English caption, the brand could not be rejected. The resulting criteria was “all the written content posted by the brand must contain English”.

We did not set a minimum or maximum number of followers as an inclusion/exclusion criteria because the engagement rate is a proportion that does not depend on the potential audience but on the number of followers the brand already has.

We decided to add an exclusion criteria regarding brands whose principal products are no consumable (for example, brands that primarily sell makeup brushes). This criteria was about narrowing down the selection to brands that sell similar products. For the same reason, we decided to exclude luxury brands. This research is not about luxury marketing so we chose products that were considered affordable. The limit we fixed was limit of 80 euros per product. This makes the price range quite large but we considered the fact that cosmetic products can come in larger containers or be a part of a limited edition. The resulting criteria were “the main activity of the brand must be the sale of their products” and “the prices of the products of the brand can not exceed 80 euros”.

In the literature review, we mentioned the multi-national companies that own a lot of different brands. This is a concern we took into consideration when selecting the accounts. To avoid having the too many brands owned by the same company, we arbitrarily fixed a limit of 5 brands owned by the same company maximum.

The final criteria we established was the minimum number of posts. We decided that, when we fixed the variables, the accounts should have posted at least 1000 posts. This decision was taken to keep the brands that have the most experience with Instagram.

This is the final selection of the brands we kept and the corresponding usernames of the accounts:

Figure 9: Brand accounts selected for the sample

	Brand	Group	Followers (millions)	Posts	Language	Origin	page ID (@)
abh	Anastasia Beverly Hills	(Private)	19,4	14,8k	EN	USA	anastasiabeverlyhills
bfc	Benefit Cosmetics	LVMH	9,9	10,9k	EN	USA	benefitcosmetics
clr	Clarins	(Clarins)	0,681	1879	EN	France	clarinsofficial
cnq	Clinique	Estée Lauder	3,4	3789	EN	USA	clinique
cpc	ColourPop Cosmetics	Seed Beauty	10,1	13,3k	EN	USA	colourpopcosmetics
dov	Dove	Unilever	0,712	1382	EN	USA	dove
ker	Kérastase	L'Oréal	1,8	3259	EN	France	kerastase_official
khl	Kiehl's	L'Oréal	0,94	5376	EN	USA	kiehls
lmr	Laura Mercier	Shiseido	3,2	4401	EN	Fr/USA	lauramercier
mac	MAC Cosmetics	Estée Lauder	24,4	11,6k	EN	Canada	maccosmetics
mlc	Milani Cosmetics	Gryphon Investors	3,7	4510	EN	USA	milanicosmetics
muf	Make up For Ever	LVMH	6,5	1875	EN	France	makeupforever
ntr	Neutrogena	Johnson & Johnson	0,91	1837	EN	USA	neutrogena
ptn	Pantène	Procter & Gamble	0,605	1287	EN	Switzerland	pantene
rev	Revlon	Revlon	2,8	6093	EN	USA	revlon
shi	Shiseido	Shiseido	1,3	3604	EN	Japan	shiseido
tar	Tarte Cosmetics	Kosé	9,9	11,6k	EN	USA	tartecosmetics
tbs	The Body Shop	L'Oréal	2,3	6659	EN	UK	thebodyshop
urb	Urban Decay	L'Oréal	10,7	8009	EN	USA	urbandecaycosmetics
vic	Vichy	L'Oréal	1,7	1050	EN/FR/ES	France	vichylaboratoires

The brand accounts were entered in an excel file called Ig400 (referring to Instagram 400) and given a code name of 3 letters. To avoid confusion, we made sure to use code names that were not too similar to each other. As you can see on the Figure 9, basic information about the brand were added: the company owning the brand (in the column Group), the number of followers (in millions) , the number of posts, the language used by the brand in the content posted, the country where the brand was founded (not the country where the brand is based) and the username of the chosen account. The brands are listed in the alphabetical order of their code name. The colors in the column group have no other use than distinguishing the companies that own the brands. Regarding the number of followers, unfortunately the number is rounded on Instagram so the information is not precise but the platform rounds down the number of followers for every accounts whose number of followers exceeds 10 000 (Clark, 2020). Knowing that this rounding affects the engagement the same way for every brand, we can still have an estimation of the engagement.

On the next figure, there are other elements of the brands, such as the general style of publication of the account, the color scheme of the brand (obtained by observing the colors most used by the brand on their official website, their packaging and their logo), whether the models on the posts of the brand represent an ethnic diversity and whether there are other verified pages for the brand. The general style of publication is a short description of the general permanent content activity of the account.

Figure 10: Brand accounts selected - additional information

	General style of publications	Color scheme	Models diversity shown	Other verified pages for brand
abh	a lot of videos, tutorials, regular posts are scarce	black, gold	1	0
bfc	very diverse formats, mostly regular products posts, tutorial videos and empowerment	pink	1	1
clr	mostly products posts and videos, very few models	red, white	0	1
cnq	tutorial videos, products regular posts, diversity highlights	black, white	1	1
cpc	highlights of content creators using their products, tutorials, regular posts about products	purple	1	0
dov	very diverse, mostly about diversity, empowerment and selfcare	blue, gold, white	1	0
ker	mostly regular posts, very diverse subjects, selfcare and natural products centered	white	1	0
khl	mostly products showcase, testimony videos about various subjects	black	1	1
lmr	almost all post are products showcase	black, brown	1	0
mac	mostly products showcase, some tutorial videos	black	1	1
mlc	tutorial videos, products showcase and examples of how to use	gold	1	1
muf	very diverse formats, products showcase, tutorial videos, events	black	1	1
ntr	mostly empowerment and educative content	black, white, silver	1	1
ptn	mostly products posts, diversity of hair highlights	gold	1	1
rev	mostly products showcase and tutorials, very diverse formats	red	1	1
shi	mostly products showcase and tutorial videos	red, black	1	0
tar	mostly products showcase and tutorial videos, some events posts	purple, gold	1	0
tbs	very few models, mostly products and textual posts	green	0	1
urb	mostly products showcase, very diverse formats	purple	1	1
vic	mostly educative content about the products and how to use	blue, silver, white	1	1

2.2 Selection of the Instagram posts

After choosing the brand, we had to make the selection of the posts. The number of posts was set at arbitrarily at 20 per brand, to match the number of brands.

The types of formats on Instagram were detailed in the literature review. Among the different types, it was difficult to envision a way to compare videos, photographs, ephemeral content and live content. According to Omnicore (2022), "Engagement is currently the highest for image posts at 1.03%, followed by carousel posts at 0.86%. Videos receive the third-highest engagements on Instagram at 0.75%". For this reason, we chose to focus on the original format of the platform: the feed posts. To compare Feed posts that were similar, we decided to only include photograph feed posts. As we have seen, users can post several pictures in a same post. This type of post is called a carousel. We decided to include these in the selection and they were encoded as if they were one picture containing all the elements that were present in the different pictures of the carousel.

Through our research on the platform, we observed that some brands tend to post very redundant pictures, that contain the same subject, products, aspect, mainly when they post about new products. To avoid these redundancies and gather as much diverse data as possible, we decided to exclude redundant posts. What we qualify as redundant posts are the posts that would give similar values for the variables that we will detail further.

All the posts were saved on the same day on the thesis5299 account. We started the selection from the top of the page (most recent content) and saved 20 feed posts that corresponded to the criteria. If a post was deemed redundant, we only picked the first post of the serie in chronological order. If a post was shared in the content of another user, it was no issue but if it was not originally posted by the brand and was a repost, it was excluded.

We decided to finalize the selection a few days later to make sure that the number of likes and comments would be stable. We then took screen captures of the saved posts. Some of them had been removed during that week. We decided to replace the missing number of posts by the next posts that would have been chosen if the selection had included more posts.

The screen captures were named according to the brand and the recency. For example, the most recent saved post of Anastasia Beverly Hills was named “abh01”⁸. To encode the posts in the database, watching the screen captures was not sufficient, we had to look at each post directly on the application. However, the screen captures were necessary to capture the engagement data at a precise time.

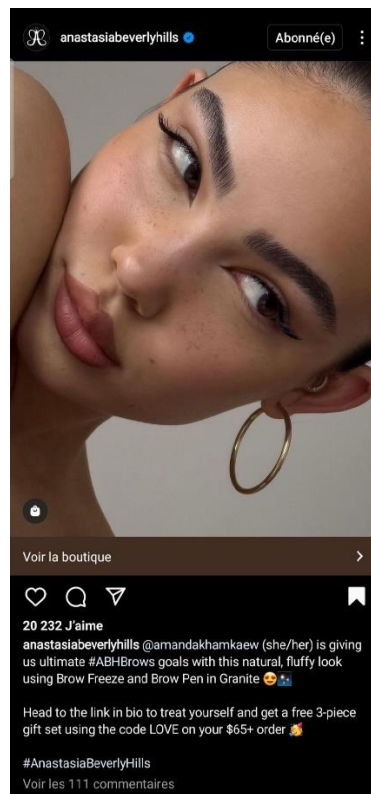
Chapter 3 : Construction of the database

3.1 Variables

After gathering the publications, we had to determine what variables would be useful to observe the impact on the engagement. Throughout this section, we will illustrate how we encoded the posts in the database by taking the example of the post “abh01”.

