



UNIVERSIDADE CATÓLICA PORTUGUESA

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**FACEBOOK AND ONLINE-SHOPPING PATTERNS AS  
SEGMENTATION TOOLS FOR THE APPAREL E-TAILING  
INDUSTRY**

**Maria Del Mar Jaramillo Echeverri**

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Supervisor:  
Professor Ana Isabel Almeida Costa

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## ABSTRACT

**Title:** Facebook and online-shopping patterns as segmentation tools for the apparel e-tailing industry

**Author:** Maria Del Mar Jaramillo Echeverri

Companies that understand social media platforms as a channel for selling, listening, and getting constant feedback from customers have the possibility to expand beyond the limits of traditional enterprises. Social media is thus, a way of developing the business as well as a lifestyle for modern firms. Nevertheless, little research has been done on how to best transform social media audiences into loyal customers. This dissertation aims to investigate the potential of Facebook, one of the most used social network sites, as well as the Facebook audience online-shopping patterns, as segmentation tools for the apparel industry in the e-tailing channel. Its results should empower firms in this type of industry, to better understand the customer segments that arise from Facebook page audiences. An online survey targeting users of an apparel retailer's Facebook page was undertaken in Colombia. The brand has been selling online for five years and it was founded twelve years ago. They specialized in feminine swimwear luxury apparel and have been expanding to the masculine and children's market, as well as to sport wear and accessories. The survey was posted in the retailer's page on December 2015 and gathered 233 valid responses. Its objectives were to assess users' social media and online buying behaviour, as well as the underlying motivations, and identify distinct groups of consumers accordingly. A two-step clustering procedure of behavioural measures yielded the existence of four clusters: The Happily married customer, the resignedly non-interested non-customer, the slippery frequent shopper non-customer and the sales hunter low frequency shopping customer. Cluster members showed distinct characteristics in terms of their socio-demographic and psychological profile. Recognizing different segments among a bigger audience can help marketers at the time of understanding customers in a less standardized way but to observe them as individuals in order to communicate with them and see the world through their various perspectives.

**Keywords:** Social Network Sites (SNSs), Facebook (Fb), Cluster, Colombia, Apparel, Segmentation.

## RESUMO

**Título:** Facebook e as tendências de compras online como ferramentas de segmentação para a indústria do vestuário no canal de vendas na internet.

**Autor:** Maria Del Mar Jaramillo Echeverri

As empresas que compreendem as redes sociais como um canal privilegiado para a venda, ouvir e receber realimentação constante tem a possibilidade de se expandir para além dos limites da empresa tradicional. As redes sociais são então uma forma de desenvolver o negócio, assim como um estilo de vida para as empresas modernas. No entanto, pouca investigação tem sido feita sobre a melhor forma de transformar as audiências de redes sociais em clientes fiéis. Esta dissertação tem como objetivo investigar o potencial do Facebook, uma das redes sociais mais utilizadas, também compreender os comportamentos de compras online enquanto ferramentas de segmentação para a indústria do vestuário no canal de e-tailing. Os seus resultados devem ajudar este tipo de empresas a compreender melhor os segmentos de clientes que surgem a partir de audiências em páginas de Facebook. Em dezembro de 2015 foi lançado um questionário na página de Facebook duma empresa de vestuário na Colômbia, que reuniu 233 respostas válidas. Esta empresa tem operado on-line desde há cinco anos e foi fundada há doze anos, sendo especializada em vestuário de luxo swimwear feminino. A mesma têm-se expandido para o mercado masculino e infantil assim como para as categorias de roupa de desporto e acessórios. Os objetivos do questionário foram avaliar o comportamento os utilizadores no Facebook e de compra on-line, assim como as suas motivações subjacentes. Pretendeu-se ainda identificar grupos distintos de consumidores. Uma análise de clusters em duas etapas resultou na identificação de quatro grupos distintos de consumidores, em termos socio-demográficos e psicológicos: os felizmente casados com a marca, os que não são clientes e são pouco interessados (Resignados), os compradores resbaladizos frequentes que não são clientes e finalmente os cazadores de ofertas. Reconhecer os diferentes segmentos dentro duma audiência maior pode ajudar os profissionais do mercadeo na hora de compreender os consumidores como indivíduos que fazem parte de um grupo com características específicas através das quais as empresas podem comunicarse e interatuar com elas.