⁸ Disambiguation: during the Methodology and Results parts, the accounts will be referred to by the name of the brand. We specify this to avoid the confusion regarding the brands that have several accounts. This simplification is just a way to make the reading of this thesis lighter. The posts will be referred to by their code names

Figure 11: abh01



As we already know, from an external perspective, the only visible engagement metrics are the number of likes, comments and followers. These are the first variables that we encoded in the excel sheet. The number of followers remains constant for all the posts of a same brand. The variables are respectively called “Followers (in millions)”, “Likes” and “Comments”.

About the comments, it is interesting to note that, sometimes, users disable the comments on their posts. If that is the case, there is a note indicating it. This case did not occur in our sample, but it is possible.

Because some types of post could encourage users to like or comment unusually, we decided to create 2 other variables called “Likes/M followers” and “Comments/M followers”. These variables are the number of likes per million followers and the number of comments per million followers obtained by dividing the number of likes by the followers count and the number of comments by the followers count. This will allow us to make comparisons between the different brands by distinguishing the likes and comments.

The last metric of that section is the engagement rate. As we mentioned it earlier, the engagement rate is obtained with the following formula:

$$\text{Engagement rate (decimal number)} = \frac{\text{Number of likes} + \text{Number of comments}}{\text{Number of followers}}$$

Because the number of followers we inputted are in millions, we used the following formula to obtain the engagement rate in percentage:

$$\text{Engagement rate (\%)} = \left(\frac{[\text{Likes}] + [\text{Comments}]}{[\text{Followers (in millions)}] * 1\,000\,000} \right) * 100$$

We rounded the Likes/M followers and Comment/M followers to the unit and the engagement rate (%) to the second decimal place.

For abh01, these variables are encoded like this:

Code	Followers (in millions)	Likes	Likes/M followers	Comments	Comments/M followers	Engagement Rate (%)
abh01	19,4	20232	1043	111	6	0,10

Next are 4 numerical variables. “Hashtags in caption (number)”, “Number of products shown (number)”, “Number of different products shown (number)” and “Number of pictures (number)”.

“Hashtags in caption (number)” is quite self-explanatory, it’s the number of hashtags used in the caption. We saw that hashtags are a tool on social media that content more visibility. That visibility can help the brand gain engagement, but they can also be used as a statistical tool for the brands if the hashtags are branded.

The number of products shown is the total number of product containers on the pictures. A product was considered as shown if at least a third of the product was clearly visible. If a product was split in 2 parts (for example, a mascara brush separated from the container) on the picture, the number of product shown was encoded as 1. If it was not possible to determine with certainty that an element of the picture was a product, it was not counted.

The number of different products shown is the number of products that have different names shown on the picture. If a product was shown in 2 different tones but had the same name and price, they were considered as the same product. If it was not possible to determine with certainty that 2 products were the same, they were counted as different products.

The number of pictures refers to the type of posts called carrousel. The number of pictures is the number of photograph in a same post.

For abh01, these 4 variables are encoded like this:

Code	Hashtags in caption (number)	Number of products shown (number)	Number of different products shown (number)	Number of pictures (number)
abh01	2	0	0	1

On abh01, we can see that there are 2 hashtags in the caption, no products shown and only 1 picture.

From this point on, all the variables are binary variables. They are encoded with 1 as “true” and 0 as “false”. To make it easier to visualize, we applied conditional formatting. The variables that were observed true for the posts are in green and the variables observed false are in red.

The first 5 are all related to models. We saw that the presence of faces has a positive impact on the engagement (Bakhshi et al., 2014). To make sure that the presence of a model was encoded as comprehensively as possible, we split that variable into 3:

Body of the model visible: For this variable, we considered that the variable was true if at least half of the body was visible, regardless of the orientation of the model. For this variable, we did not make a difference between models who were more or less dressed.

Full face of the model visible: this variable was considered true if at least 50% of the face was visible. By face, we mean the elements of the face: the 2 eyes, the nose and the mouth. If the face of the model was on the edge of the picture, if we could see at least one eye, the nose and the mouth, the variable was considered true. If the model is hidden in the shadow and we can guess the silhouette of her face without seeing it, this variable was false. The idea of this variable was to encode whether the face of the model was mainly visible. If the model has their back to the camera, even if we can see the whole back of the head, the variable is considered as false.

Part of the face of the model visible : this variable was considered true if 2 or less elements of the face were visible. If the mouth and nose were the only visible elements, it was considered as true. If one or 2 eyes were visible, it was considered as true. As for the previous variable, the back of the head is not considered as a part of the face.

These variables are not mutually exclusive, it possible to find pictures with several models posing different ways.

The other 2 variables are “Famous person” and “Anything out of the ordinary about the model”. These 2 variables stem from 2 concepts that we saw earlier: influencers marketing and cause-related marketing.

The variable “Famous person” is considered true if a famous person (actor/actress, politician, influencer, any public figure) is featured on the publication or if the famous person is referred to in the publication and/or identified on it.

The variable “Anything out of the ordinary” refers to cause-related marketing as we have seen that brands can decide to take a stand and support causes. If the model has a specificity that makes them part of an under-represented community on social media the variable is considered true. That includes models with skin conditions, disabilities, normal bodies (as explained in the empowerment section), men wearing makeup and older models.

There was a discussion about adding a variable regarding the ethnicity of the models, but we decided not to do so because it felt out of place for us to determine whether a model was clearly Caucasian or not. We decided to replace that variable with “diversity of the models” in the Summary tab which indicates whether there are models featured on the Instagram account of the brand that are from other different ethnicities or not. We observed that the only 2 brands for which this variable is false are accounts where very few models are featured, if any.

For abh01, the different variables were encoded like this:

Code	Famous person identified (yes = 1)	Anything out of the ordinary about the model (yes = 1)	Body of the model visible (half of the body or more = 1)	Full face of the model visible (yes = 1)	Part of the face of the model visible (yes = 1)
abh01	1	0	0	1	0

We can see that the influencer @amandakhamkaew is mentioned in the caption. She is also tagged on the photograph, but this is not visible on the screen capture. There is nothing out of the ordinary about her, her body is not visible, her face is, and we can’t say that only a part of the face is visible.

Next are the variables related to characteristics of the interactive elements of the pictures.

“First post of the day” informs about whether the post was the first content posted by the brand that day. That information cannot be found on the picture, it must be looked up in the application. For this variable we are taking all the other formats into consideration to see if there has been any other permanent format on the account that day. Bakhsi et al. (2014) have observed that posting a lot of pictures had a negative impact on the engagement, so we designed this variable to observe that effect.

“Link to shop” indicates whether the post is a shoppable post, as defined earlier, or not.

“Interaction incentive” is a variable that indicates whether the content of the post or the caption openly encourages users to like or comment. That variable is considered true if there is an open question to the users, a request (tagging a friend) or any type of content that clearly expects a particular reaction from the users. A rhetorical question asked and answered by the brand in the caption is not considered as an incentive.

“Familiar caption” is a variable based on the article of Kaplan and Haenlein (2010) that encourages marketers to be “unprofessional” and more human. This variable is considered true if there are emojis in the caption, slang or personification of the account (“we are so excited to..., we love this product”). An exception for the emojis is if they are used visually as bullet points. If the tone of the caption is more familiar, the variable is true.

For abh01, we observed this:

Code	First post of the day (yes = 1)	Link to shop (yes = 1)	Interaction incentive (yes = 1)	Familiar caption (yes = 1)
abh01	0	1	0	1

The post was not the first content that day, there is a link to the shop of the brand, there is no interaction incentive regarding the post and the caption is familiar.

Then we have 3 variables about the visual aspect of the posts.

“Clear placement of the logo” means that the logo is clearly identifiable on the posts at first sight. If the logo is too blurred to be recognizable, the variable is false. If the logo of the brand is doodled without it being the official logo, the variable is false.

“Color-coordinated with brand colors” refers to the brand image. Based on the colors we found in the selection of brands, we can determine if the post has a visual aspect that recalls these colors or not. If the answer is too ambiguous, the variable will be considered as false.

The last variable, “if several pictures, consistency” is not a variable that is meant to be observed alone. It is a complimentary variable that should be observed alongside “Number of pictures”. This variable informs about the consistency between the multiple pictures of the carousel. All the posts that were not carousels were observed as true because they can’t be inconsistent with themselves.

The results for abh01 are as follows:

Code	Color		If several pictures, consistency (Y-N)
	Clear placement of the logo (yes = 1)	coordinated with brand color (yes = 1)	
abh01	0	1	1

Finally, we have the 8 variables that we can call topics. These variables all describe whether a topic is shown in the post and/or mentioned in the caption.

“New Product”: Is a new product mentioned? To be considered new, the product must have been announced during the month preceding the post.

“Event”: This variable is linked to the concept of real-time marketing (Agnihotri, 2020) and asks if an event is mentioned, regardless of the nature of the event. In the posts, examples of events included Mother’s Day, Star Wars Day and the Met Gala.

“Giveaway”: As explained earlier, a giveaway can generate more engagement than other posts because its purpose is to reward the users for engaging with the brand.

“Product follow-up”: This variable and New Product are not mutually exclusive, as there can be multiple products in a post. It informs on presence on the post or the mention in the caption of an already existing product.

“Educative content”: Is the post addressed to the users with an educative purpose? It can be about the products, an event, a person. The variable is considered true if the post contains information for to the users.

The last 3 topic variables are cause-related marketing variables. We decided to split the topic in 3 to focus on the 2 cases developed earlier in the literature review: empowerment and sustainability. The third variable is covering the cases of cause-related marketing that are not about empowerment and sustainability.

These are the results for abh01:

Code	New product (yes = 1)	Event (yes = 1)	Giveaway (yes = 1)	Product follow-up (yes = 1)	Educative content (yes = 1)	Cause-related marketing - Empowerment (yes = 1)	Cause related marketing - Sustainability (yes = 1)	Cause-related marketing - Other (yes = 1)
abh01	0	0	0	1	0	0	0	0

We can see that a product is clearly mentioned in the caption of the post.

Chapter 4: Data processing

4.1 Descriptive analysis of the sample

Once the database is encoded, we can start processing the data.

For the numerical variables, we computed the means and standard deviations of the following variables: Likes/M followers, Comments/M followers, Engagement rate, Hashtags in caption, Number of products shown, Number of different products shown and How many pictures. These metrics will be interesting further to compare the general trends with the trends by brand.

The general trend for these variables are not as interesting on their own as they are when we associated them with the findings of the binary variables. For these, we computed the number of “true” observations for each variable, then transformed them in proportions in percentage.

$$Proportion (\%) = \left(\frac{Number\ of\ "true"\ observations}{400} \right) * 100$$

4.1.1 General observations

After computing the means and standard deviations, we obtain the following results for the numerical variables.

Like/M Followers - Mean	Like/M Followers - Standard Deviation	Comments/M Followers - Mean	Comments/M Followers - Standard Deviation	Engagement rate (%) - Mean	Engagement Rate (%) - Standard Deviation
845	1045	79	713	0,09	0,16

Hashtags in caption - Mean	Hashtags in caption - Standard deviation	Number of products showed - Mean	Number of products showed - Standard deviation	Number of different products showed - Mean	Number of different products showed - Standard deviation	How many pictures? - Mean	How many pictures? - Standard deviation
4,4	3,2	2,6	3,8	1,5	2,1	1,5	1,2

The average engagement rate is 0.09%. That means that for every 100 followers, 0.09 either like or comment, or 9 people out of 10 000. This engagement rate is far below the average engagement rate of the beauty industry of 0.54 to 0.61% (Cucu, 2022).

For the binary variables, we obtained these proportions in percentage.

Famous person identified	Anything out of the ordinary about the model	Body of the model visible	Full face of the model visible	Part of the face of the model visible	First post of the day	Link to shop
15	5,25	6	24,5	11	61,25	32,75

Interaction incentive	Familiar caption	Clear placement of the logo	Color coordinated with brand color	If several pictures, consistency (Y-N)	New product
31	58,5	65,25	40,25	95,5	25

Event	Giveaway	Product follow-up	Educative content	Cause-related marketing - Empowerment	Cause related marketing - Sustainability	Cause-related marketing - Other
19,5	2	54,25	9,75	8,75	2,75	0,25

With these proportions, we can observe that some elements are represented a lot in the Instagram posts of cosmetic brands while others are rarely seen, if ever.

There is only 1 observation for “Cause-related marketing – Other”. We can see that among the concepts that we wished to observe regarding the engagement rate, the ones that seem to be the more represented are the clear placement of the logo, familiar caption, product follow-up, color coordination and link to shop. But we don’t have any idea yet if these factors will be as present in the posts that see the best engagement.

Some variables will have to be considered alongside others. For example, as we suspected it, the consistency is observed in 95.5% of the posts because it is supposed to be observed along with the carousel posts. Carousel posts represent 87 of the observations, or 21.75%. We noticed that 70 out of the 87 carousel posts also showed consistency. There are very few carousel posts that are inconsistent in the sample.

4.1.2 Observations by brand

To be able to compare the brand with one another, we applied the same techniques to obtain the same metrics as the general sample. We reported our data in the Summary tab. We reported the general metrics as well to see how the brands compared to the descriptive statistics of the sample.

After sorting the summary tab by engagement rate, we can notice that Clarins, Dove, Clinique, ColourPop Cosmetics, Shiseido and Kérastase have higher average engagement rates than the other brands. On top of the list, we find Clarins with an average engagement rate of 0.52%. With less than 0.02%, at the bottom of the list are Tarte, Revlon, Make Up For Ever and Urban Decay.

We can't emit any opinion about this ranking and determine that Clarins has the best solution for engaging Instagram users. We don't know yet the general behavior of the variables of each brand. The high or low engagement rate of a brand is perhaps due to a post that worked exceptionally well, or, in the contrary a post that received very few reactions.

4.2 Calculations

After observing these first metrics, we need to go further to see what the brands and the posts that get the best engagement rates have in common. For this, we are going to take closer look at the posts and brands that have above-average engagement rate. To do so, we sort the entries by decreasing engagement to have the highest engagement rates on top of the table. We then filter which entries are visible and choose to display only the entries that have an above average engagement rate.

4.2.1 General trends

In the general sample, there are 119 observations that have above average engagement rate. We can now observe the metrics and proportions as before but this time only on the above average entries. It is a simple way to see if in terms of proportion, the observations of a variable are rather above or below the average.

If we focus our attention on the above-the-average section of the entries and find that a certain variable is represented in the same proportions as in the sample, we can suppose that the variable is not necessarily observed along with a higher engagement. However, if the proportion in the above-the-average section increases or decreases dramatically, we can flag that variable as potentially having a positive or negative impact on the engagement. We can not verify those claims without statistical tests.

To compute these new proportions, we simply count the number of "true" observations for each variable and divide these by 119, as it is our new size of sample.

To compare the results, we obtained for the new proportions (in percentage) of the binary variables, we created new tables. The first row of numbers in each table is the proportion in the whole sample, the second row corresponds to the proportion of the same variable observed true but only in the above-the-average engagement section.

Famous person identified	Anything out of the ordinary about the model	Body of the model visible	Full face of the model visible	Part of the face of the model visible	First post of the day	Link to shop
15,00	5,25	6,00	24,50	11,00	61,25	32,75
14,29	7,56	5,88	15,97	9,24	69,75	25,21

Interaction incentive	Familiar caption	Clear placement of the logo	Color coordinated with brand color	If several pictures, consistency	New product
31,00	58,50	65,25	40,25	95,50	25,00
48,74	48,74	72,27	47,06	97,48	31,93

Event	Giveaway	Product follow-up	Educative content	Cause-related marketing - Empowerment	Cause related marketing - Sustainability	Cause-related marketing - Other
19,50	2,00	54,25	9,75	8,75	2,75	0,25
21,01	5,04	52,10	10,08	10,92	5,04	0,00

What we are looking for to see potential factors that impact positively the engagement are the proportions that have increased when we reduced the size of the sample. We can see that some variables are a lot more observed, some are a lot less and some keep quite similar proportions.

The variables which seem to be represented more in the smaller sample are “First post of the day”, “Interaction incentive”, “Clear placement of the logo”, “Color coordinated with brand”, “New product”, and “Giveaway”. These are all concepts that have been studied in the academic literature as good strategies for social media marketing. We saw that a higher activity has a negative impact on the engagement (Bakshi et al., 2014), so a lower activity, meaning less posts, should have a positive impact on the engagement. We saw that the visual elements of the brand identity, including the colors and the logo, were important element to build efficient campaigns that appeal to customers (An & Lee, 2012 ; Hunjet & Vuk, 2017, Schaefer, 2018 ; Singh, 2020). “Interaction incentives”, which include “Giveaway” have been studied by Agnihotri (2020) as something that brands need to constantly work on. Interaction incentives generate engagement if they are managed correctly and with flexibility.

The variables that were apparently represented less in the smaller sample are “Full face visible”, “Link to shop” and “Familiar caption”. The variable “Full face visible” was represented 9% less in the smaller sample, which is surprising in the light of the findings of Bakhshi et al. (2014). That could be explained by the fact that they studied the impact of faces in a different social media but as their findings were quite significant, it was reasonable to think that we could maybe observe similar trends on Instagram. The representation of “Link to shop” also dropped ; we didn’t find any information in the literature as to why that could be. The decrease in representation of “Familiar caption” in the smaller sample contradicts the advice given by Kaplan & Haenlein (2010).

Here is the list of the brands whose posts make up the sample of above-the-average engagements rate sample. The numbers below the name of the brands are the number of posts that have an engagement rate above the average of the whole sample. The colors correspond to the company that owns the brand, as shown in the section dedicated to the selection of the brand.

Anastasia Beverly Hills	Benefit Cosmetics	Clarins	Clinique	ColourPop Cosmetics	Dove	Kérastase	Kiehl's	Laura Mercier	MAC Cosmetics
8	1	20	13	14	17	8	1	0	1
Make up For Ever	Milani Cosmetics	Neutrogena	Pantène	Revlon	Shiseido	Tarte Cosmetics	The Body Shop	Urban Decay	Vichy
0	0	4	1	0	15	0	8	0	9

4.2.2 Trends by brand

To compare the brands, we used the same process of keeping the data of the brands that had an engagement above average in the summary tab.

This is the representation in percentage of the “true” observations of the different variables. The first line represents the proportion for the whole sample, all brands included. The second line represents the proportion of the “true” observations for the brands that have an above-the-average engagement rate. These 6 brands are Clarins, Dove, Clinique, ColourPop Cosmetics, Shiseido and Kérastase.