**Palavras-chave:** Redes sociais (SNSs), Facebook (Fb), conglomerados (clusters), vestuário, Colômbia, Segmentação,

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# 1. INTRODUCTION

The digital marketing generation has begun. The television era, which once replaced iconic communication media such as Life Magazine, is being rapidly complemented by other media and will promptly be accompanied by various strong players. Correspondingly, the rules of marketing have changed and the TV prime time nights where powerful brands messaged audiences massively, are gradually fading. One of the biggest changes in human interaction is the recent proliferation of online social networks. The rapid growth of Web-based platforms facilitating online social behaviour has significantly modified the nature of human activities, habitats and interaction (Pinheiro Melo & Cristóvão Veríssimo, 2014).

This leaves both firm managers and marketers wondering where contemporary marketing strategies are heading and how digital technology can habilitate them in order to maximize results. Digital marketing is an extensive field and can be applied to many business activities. Within it, social media in general and social networking sites (SNS) in particular, have rapidly brought about the power for anyone to create and share content with everyone else (Wertheim & Fenwick, 2011). Still, consumers were not the focus of content creation and interaction from the onset of digital marketing. Traditionally, consumers used the internet to simply observe content. Increasingly, however, consumers are utilizing platforms, such as content sharing sites, blogs, social networking, and wikis, to create, modify, share, and discuss content. This represents the social media phenomenon, which can now significantly impact a firm's reputation, sales, and even survival (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011).

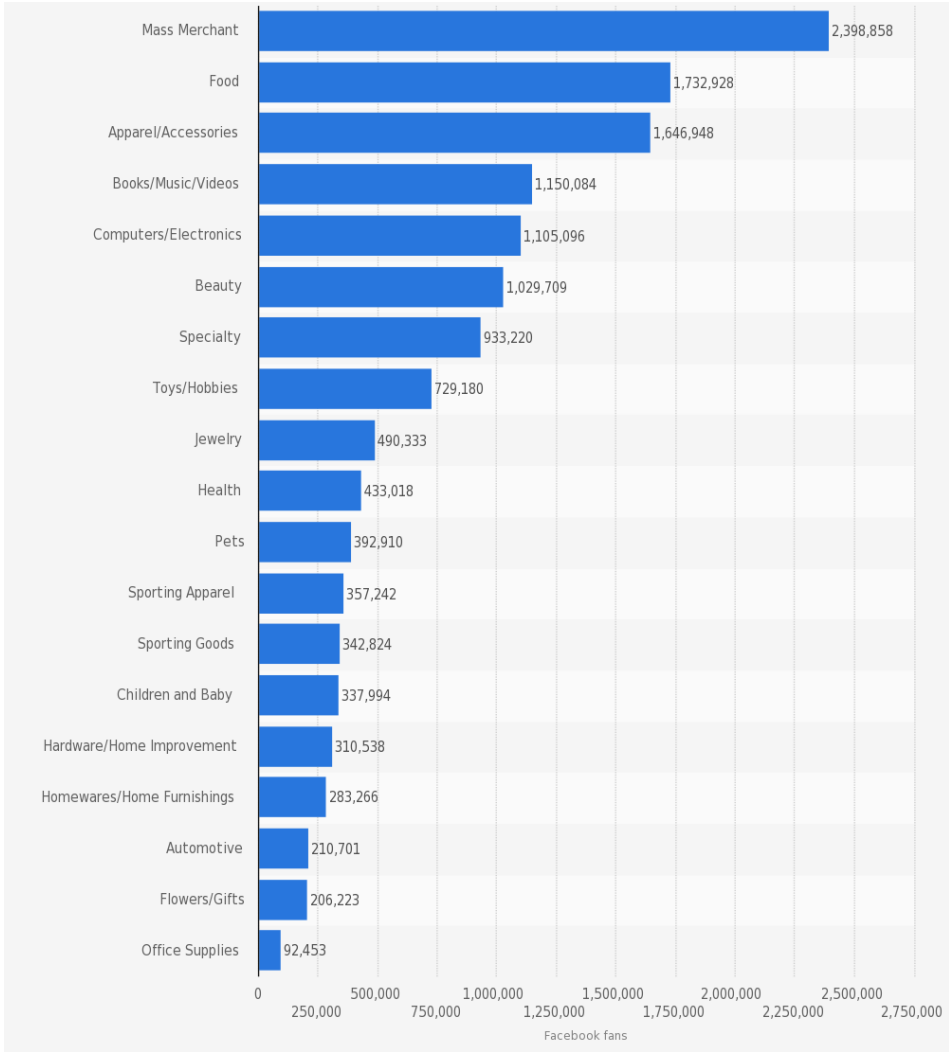
Social media occupy an important role in our daily activities. We see stories of people getting reunited on Facebook after losing contact for many years, multibillionaire businesses growing through networking and e-commerce, companies launching their virtual channel rapidly as globalization took place, and finally, advertising going through the internet tool, as new departments called content creators or community managers invading the once traditional administrative offices. As for advantages and disadvantages of social media, one of its main advantages is the fact that it costs much less than the traditional media as a marketing tool. Moreover, given the diversity of applications platforms, pages and forms that it can support, it is highly attractive to different audiences. In fact, social media sites were a unique development of digital marketing in its ability to create virtual communities that dramatically changed the dynamics of marketing, the scope, nature and speed of communication (Wind & Mahajan, 2002).