Famous person identified	Anything out of the ordinary about the model	Body of the model visible	Full face of the model visible	Part of the face of the model visible	First post of the day	Link to shop
15	5,25	6	24,5	11	61,25	32,75
19,17	9,17	10,00	23,33	13,33	64,17	19,17

Interaction incentive	Familiar caption	Clear placement of the logo	Color coordinated with brand color	If several pictures, consistency	New product
31	58,5	65,25	40,25	95,5	25
40,83	43,33	58,33	39,17	99,17	30,00

Event	Giveaway	Product follow-up	Educative content	Cause-related marketing - Empowerment	Cause related marketing - Sustainability
19,5	2	54,25	9,75	8,75	2,75
20,83	3,33	45,00	14,17	14,17	3,33

We are again looking for variables that were represented more in the selection of brands that have an engagement above the average.

We can see that “Famous person identified”, “Anything out of the ordinary about the model”, “Body visible”, “Interaction incentive”, “New product”, “Educative” and “Cause-related marketing – empowerment” are all represented more than in the main sample. The variables that decreased in proportion in the smaller brand selection are “Link to shop”, “Familiar caption” and “Clear placement of the logo”. As previously in the general trends, Interaction incentive is much higher in the smaller selection and Link to shop is lower.

It is interesting to note the differences between the approach of the posts engagement and this one as we can see that the results differ. While Clear placement of the logo was more strongly represented in the above-the-average posts sample, it is now 7% less represented in the above-the-average brand selection.

One thing we still need to be aware of regarding these trends is the importance of the followers count. Less followers means less people to satisfy and a community that is closer to the brand.

4.2.3 Multidimensional scaling

Through the previous analysis, we observed that the average engagement rate is quite low for the industry on the posts that we have chosen. However, there are some variables that seem to be more represented when we observe the posts and brands that have a higher-than-average engagement rate. However, the big number of variables can be confusing while looking for clues about what could have a positive impact on the engagement rate.

There are 20 binary variables in the database. As we saw it, these cover visual elements like the mention of a famous person or the brand color scheme, textual elements like the tone of the caption and context elements like the relation to an event or the earliest post of the day. The big number of binary variables makes it impossible to represent them all with any type of graph. But we still wanted to observe visually if there were similarities between the different variables. Are there variables that seem to follow the same trends? Which variables are the furthest from each other? That is why we decided to use multidimensional scaling.

To do the multidimensional scaling, we started by constructing a distance matrix then we used SPSS to create the multidimensional scaling. We took all the binary variables except for the variables “Consistency”, “Giveaway”, and “Cause-related marketing - other”. The first one was removed because it was designed to be observed together with the variable “Number of pictures”, not on its own. The second and third ones were removed because, as we have seen, the number of observations for these variables is small.

There were a few steps necessary to create the distance matrix. First we created a matrix that we will call “Both observed true” (Cfr. Figure 12) where the rows and the columns correspond to the same variables. In this matrix, each intersection corresponds to the number of observations in the whole sample where the 2 variables were observed true. The intersections where the numbers are in bold, where the column variable and row variable are the same, simply represent the number of observations that are true for this variable only.

Figure 12: Both observed true matrix

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		Famous person identified	of the ordinary about the	Body of the model visible	of the model visible	the face of the model	First post that day	Link to shop	Interaction incentive	Familiar caption	placement of the logo	coordinated with brand color	New product	Event	Product follow-up	Educative content	related marketing - Empowerment	related marketing - Sustainability
2	Famous person identified	60	9	11	20	11	32	17	11	46	12	16	10	21	14	2	15	0
3	Anything out of the ordinary about the model	9	21	10	14	4	19	2	8	6	12	6	5	8	3	3	16	2
4	Body of the model visible	11	10	24	10	6	18	3	3	9	8	9	2	16	4	3	9	2
5	Full face of the model visible	20	14	10	98	11	61	27	26	53	36	30	21	22	28	16	21	1
6	Part of the face of the model visible	11	4	6	11	44	25	15	11	23	12	8	13	7	13	4	3	0
7	First post of the day	32	19	18	61	25	245	63	91	126	169	110	68	45	122	31	31	11
8	Link to shop	17	2	3	27	15	63	131	124	87	91	60	20	20	99	8	1	2
9	Interaction incentive	11	8	3	26	11	91	124	124	89	88	59	29	21	71	14	10	5
10	Familiar Caption	46	6	9	53	23	126	87	89	234	149	90	53	45	139	9	13	5
11	Clear placement of the logo	12	12	8	36	12	169	91	88	149	261	122	68	43	176	26	17	8
12	Color coordinated with brand color	16	6	9	30	8	110	60	59	90	122	161	31	27	101	25	14	8
13	New product	10	5	2	21	13	68	20	29	53	68	31	100	12	10	6	3	3
14	Event	21	8	16	22	7	45	20	21	45	43	27	12	78	28	6	21	5
15	Product follow-up	14	3	4	28	13	122	99	71	139	176	101	10	28	217	17	4	4
16	Educative content	2	3	3	16	4	31	8	14	9	26	25	6	6	17	39	9	0
17	Cause-related marketing - Empowerment	15	16	9	21	3	31	1	10	13	17	14	3	21	4	9	35	2
18	Cause-related marketing - Sustainability	0	2	2	1	0	11	2	5	5	8	8	3	5	4	0	2	11

We can see that the observations are reflected on both sides of the diagonal formed by the cells B2 to R18. This can be explained by the fact that the 2 variables involved are observed at the same time and not conditionally (Elmeddah, 2013).

Then we created a second matrix which is the real distance matrix. That matrix has the same structure as before with the rows and the columns corresponding to the same variable. The intersection of each row and column corresponds to the distance in percentage between the 2 variables. To make it easier to understand and read, we can name each intersection of the first matrix $x_i y_j$, with x_i referring to the column i and y_j referring to the row j .

$$\text{Distance between } x_i \text{ and } y_j (\%) = 100 - \left(\frac{x_i y_j}{x_i y_i + x_j y_j - x_i y_j} * 100 \right)$$

$$\text{Distance between } x_i \text{ and } y_j (\text{decimal number}) = 1 - \frac{x_i y_j}{x_i y_i + x_j y_j - x_i y_j}$$

In other words, to compute the proximity, we must divide the number of observations where both variables are true by the number of observations where at least one of the variables is true. Since we are not interested in the proximity but in the distance, we remove the proportion we obtained from the total probability. We can also see that if we compute the distance for intersections of the same variable, we have $i = j$, hence the 3 terms of the denominator become identical, and the fraction equals to 1. The distance is then $1 - 1$, so 0. This makes sense because a variable can't be different from itself.

In the second matrix, which we will call the “Distance Matrix” (Cfr. Figure 13), we can see that, as in the first one, there is a symmetry between both sides of the diagonal formed by the cells B2 to R18.

Figure 13: Distance Matrix

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	Famous person identified	Anything out of the ordinary about the model	Body of the model visible	Full face of the model visible	Part of the face of the model visible	First post of the day	Link to shop	Interaction incentive	Familiar caption	Clear placement of the logo	Color coordinated with brand color	New product	Event	Product follow-up	Educative content	Cause-related marketing - Empowerment	Cause-related marketing - Sustainability	
22	Famous person identified	0	88	85	86	88	88	90	94	81	96	92	93	82	95	98	81	100
23	Anything out of the ordinary about the model	88	0	71	90	96	92	99	94	98	96	97	96	91	99	95	60	93
24	Body of the model visible	85	71	0	91	90	93	98	98	96	97	95	98	81	98	95	82	94
25	Full face of the model visible	86	90	91	0	92	78	87	87	81	89	87	88	86	90	87	81	99
26	Part of the face of the model visible	88	96	90	92	0	91	91	93	91	96	96	90	94	95	95	96	100
27	First post of the day	88	92	93	78	91	0	80	67	64	50	63	75	84	64	88	88	96
28	Link to shop	90	99	98	87	91	80	0	5	69	70	74	91	89	60	95	99	99
29	Interaction incentive	94	94	98	87	93	67	5	0	67	70	74	85	88	74	91	93	96
30	Familiar Caption	81	96	96	81	91	64	69	67	0	57	70	81	83	55	97	95	98
31	Clear placement of the logo	96	97	97	89	96	50	70	70	57	0	59	77	85	42	91	93	97
32	Color coordinated with brand color	92	96	95	87	96	63	74	74	74	70	0	87	87	64	86	92	95
33	New product	93	96	98	88	90	75	91	85	81	77	87	0	93	97	95	98	97
34	Event	82	91	81	86	94	84	89	88	83	85	87	93	0	90	95	77	94
35	Product follow-up	95	99	98	90	95	64	60	74	55	42	64	97	90	0	93	98	98
36	Educative content	98	95	95	87	95	88	95	91	97	91	86	95	95	93	0	86	100
37	Cause-related marketing - Empowerment	81	60	82	81	96	88	99	93	95	93	92	98	77	98	86	0	95
38	Cause-related marketing - Sustainability	100	93	94	99	100	96	99	96	98	97	95	97	94	98	100	95	0

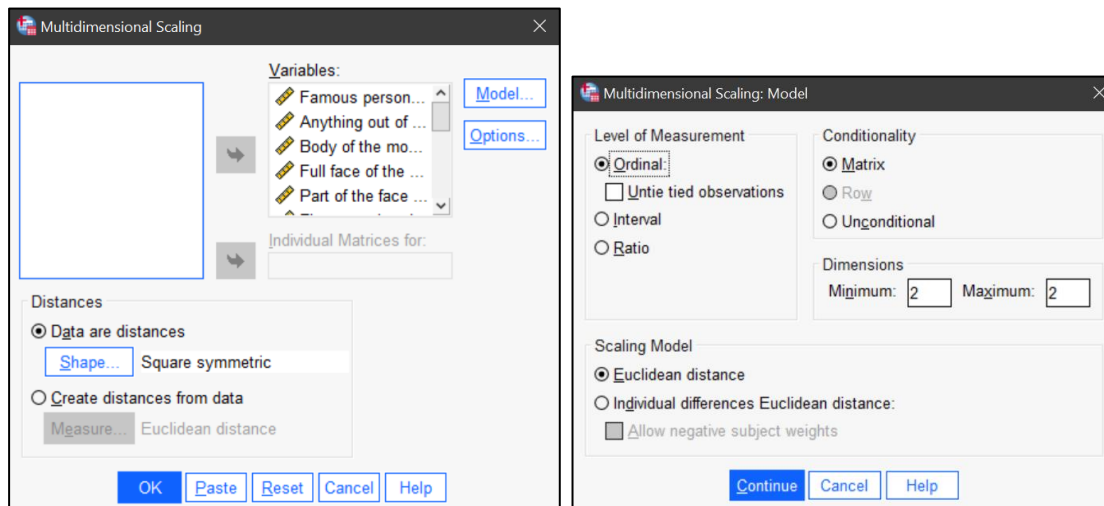
As explained with the cells for which the variable in the row and the column are identical, a distance of 0 means that the 2 variables are behaving the exact same way. On the other hand, a distance of 100 percent means that the 2 variables behave in completely different ways. We must keep in mind that distance is not a measure of direction. It gives us information about whether 2 variables behave similarly or not, it doesn't tell us if they are evolving in similar directions.

When the Distance matrix is done, we use SPSS for the multidimensional scaling. Multidimensional scaling is useful for representing a number of variables that can't be represented in a 3-dimensional model. It offers the perspective of “how, if the distances between different data points remained more or less the same, would this look like in 2 dimensions” (Perret, 2018).

On SPSS, we start by importing the data of the Distance Matrix. We can rename the variables in SPSS to have shorter variable names. We conduct the multidimensional scaling by going in the “Analyze” tab at the top of the page. There is an option called Scale, and in this option, there is the command ALSCAL. In the Multidimensional Scaling tab, we must make a few operations. We start by selecting all the variables in the left tab to move them in the right tab

“Variables”. We select the option “Data are distances” because we already computed the distances. The default settings are the one we need here so we don’t need to make any modification. Then we can run SPSS to obtain the results.

Figure 14: SPSS commands for ALSCAL



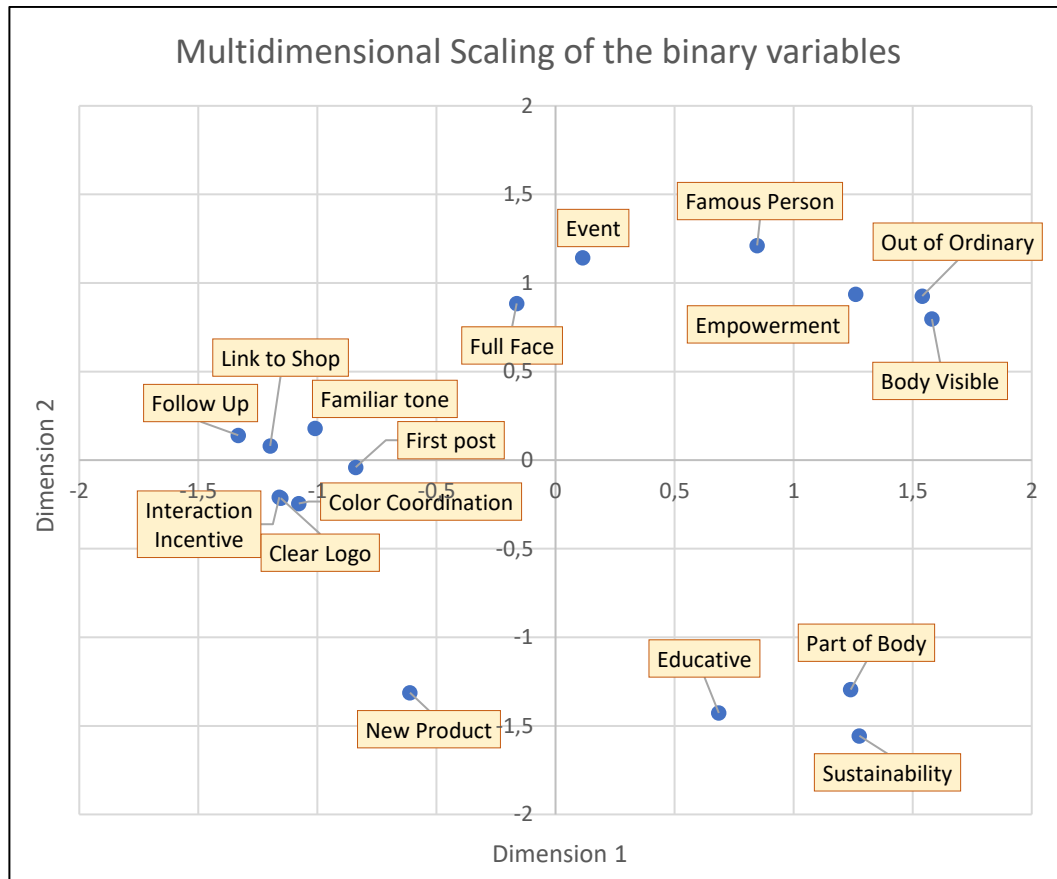
The results are given in a specific way. First, the program informs about the Stress and squared correlation (RSQ). What we want for this kind of operation is for the stress to be as low as possible because the stress is an information on the problems that the program encountered while trying to compute the multidimensional scaling. In this case, the stress was quite small, with a value of 0.23798. The program then gives the abbreviation used to replace the names of the variables and the output in the form of coordinates that can be used to create a 2-dimensional model.

Figure 15: Output of the multidimensional scaling

		Stimulus Coordinates	
		Dimension	
Abbreviated Name	Extended Name	Stimulus Name	
		1	2
		Famous	,8468 1,2123
		OutofOrd	1,5401 ,9263
		BodyVisi	1,5807 ,7968
		FullFace	-,1631 ,8847
		PartofBo	1,2398 -1,2954
		FirstPos	-,8390 -,0400
		LinktoSh	-1,1983 ,0802
		Interact	-1,1600 -,2094
		Familiar	-1,0092 ,1794
		ClearLog	-1,1536 -,2150
		ColorCoo	-1,0783 -,2447
		NewProdu	-,6112 -1,3126
		Event	,1146 1,1428
		FollowUp	-1,3325 ,1404
		Educativ	,6859 -1,4273
		Empowere	1,2610 ,9376
		Sustaina	1,2761 -1,5561

To create the 2-dimensional model, we can use Excel, as SPSS facilitates the export of the data. We used the scatterplot tool of Excel and we obtained this figure.

Figure 16: Multidimensional scaling



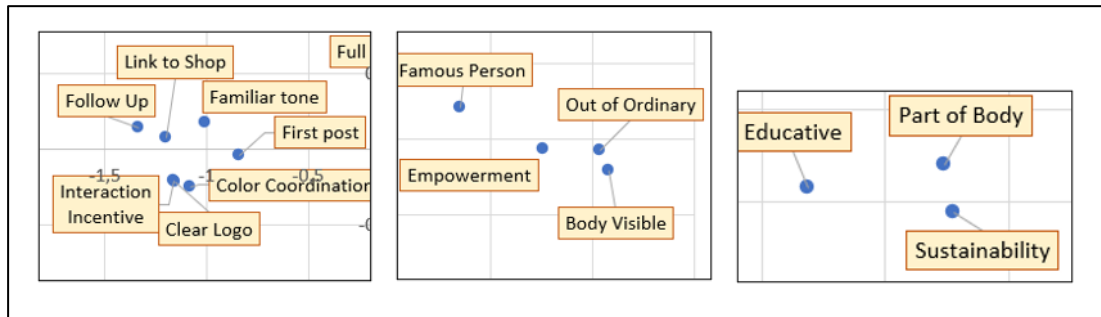
That figure gives us precious information about 3 groups of variables that seem to be evolving the same way in the database.

The first group (Cfr. Figure 17) is formed by the variables "Link to shop", "Familiar tone", "First post", "Color coordination", "Clear logo", "Interaction incentive" and "Follow up". These are the most observed variables in the sample. The least represented is Interaction incentive with 124 observations ; the most observed is Clear placement of the logo with 261 observations. When several of these variables are observed at the same time, the posts are mostly communications about the products, especially best sellers of the brands. As we have seen, "Link to shop" and "Familiar tone" have not been observed along with high engagement posts or brands but this group of variables together is very coherent and gives off the image of brands that carefully prepare their communication.

The next group (Cfr. Figure 17) is represented by the variables “Famous person”, “Out of the ordinary”, “Empowerment” and “Body visible”. These variables together are very coherent with the idea of body positivity and the influencers that represent that movement. Dove is a good example of brand that consistently uses cause-related marketing successfully as 17 out of the 20 posts we observed show an above-the-average engagement rate.

The third and last group (Cfr. Figure 17) is represented by the variables “Educative”, “Part of Body” and “Sustainability”. These variables are observed a lot with brands that advocate their brand image as integrating sustainability in their business plan. The Body Shop and Vichy are both promoting sustainability on their respective accounts by giving advice and relevant information about their products and commitments.