However, one of the main drawbacks of social media is the fact that it can only reach people with access to technology. But as internet access increases worldwide, the number of engaging is expected to continue growing. Social media marketing, as a discipline and a practice, requires still a lot of rigorous concept development and testing in order to become mainstream. The challenges of social media marketing start with the need to determine the right metrics for value creation and the valuation of e-businesses and proceeds. This requires marketers to rethink and reinvent their vision, objectives strategies, and organizational architecture based on a new marketing paradigm (Wind & Mahajan, 2002).

Facebook is the biggest and most notorious SNS of all times. First designed to support the contacts and relationships of a single college network, it then expanded to other colleges in the US as a rather intimate and private community (Boyd & Ellison, 2007). Soon, however, it scaled massively to become what it is today: a multimillion dollar business and the authority

in social media interactions, and a brands and e-commerce favourite to deploy digital marketing activities. Nevertheless, other SNS such as Twitter, Instagram, Pinterest, Tumblr and YouTube are also becoming important to companies, due to their high appeal for different audiences and uses (Kietzmann et al., 2011). In spite of the development of other SNS, Facebook still stands out as the social media of choice of businesses due to its massive audiences: According to Zuckerberg, (2004) by April 2015 there were forty million active small business pages on Facebook, and by August 2015, one in seven people on Earth used Facebook to connect with their friends and family.

Apparel and fashion accessories“ brands are among the most followed brands on Facebook, according to their number of fans Statista, (2013) (Figure 1). Moreover, they will constitute the fastest growing e-commerce product category in 2016, when they are expected to reach sales of \$73 billion and account for about 20% of all online purchases. Indeed, apparel retailers were among the first retail areas to use Facebook extensively to engage with their customers (Constantinides, Romero, & Boria Gómez, 2008). They have by now largely incorporated SNS into their marketing strategies, as this allows them to stay competitive in the challenging fashion industry and the constantly changing landscapes of traditional retailing and e-tailing.



**Figure 2- Most popular brand categories on Facebook as of August 2013, based on number of fans.**  
<http://www.statista.com/statistics/291942/most-popular-brand-categories-on-facebook/> Gathered from Statista 2015 (Accessed October 05, 2015)

## 1.1 Problem statement

Market segmentation aims at describing the different types of homogeneous groups that are present in a heterogeneous customer market, to aid in the design stage of a target marketing strategy (Wedel & Kamakura, 2012).

In spite of the obvious importance of Facebook in both consumers and B2C brands' activities, little is known about the segmentation of Facebook brand audiences and the relationship between Facebook engagement and the buying behaviour of consumers (Shao, Ross, & Grace, 2015). There is also a tendency to consider Facebook users as a single segment rather than understanding the nuances of different page user segments (Shao et al., 2015).

This makes it hard for marketers and brand managers to fully exploit the potential of Facebook audiences and monetize social media engagement. To address this, Facebook itself provides useful information for companies in the form of Facebook Insights. This is a way for companies to track their activities in their profiles and better understand the reactions, or lack of them, from their fans in their page.

According to Loomer, (2013), Facebook Insights represent a marketing tool not only to monitor the activities from and to the customers, but also to compare the company's performance in different moments in time. This encourages a benchmark process in the platform, so that companies can understand their position and current role and can adjust if necessary. Moreover, this tool gives companies a quick historic overview of their last five posts, including its date of publishing, type, reach rate and engagement rate, so that companies can understand, from that section in those specific dates, which posts generated better results. In addition, the "likes" section allows companies to understand the total number of likes over time, the type of likes they received, for example the paid likes different from the organic likes or the "unlikes", and finally, where the likes came from, the company's own page, shared posts, page suggestions, etc.

Facebook insights also helps companies to deeply understand a single post reach, it throws information related to the number of likes, number of times the post was shared, and the different comments it generated along with its content. It also determines the "unlike" rate of the post so it said the number of times it was marked as spam or it was hidden. On top of that, Facebook insight also reveals the general behaviour of users in the page, so it evaluates content interaction rather than single posts interactions. All this information can be easily filtered by reach rate, likes type and others so that companies can segment according to the interactions they generate. Another way for Facebook insights to give information is showing the average number of fans that are online, so it shows which day of the week and at what time they connect (Loomer, 2013).