Figure 17: 3 groups of variables



PART III: RESULTS

Chapter 1: Summary of the results

All along the data construction, processing and analysis, we observed many things that sometimes supported the findings of the literature and sometimes didn't.

We can start discussing the results by mentioning the observations that the variables offered. We encoded 400 Instagram posts using 30 variables. These variables were not all observed in similar proportions.

The least encountered variables were, in increasing order, "Cause-related marketing – other", "Giveaway" and "Cause-related marketing – Sustainability". They were observed less than 15 times out 400 posts. This doesn't necessarily mean that they don't have a significant impact on the engagement. As we will see, it is sometimes useful to use these less encountered elements in social media marketing.

The most observed variables were, in decreasing order, "If several pictures, consistency", "Clear placement of the logo", "First post of the day", "Familiar caption" and "Product follow-up", all observed for more than half of the posts. Exception made of the consistency variable which, as discussed earlier, was not designed to be observed on its own, these variables can be found in very similar advertisements, especially on social media. However, just because they are the most encountered through the sample doesn't mean they have a positive impact on the engagement.

Using a distance matrix and multidimensional scaling, we discovered the existence of 3 groups of variables that behave the same way. We will discuss in the analysis of the results how these 3 groups can be interpreted and what we can learn from the variable that constitute them.

After discussing these elements, we will summarize how these findings could be useful to marketers moving forward. We will also explain how this study was limited by diverse elements that were introduced in the methodology such as cultural concerns.

Chapter 2: Analysis of the results

The least encountered variables are not necessarily the less useful in terms of engagement. On the contrary, giveaway posts represent only 8 of the 400 posts but 6 out of these posts have engagement rates superior to the average. Four Clarins posts were giveaways, and these posts alone secured the first place for Clarins in the ranking of brands based on their average engagements rates. The Sustainability variable was not very popular in the sample either, but it can be an interesting element to associate with.

We saw that there were 3 groups of variables highlighted by the multidimensional scaling as evolving in similar ways.

The first group was the group of the most encountered variables of the sample. They are also variables that represent elements commonly found in the marketing of other media. For example, a Famous person identified is not Instagram exclusive and there are thousands of examples of brand ambassadors. We saw that, when compared based on the brands' average engagements rate, the variable appears proportionally more often in the above-average engagement selection than in the full sample. This can be interpreted as a good thing for a brand who uses pictures of famous people in their posts. This is a factor that has already been studied (de Brito Silva, Alencar de Farias, Kovacs Grigg, & de Lourdes de Azevedo Barbosa, 2020 ; Uzunoglu, 2014).

The Interaction incentive was also a variable that was quite more observed in both restricted samples. The interaction incentive is not referring to a specific word or action but more to the type of communication used to invite the users to interact with the content posted by the brand. It makes sense that if people felt welcome to comment their impressions, they would be more likely to engage with the content.

The fact that some variables are not represented as much in the "upper engagement rates" posts sub sample as they are in the brands' smaller selection could mean that using other elements like influencers can leverage a brand's global average engagement rate. Using elements that commonly work and mixing them with elements that are less observed could potentially impact the engagement rate of both elements. As we have seen earlier, these posts are usually accompanied with hashtags, which are powerful tools to spread information and awareness.

In addition to using more mainstream elements, the association of different elements that make sense together can have a positive impact on the engagement.

We saw that the engagement rate is computed using the number of interactions and the number of followers. It is no surprise to see that brands with several million followers have lower engagement rates as they have more people to please. Committing on certain elements such as cause-related marketing could help them grow a community that would engage more. We saw that such strategies must be used carefully as they can appear dishonest if used for a too short amount of time (Simcic Brønn & Belliu Vrioni, 2001).

Finally, it appears that the variables about visual elements of the brand identity have their importance as the posts that contain logos and colors associated with the brand are observed more in the smaller segment of upper-engagement posts studied.

Chapter 3: Implications and recommendations

Social media are fast-paced environments where any mistake will be spotted, and any smart decision will be acclaimed.

Being professionally active on social media can appear hazardous for any entity that has not elaborated strong strategies regarding positioning and communication. We saw that the tone of communication must be adapted to the platform and the industry. Even if Kaplan and Haenlein (2010) argue that being unprofessional and not being afraid of making mistakes is a good thing for brands on social media, our findings suggest that familiarity might not be such a great idea. The key ideas that Agnihotri (2020) evokes regarding how to build a coherent communication on social media seem more appropriate.

Another principle Agnihotri (2020) advocates is the necessity to be up to date with your audience. Having a communication that is adapted to the audience, their interests and their suggestions can only help a brand grow a stronger community.

Our findings also suggest that depending on the positioning of the brand, some strategies could be useful to leverage attention on some aspects of the brand, including its social commitments and beliefs. A purely product-oriented marketing strategy might not fit a brand whose beliefs and interests are centered on more social concerns. Therefore, there are tools that can be used occasionally to “boost” the engagement rate, for example the giveaways.

About occasional strategies, finding influencers that can engage their audience by talking about the product or services offered by a brand is important on a platform like Instagram. The platforms even designed a part of their services to help businesses find the best tools to grow.

Social media can be a great business opportunity, provided that it is taken seriously. Businesses that want to create social media strategies should be aware of all the tools they can use and be attentive to the key metrics of social media.

Overall, the engagement on social media is a currency that any business should seek.

Chapter 4: Limitations and prospects for new research

This research has been a challenging opportunity to discover more about the Business perspective on Instagram. There are some elements that must be mentioned regarding the elaboration process of this thesis.

As explained in the methodology, we tried to create a database as comprehensive as possible, but we had to make choices to create a realistic research frame. Many other brands could have been picked for analysis and we had to make arbitrary choices as to which would be kept, as it was not possible to make an exhaustive database of brands. We decided to choose one account per brand but we could suppose that, if we had analyzed the different accounts of one brand, we could have found interesting results as well.

We tried to keep the cultural factor out of the equation for this research, but it can't be denied that culture has an impact that is not always quantifiable. There probably are impacts on the data we gathered.

The number of posts we gathered can also be a bias because the period that corresponds to the dates of the posts is not very long. The number of posts could be extended to a longer period of time to be more comprehensive and less biased by the specific events that occur in the meantime.

We imagined this study as an exploratory research because the frame of research was quite large and trying to simply explore and describe would be enriching. We wanted to offer a better picture of what exists on Instagram for Businesses. In the future, this study could be imagined as a statistical analysis as well to determine which factors can be proven to have the best impact on the engagement rate.

GENERAL CONCLUSION

The goal of this research was to provide a better overview of the factors that could have a positive impact on the Instagram posts of cosmetic brands.

In the literature review, we discovered that social media have been a wonderful business opportunity for brands and other stakeholders for a long time. The arrival of brands on social networks created a new side to what social media marketing could be. Because social network facilitates the interaction between the users, brands became part of a dialogue and, thus had to create new strategies to adapt to the fast-paced environment. Some of these strategies stem from traditional tools, such as brand ambassadors, but others rely on the creation of engagement.

We discovered through an exploratory research about potential factors that have a positive impact on engagement that some theories about social media were not necessarily adapted to Instagram.

We believe that the potential factors that are the most relevant for the cosmetics industry include encouraging the audience to interact, carefully controlling the publication agenda to fit the needs and preferences of the audience and choosing the right partners that will help grow communities that engage actively with the brand.

This study was realized through the collection of Instagram posts. As social media are a very volatile environment, this study could be reimaged in the future in a more comprehensive way by extending the period of time corresponding the dates of publications.

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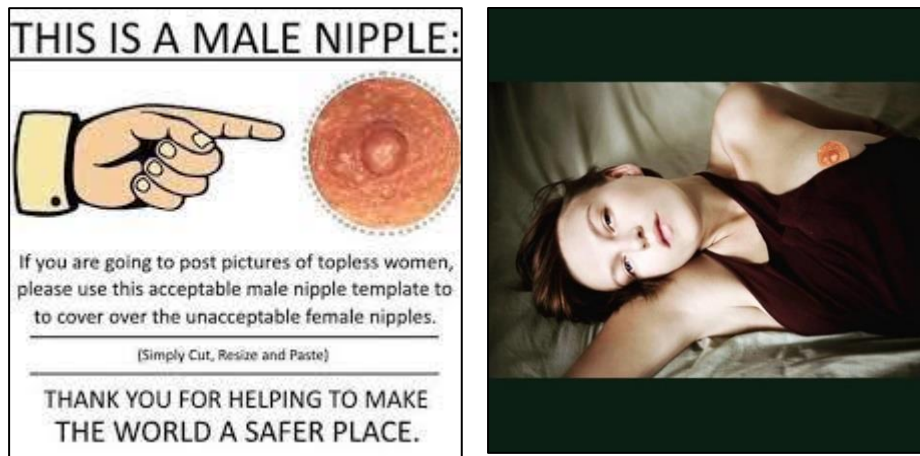
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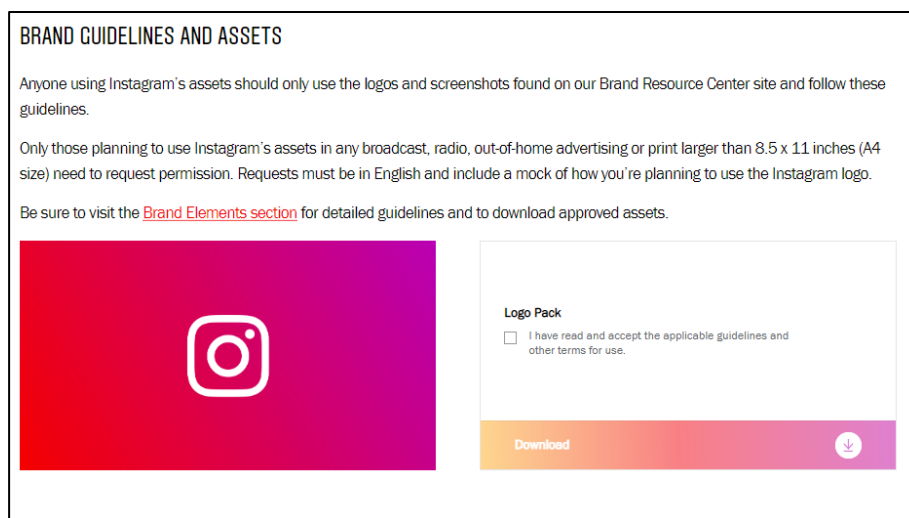
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APPENDICES

Appendix 1: #FreeTheNipple campaign (The Daily Edge, 2015)⁹



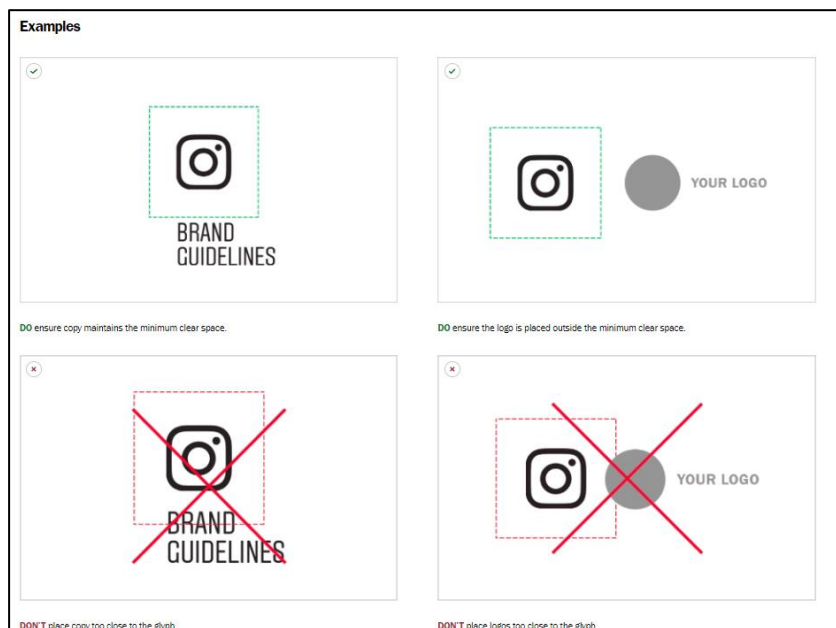
Appendix 2: Brand overview website for Instagram (Instagram 2022)¹⁰



⁹ Source: The Daily Edge. (2015). *Women are Photoshopping male nipples over their own to protest Instagram censorship*. Retrieved from <https://www.dailyledge.ie/free-the-nipple-photoshopping-male-nipples-2206654-Jul2015/>

¹⁰ Source: Instagram Brand. (2022). *Brand overview*. Instagram. Retrieved from <https://www.facebook.com/brand/resources/instagram/instagram-brand>

Appendix 3: Glyph Icon Rules (Instagram, 2022)¹¹



Appendix 2: Visual example of IGTV (Newton, 2018)¹²



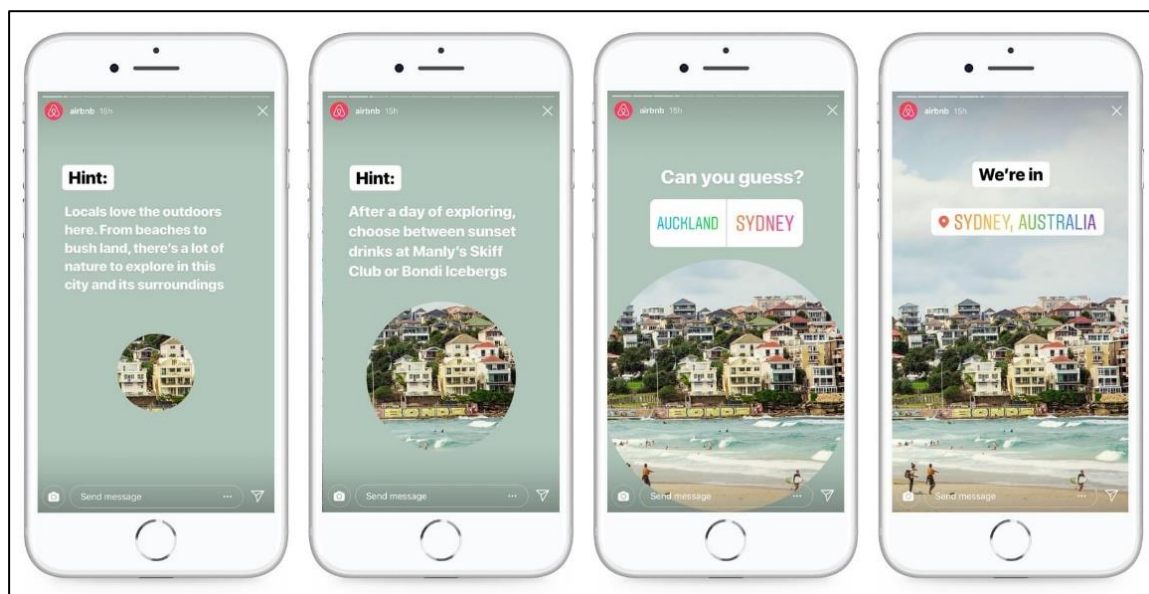
¹¹ Source: Instagram Brand. (2022). *Brand overview*. Instagram. Retrieved from <https://www.facebook.com/brand/resources/instagram/instagram-brand>

¹² Source: Newton, C. (2018). *Instagram announces IGTV, a standalone app for longer videos*. The Verge. Retrieved from <https://www.theverge.com/2018/6/20/17484436/instagram-igtv-video-app-launch>

Appendix 3: Visual example of a Feed post (author's picture, 2022)¹³



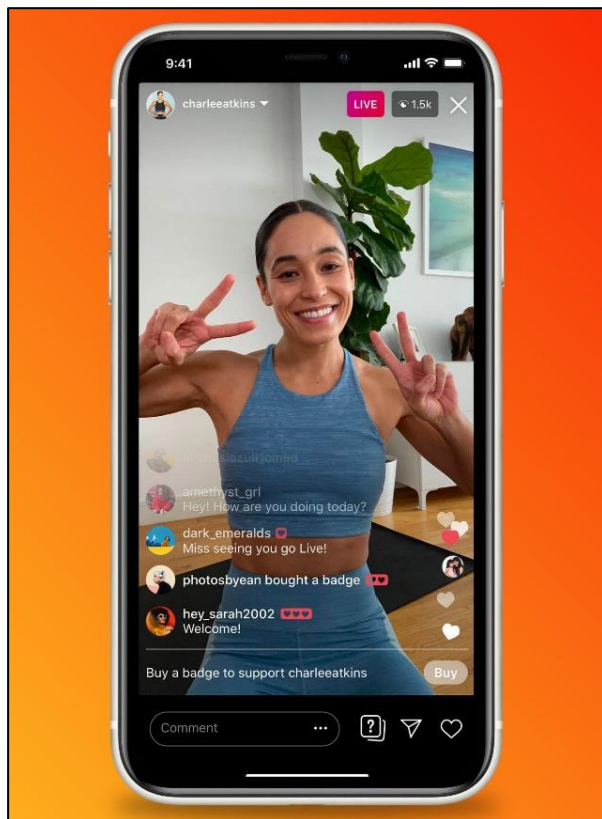
Appendix 4: Visual example of Stories (Maurice, 2018)¹⁴



¹³ Source: author's picture. (2022). *Feed post example* [Screencapture]. Instagram application.

¹⁴ Source: Maurice, C. (2018). *Guide : comment optimiser ses stories Instagram ?*. Blog du Modérateur. Retrieved from <https://www.blogdumoderateur.com/optimiser-stories-instagram/>

Appendix 5: Visual Example of Instagram Live (Lorenz, 2020)¹⁵



Appendix 6: Visual example of Reels (Nochii, 2020)¹⁶



¹⁵ Source: Lorenz, T. (2020). *Instagram Wants Its Influencers to Make More Money*. The New York Times. Retrieved from <https://www.nytimes.com/2020/05/27/style/instagram-influencer-monetization-live-igtv.html>

¹⁶ Source : Nochii. (2020). *Instagram Reels gaat de strijd aan met Tiktok*. Retrieved from <https://nochii.com/nl/instagram-reels/>

Appendix 7: Choice of Professional Account (author's picture, 2022)¹⁷

Are you a business?

Based on the category you selected, you may be a business. You can change this anytime.

Business

Best for retailers, local businesses, brands, organizations and service providers.