In spite of Facebook's actions to provide companies with useful information to better assess their social media activities and performance, there are still remaining doubts regarding who is the person behind the interactions with the fan pages of the brand, companies can characterize the mass audience in terms of posts they like or unlike and time where they connect or how they prefer to receive the information; Firms can even break through some demographics such as gender, age and country of origin, but Facebook has not reach yet the point where fans can be segmented by variables that are not related with interactions within the platform Loomer (2013).

Consumers engage with Facebook posts for several reasons besides the post itself. This can be affected by someone's personality, their moment in life and many other individual

characteristics. Segmenting Facebook page users in terms of demographic and personality variables as well as online shopping patterns, will give companies the possibility to better identify and target customer segments within their social media audiences.

## **1.2 Aim**

The general aim of this dissertation is to identify and explore the existence of consumer segments based on individual Facebook behaviour, online shopping patterns and personal characteristics. To achieve this aim, two specific research questions will be answered:

Which types of Facebook and online shopping behaviour might constitute relevant and meaningful segmentation criteria for consumer brands?

How can such criteria be combined with demographic and psychographic variables to develop an effective segmentation approach?

## **1.3 Scope**

This dissertation focused on segmenting the users of the Facebook page of an established, middle-sized apparel retailer from Colombia, selling swimwear and sports wear both on- and offline. Their main focus is in Feminine apparel, but they have also recently created new product lines in men's and children wear and expanded to sport wear and accessories. The company started by selling to consumers through local bricks-and-mortar stores and later evolved to selling online internationally. It is currently present in 12 countries and hopes to expand to another 8 during 2016. The company and category were chosen as the student writing the dissertation has familiarity with them; she previously worked with the leader of this swimwear category for Colombia and one of the strongest competitors of this company, so she knows the market, the competitive environment, the industry and the customers in Colombia.

## **1.4 Research method**

An online, cross-sectional survey was performed to identify and profile segments of apparel consumers among a convenience sample of users of a branded Facebook page (n=233). A survey was chosen as method, as there was a need to collect primary data that could serve as a complement to Facebook Insights information. The survey was ideal to understand who the person behind the interaction was, and to what segment he/she might belong according to their personal behaviour, not only their interactions with the brand. The statistical technique employed to segment users and identify groups of homogeneous individuals was cluster analysis. This type of technique reveals the natural grouping within a big sample of people, so that different clusters of homogeneous individuals may be identified and profiled. Since some of the selected clustering variables were categorical, a two-step clustering technique was specifically employed.

## **1.5 Relevance**

This dissertation will help companies to have a deeper understanding of their customers in terms of their personal characteristics. Moreover, it will help communicating with each user knowing that he or she shows different behaviour according to their belonging to certain

group. If companies acknowledge customers as part of different groups that behave differently and express distinct characteristics, they can drive selling efforts and communication initiatives in a more customized way. By translating each segment's requirements into specific company actions to be taken, they will be able to target segments in a more effective way. Finally, this dissertation proposes an additional way to analyse the Facebook audience of a certain company, aside from the use of Facebook Insights. It presents a complementary analysis of the audience interactions with a company's Facebook page, with a characterization of several groups within that big audience that can be targeted and strategically reached through social media.

## **1.6 Dissertation Outline**

This dissertation is composed by five chapters; the first chapter shows the introduction, problem statement, aim, scope and relevance of the thesis. Furthermore, the second chapter reviews relevant literature regarding the research that has been made within the digital media tools particularly within the social network sites on segmentation of the audience in the apparel industry that operates online. Additionally, chapter three describes the methodology employed for the data collection and following analysis. Continuing, the fourth chapter reveals the main results of the study and answers the questions proposed in chapter one. Finally, chapter five exposes the limitations of this dissertation and gives recommendations for further research.

## **2. LITERATURE REVIEW**

### **2.1 Market segmentation**

Market segmentation aims at describing the different types of homogeneous groups that are present in a heterogeneous customer market, to aid in the design stage of a target marketing strategy (Wedel & Kamakura, 2012). In addition, consumer segmentation can be used to provide an understanding of each segment motives, characteristic and needs Swinyard, (1996). Ultimately, the purpose of customer segmentation is to gain a deeper understanding of the different type of individuals that a company is reaching, so that it can target them more effectively. Naturally, segmentation did not started within the social media channel; it took years of technology development before that to be able to segment internet users. At the beginning of the digital revolution, segmentation was not even present in the marketing agenda. Then, the focus was purely transactional and only later did relational marketing develop online (Sheth & Parvatiyar, 1995).

### **2.2 Market segmentation based on social media**

Nowadays, when a consumer is interested in a certain brand, he or she has the opportunity to approach it through the physical channels such as owned stores, the so-called “house of the brand”, or they can also go to the internet world. For example, it is very common observing people researching online to later purchase offline, this behaviour is not only for buying but also to get diverse information about brands and companies, such as their social and ethical behaviour, industry news, events and activities about the brand, to observe other followers or simple to have a general update.

Colombian consumers are not an exception. They do their brand research on the internet and social network sites the same way other people in different countries do. This country has one of the highest internet accessibility rates in Latin America: 44% of the Colombian homes had access in 2014 according to their former technology of information and telecommunications minister Diego Molano. He also disclosed that in recent years, nearly one million Colombian citizens learned how to use the internet (El Universal Cartagena, 2014).

According to Mintic.gov.co, (2015), Colombia is also one of the countries with more social media users of the Latin American region, SNSs such as Facebook and Twitter are the ones with highest popularity among Colombians: the country occupies the 14<sup>th</sup> position worldwide in terms of Facebook users, with more than 15 million accounts, while its capital Bogotá is the 9<sup>th</sup> world city, with a cipher close to 6.5 million users. It is also estimated that 6 million Colombians use Twitter and that it is the favourite communication tool for politic campaigns, politics, athletes, singers and others. This cipher places Colombia above the number of users of countries like France and Germany, attesting to the growing importance of social media in Colombian consumers’ lives.

Several studies have been conducted in order to find why consumers engage with social media in the first place and whether they can be segmented according to their social media usage patterns.

Hargittai (2007) looked at differences between groups of users and non-users of SNS, focusing on Facebook, MySpace, Xanga and Friendster, by applying a survey to 1060 college students. This study was conducted in 2007 in the University of Illinois which is a U.S. urban public research university. The results showed that there were, as expected, significant

differences in the social demographic characteristics of users, namely gender, ethnicity and parents' educational background. Some trends were notable and particularly on Facebook it was found that regarding race and ethnicity, the most pronounced findings concern students of Hispanic and Asian origin. Hispanic students are significantly less likely to use Facebook (60% compared to 75% or more for other groups), whereas they are much more likely than others to use MySpace (73% among Hispanic students compared to 58% or less among all others).

In contrast, like White students, Asian and Asian American students are much more likely to use Facebook than others, but they are significantly less likely to use MySpace. There are also significant differences according to parents' level of education. The most pronounced finding is that students whose parents have less than a high school degree are significantly less likely to be on Facebook and are significantly more likely to be MySpace users. In contrast, those who have at least one parent with a college education are significantly more likely to be Facebook users, while those who have at least one parent with a graduate degree are considerably less likely to spend time on MySpace (Hargittai 2007).

Alarcón del Amo, Romero Lorenzo, & Gómez Borja, (2011) have employed a latent class analysis to classify and profile SNS users based on the frequency by which they performed different SNS activities, as well as their socio-demographic variables, experience in SNSs and dimensions related to their interaction patterns. These authors sampled a group of internet users between 16 and 74 years old, during March and April of 2009, obtaining a final sample of 399 respondents. They employed probabilistic quota sampling method; the population of internet users was obtained from different secondary and public data sources. The studies named "Fgroup" to the more occasional types of users, accessing SNSs mainly to communicate with friends. Later, "introverts" were the most passive users. Meanwhile, "versatile" users performed different activities on SNS, although only occasionally. Finally, the "expert-communicator" performed a greater variety of activities with a higher frequency. These also tended to perform some marketing-related activities such as commenting on ads or gathering brand information.

Other studies have focused on more specific audiences and/or media. Shao and colleagues (2015) developed a segmentation typology of Facebook users based on motivational variables to engage with this platform, as well as demographic characteristics. They administered an online survey to several members of three universities in Australia, with the aim of uncovering motives to access as well as frequency and length of Facebook access.

The survey was emailed to 2129 potential respondents and gathered 530 valid answers. These were analysed with two-step hierarchical clustering and ANOVA. Results showed four types of segments of Facebook users: "Devotees", "Agnostics", "Socializers" and "Finders". Devotees were highly positive about Facebook use, while Agnostics were least motivated to use it. Meanwhile, Socializers were motivated to use Facebook for socializing and entertainment, while Finders were motivated to use it for information seeking. These four distinct groups were further validated by examining their individual behaviour regarding frequency of access to Facebook and the average amount of time spent on Facebook per visit. Demographic variables such as gender and age were found to be significantly related to Facebook user-motivation and segmentation. There was found that females were significantly highly motivated by entertainment and information needs, more than males. Additionally, individuals below 30 were significantly more highly motivated by socializing, entertainment and status seeking than individuals above 30 (Shao et al., 2015).