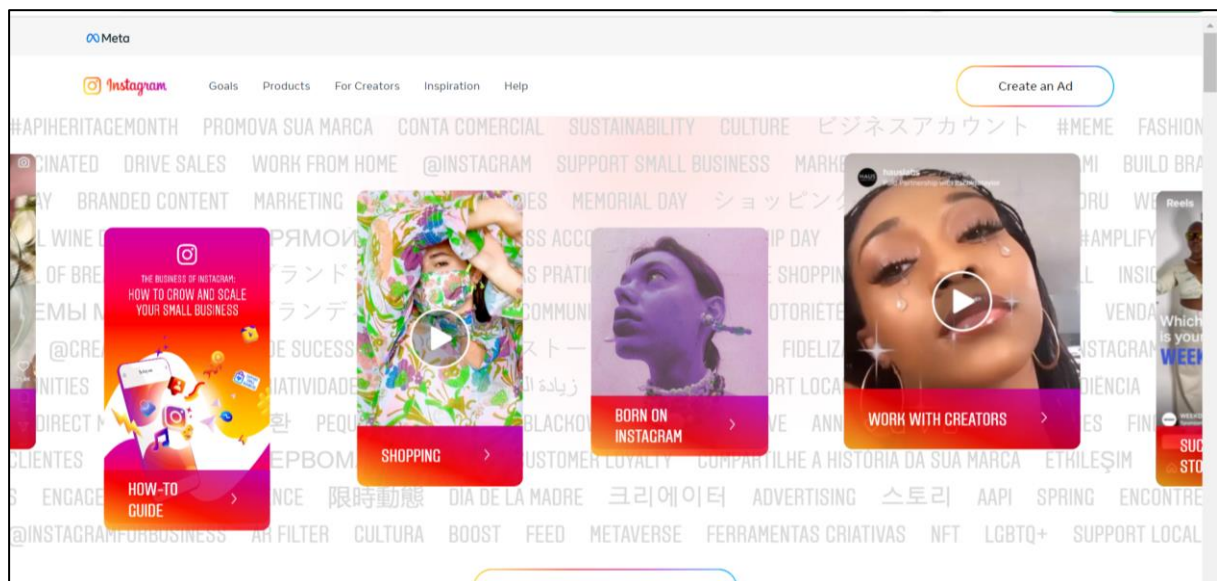
☒

Creator

Best for public figures, content producers, artists, and influencers.

☐

Appendix 8: Instagram for Business website (Instagram for Business, 2022)¹⁸



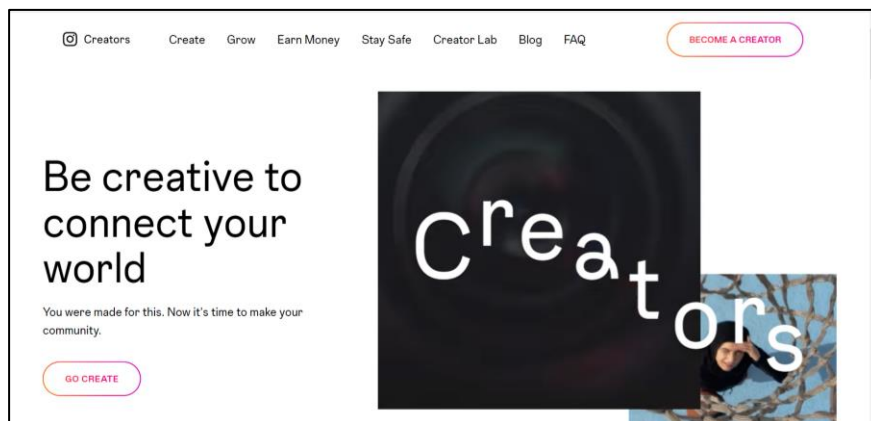
¹⁷ Source: Instagram application. (2022). *Choice of Professional Account* [Screenshot].

¹⁸ Source: Instagram for Business. (2022). [Screenshot] Retrieved from <https://business.instagram.com/>

Appendix 11: Visual example of a Shoppable post (author's picture, 2022)¹⁹



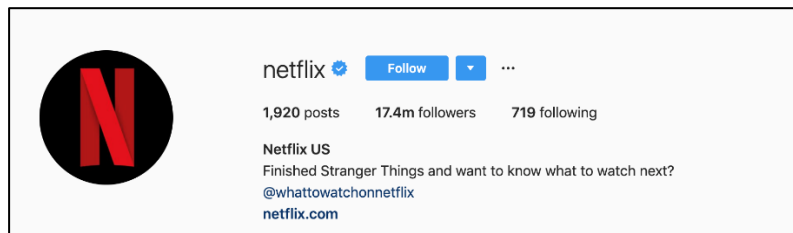
Appendix 12: Instagram for Creators website (Instagram for Creators, 2022)²⁰



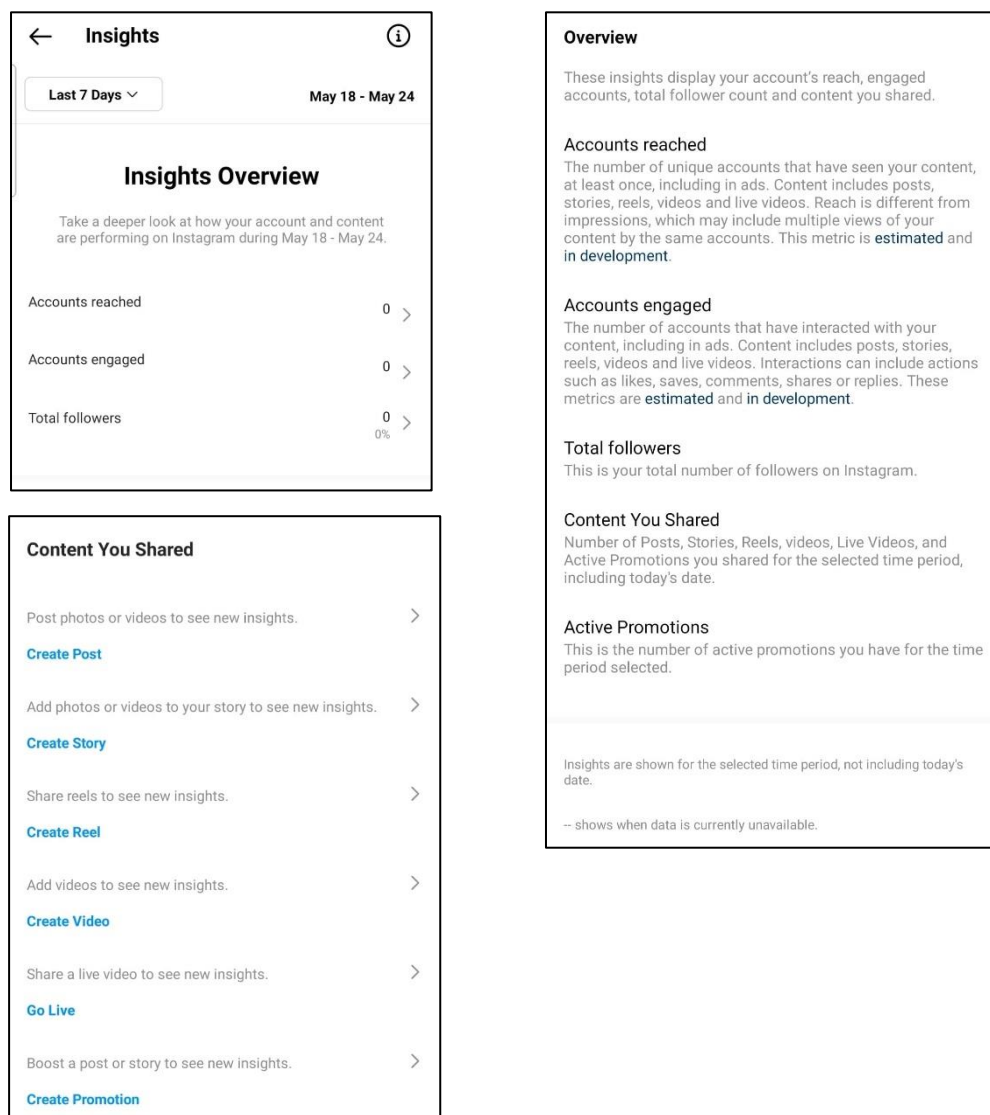
¹⁹ Source: author's picture. (2022). *Visual example of a Shoppable post* [Screenshot]. Instagram application.

²⁰Source: Instagram for Creators. (2022). [Screenshot] Retrieved from <https://creators.instagram.com/>

Appendix 13: Visual example of a verification check (Sheikh, 2022)²¹



Appendix 9: Tools available for Professional accounts (author's pictures, 2022)²²



²¹ Source: Sheikh, M. (2022). *How to get verified on Instagram: the 10 essential steps*. Sprout Social. Retrieved from <https://sproutsocial.com/insights/how-to-get-verified-on-instagram/>

²² Source: author's pictures. (2022). *Insights overview* [Screenshots]. Instagram application.

Abstract :

The engagement rate has become the new key metric to judge the success of the communication on social media. In this exploratory research, we try to give an overview of some potential factors that could impact positively the engagement rate of Instagram posts of cosmetic brands. Restricting our analysis to a specific industry allowed us to compare similar brands in a common environment. We created a database to explore different ideas and concepts such as rhythm of posting and presence of faces. Our findings aim at framing the different aspects that come into the making of a social media strategy.

UNIVERSITÉ CATHOLIQUE DE LOUVAIN
Louvain School of Management

Place des Doyens, 1 bte L2.01.01, 1348 Louvain-la-Neuve
Boulevard Emile Devreux 6, 6000 Charleroi, Belgique
Chaussée de Binche 151, 7000 Mons, Belgique

www.uclouvain.be/lsm