Constantinides & Zinck Stagno (2011) segmented the higher education market in the Netherlands based on secondary data (national statistics) and an online survey administered to a sample of a panel of 120.000 members. The survey was carried out in the spring of 2010 and yielded 400 valid. It assessed the respondents' level of social media usage and examined the impact of social media on the choice of a higher educational program and institution of prospect students,

These authors were able to identify three distinct segments: "Beginners", "Social Users" and "Informational Users". Beginners showed a low usage of social media, limited to low levels of entertaining and social activities, whereas social users used social media as their main source of entertainment and social activities. Nevertheless, social users were characterized as passive users, as their preferred information exchanging activities were the sharing of pictures and videos. Finally, informational users resemble social users in terms of their entertainment and social activities, but were much more engaged in information seeking activities. (Constantinides & Zinck Stagno, 2011).

Finally, Foster, West and Francescucci (2011) studied social media user segmentation and its impact on the development and management of social media branded pages. They administered a survey to young social media users in Canada (18-30 years old; n=2471), to uncover meaningful groups based on use of and participation in social media. They also inquired these users about which companies did the best job of connecting with them using social media technology, and what characteristics in particular were making them successful. Four clusters were identified, based on respondents' need to find information on social media as well as their likelihood to engage with brands on them: "SMT Mavens", "Minimally Involved", "Info Seekers" and "Socializers". Members of the SMT Maven group scored high both on information needs and active participation in social media. In contrast, the Minimally Involved were less likely to participate in online activities compared to the other three groups. Meanwhile, Info Seekers were more likely than Socializers to be involved in more passive, information-search types of online activities, such as reading the comments of others, whereas the Socializers were higher than Info Seekers when it came to more active social endeavours, such as posting comments on the social network pages of others. However, they remain fairly passive when it came to posting content of an informational nature.

Studies of consumer segmentation according to their social media usage show that the main clusters of each research have significant differences in terms of socio-demographic variables such as gender and age. Moreover, the education level and occupation as well as socio-economic position seem to influence the creation of a segmentation of social media users. The frequency of usage as well as the motivation to use SNS as a research tool also dictates strong clustering possibilities. However, these studies did not take the activities of users of branded Facebook page, particularly those of brand customers (off- and/or online), into account as segmentation criteria.

### **2.3 Market segmentation based on Facebook page usage**

SNS communities are constantly changing and evolving. They form a very heterogenic marketing group in terms of socio-demographic characteristics, motivations, interests, responses to marketing and buying behaviour (Perrin, 2015). From a marketing perspective, to treat them as similar current or prospect customers of a brand is likely to be highly ineffective as well as a waste of marketing efforts.

Segmentation of a company's social media audience is important because in that way a firm can create customized advertising and information, which in turn can be delivered to the specific segments accordingly to the way they interact with the SNS. For instance, a user who is highly involved with a branded SNS and is also an active online shopper is expected to react differently to the brand's advertising than a less engaged SNS site user who is not a loyal brand customer. By understanding when, why and how these different segments access SNS, companies can therefore plan and accurately communicate with them. (Perrin, 2015).

Facebook is a worldwide platform, therefore it is a very diverse business with obvious segmentation opportunities, it could be expected that great knowledge have been achieved about the various groups within the massive audience. In spite of that, little is known about the segmentation of Facebook brand audiences and the relationship between Facebook page engagement and the buying behaviour of consumers (online or offline). There is also a tendency to consider Facebook users as a single segment rather than understanding the nuances of different page user segments (Shao et al., 2015). This makes it hard for marketers and brand managers to fully exploit the potential of Facebook audiences and monetize social media engagement.

## **2.4 The apparel industry and social media usage**

According to Reynolds (1968), Fashion is essentially a public statement of personality and lifestyle which is known to be well spread through network effects (Easley & Kleinberg, 2010). Social media is thus becoming the natural stage for developments in both fashion markets and the fashion industry to unfold. These media are valuable not only to fashion users or spectators, but ultimately to fashion brands wanting to engage customers. Hence, the primary goal of their social media marketing strategies, namely segmentation or targeting, should be to attract and retain customers. In this industry, social media must be not only a tool to stay connected with the public, but above all a means to achieve strategic business goals and profitability (Weber, 2009).

Apparel is a high involvement category for many consumer segments, mainly due to its self-expression and symbolic value Goldsmith & Emmert (1991). The clothes we wear represent our vision, our ambitions, how we adopt and understand fashion and how we want to be interpreted by others (Lipovetsky, 2004). Additionally, apparel is also often endowed with hedonic benefits by marketing activities. All of this explains why the apparel category is considered as one of the major products of the fashion industry. It also helps explain why online sales of this category are fast growing and how these are fuelled by consumers' interactions with brands and each other on social media.

Research conducted in the UK has shown that fashion brands are among those that have learned to use Facebook the best to drive traffic to their websites and generate sales Webpronews.com (2011). However, a recent study has shown that there is still ample room for improvement in the social media strategy of fashion brands. Segmenting Facebook page users according to their social media activities should yield important contributions to these improvements and increase opportunities to drive traffic to the brands' online stores.

Colombian consumers spent about 6.6% of their 2013 income on the fashion industry, specifically on clothing and footwear (Strijbos, 2014). This positioned the sector as the 6<sup>th</sup> most successful in Colombia, after food, housing, transport, restaurants and hotels and miscellaneous goods and services. According to Inexmoda, the organization for the fashion sector in Colombia, this country went from the 5<sup>th</sup> to the 3<sup>rd</sup> economic position in Latin

America between 2005 and 2013. In the same period, the total trade (importation and exportations) grew from US\$42.395M to US\$118.219M and foreign direct investment from US\$13.405 to US\$16.770; in the textile and apparel industry, imports ascended from US\$915M to US\$2.316M. More importantly, Colombia's middle-class consumers grew from 15% to 30% of the total population and internet penetration increased from 2.21% to 51.7%.

Meanwhile, purchase of clothing items grew from 7.18 to 14.79 garments and per capita apparel expenditure increased from 136.897 to 241.969 Colombian pesos.

Furthermore, 4.2% of the global household expenditure is devoted to fashion while 6.1% refers to Latin-American households and finally in Colombia, the number is close to 4%. Lastly, during the last 14 years (2014-2000), the global percapita fashion expenditure grew 79% while it expanded 121% for Latin-American and 126% for Colombia. (Annex 1).

A 2014 report from the company that carries out 80% of Colombia's online transactions, payU, revealed that the categories most sold online in this country are airline tickets, hotels, electronics and apparel and shoes. Regarding online payment methods, the most frequent are credit cards (55%), physical payment in authorized points of payments (34%) and debit cards (11%). A survey carried out by Mercadolibre.com and Oh!Panel with 2867 Colombian women (older than 16 years) in 2012 revealed that these buy mostly electronics, apparel and accessories, and traveling services online. Their main motivations for online purchases are saving time and finding better priced and more varied offers. (El Tiempo 2015).

## **2.5 Conclusions**

Every day, consumers experience how firms aggressively and actively engage with them in social media, with activities at a whole new level of involvement and responses quicker than ever before. Nevertheless, at the time of studying the company's social media interaction, the analysis monitors what kind of information the consumer generates but it has not reach a stage where the industry analyses who is the customer behind an interaction with the brand and to which segment it belongs.

Although the studies present in the literature review, attempt to cluster samples where distinct variables such as gender, age, education level, occupation, frequency of SNSs usage as well as motivations, revealed various conglomerates, they just focused on general social media usage access and patterns, which do not yield very relevant information to brands looking to improve their level of engagement and conversion through social media, that is, their social media strategy and tactics.

These studies also focused in sectors other than the fashion industry and often employed secondary, national statistics data, rather than primary data generated by consumers. Importantly, they mostly date from 2011 or earlier and hence might not be update with current developments in social media usage.

To conclude, it seems that both firms and academic researchers are well aware of the latent information that SNS can bring about customers. Nevertheless, there is no sufficient research on which are the segments that generate these interaction through social media and more importantly there is no an approach where a certain company's audience is segmented. As curious as it might seem, no studies have been conducted on behalf of any particular brand, this fact ignites this research in order to segment a specific company/brand Facebook audience. Finally, as expressed in chapter two, the fashion industry is one of the most purchased in Colombia, both online and offline, moreover, the online industry is rapidly and

steadily growing towards a robust amount of online transactions in which the apparel is one of the relevant categories. The middle class in growing, the country is nowadays the third economy of the region, the internet penetration has grown around 50% and the apparel industry percapita expenditure for 2013, revealed an impressive cipher of 241.969 Colombian pesos. This information exposes the importance of the industry in the country and the potential of the online channel.

According to the information available from previous studies and the country's particular industry and customers, it could be expected that the variables that are significant at the time of configuring various clusters, are those related to Facebook usage and motivations as well as the several psycho-demographics characteristics that can be observed along the groups.

Hargittai, (2007) exposed that the people with parents with higher education levels (college) are up to be us Social Media platform users, in this dissertation is expected that the higher the education level of the individual, the higher the level of involvement and usage of these platforms.

Foster, West and Francescucci (2011) studied the levels of usage arriving to the conclusion of four clusters according to the likelihood to engage with certain type of information, it is expected that another interesting variable for segmentation is therefore the type of information they share and gather in order to understand their motivations.

As this dissertation is willing to understand the online customers at the apparel industry, the variables that are expected to be taken into account to form the conglomerates are frequency of buying apparel online, and whether or not the respondents had bought the brand online.

The shopping behaviour will be the measure for the clusters to segment the current and potential female customers of the brand that are either following the brand page on Facebook or have friends that do that. Later, it will be the goal of the dissertation to analyse the arousing clusters in what respects to their Facebook use and motives in general, and their use and motives of Facebook page of the brand in particular.

Knowing these differences should help the company to better understand how to use Facebook, to target specifically each of these 4 different types of current customers and prospect customers with Facebook campaigns.

# METHODOLOGY

This chapter presents the methodology used in the data collection and analysis, with the purpose of answering the proposed research questions.

## 3.1 Research Approach

Three main approaches can be undertaken to perform a research project in business studies: exploratory, descriptive and explanatory (Saunders, Lewis, & Thornhill, 2009). Exploratory research appeals to the discovery of new insights, finding out “what is happening” and understanding phenomena with a new approach. It is mainly conducted by reviewing existent literature, interviewing experts or moderating focus groups, that is, by conducting documental and/or qualitative research. Descriptive research, on the hand, aims at describing existing phenomena in a clearer and more comprehensive way. It is hence often performed through compilation and analyses of quantitative (primary or secondary) data about the phenomenon, for instance through census or survey research. Finally, explanatory research seeks to understand the relationship between variables in a problem or, in other words, to establish the causal relationship between variables. It utilizes tools such as experiments and quantitative data analysis.

As expressed in chapter one, the focus of this dissertation is to characterise the Facebook audience of a particular brand in order to discover the possible arousing segments. To achieve this goal, the dissertation was developed under the descriptive research approach with primary data as the main source of information.

## 3.2 Research Method

Surveys are a popular and common strategy in business and management descriptive research, being most frequently used to answer questions about the phenomena like “who?”, “what?”, “where?”, “how much?” or “how many?” (Saunders et al., 2009). Surveys allow the collection of a large amount of data from a sizeable population in a highly economical way. Information is often obtained by using a questionnaire administered to a sample.

In the present dissertation, an online questionnaire targeting Facebook page users of an apparel retailer was undertaken (Annex 1). Its objectives were to assess their social media and online buying behaviour, as well their underlying motivations, and identify distinct groups of consumers accordingly.

## 3.3 Questionnaire design

The first part of the questionnaire contained questions about the socio-demographic characteristics of respondents, namely their age, gender, nationality, education level and occupation. Given that the main objective of this dissertation was to relate branded Facebook page activity with online shopping behaviour, the following question inquired about the respondents’ access to credit card usage. This effectively screened out respondents without the possibility to conduct online shopping.

The second part of the questionnaire included questions about the general Facebook and the branded Facebook page activities of respondents, as well as the corresponding motivations. It included such as frequency of Facebook usage, motives to use Facebook, which type of content was more often checked or shared, how often they interacted with the branded page, how and to what end.

The third part of the questionnaire inquired respondents about their online shopping behaviour, in general and specifically about the brand in question. It included questions about frequency of online purchasing, frequency of website visits driven by the Facebook profile, categories of online shopping and apparel purchasing habits. Given that the main objective of this dissertation was to relate branded Facebook page activity with online shopping behaviour, subsequent answers of respondents declaring never to shop online, or never to shop apparel online, were excluded at this point.

The fourth and final part of the survey encompassed three psychometric scales, which measured variables deemed relevant to characterize Facebook user segments in terms of main shopping motivations. Answers to all scale items were measured on 6-item, Likert-type scales, to avoid online survey respondents' effort-saving tendency to tick answers on the mid-point (Industries & Kodan, 1997).

The first psychometric scale measured fashion leadership, as developed and validated by previous authors (Goldsmith, Freiden, & Kilsheimer, 1993). This fashion leadership scale helps to identify opinion leaders in fashion markets. Fashion leaders learn about fashion trends earlier than the average buyer and they purchase new fashion items soon after they are introduced into the market. Fashion leaders are also more open to the excitement of buying new fashion and enjoy the fashion buying process because of the excitement. Finally, they play a key role in the diffusion of fashion information to other consumers. It was interesting to use this scale as fashion leadership characteristics are related to the apparel category, since this is one of the industries where fashion trends develop with more frequency and variety. An individual presenting fashion leadership characteristics could be expected to show a rather active behaviour on Facebook, as well as a frequent online shopping activity.

The second psychometric scale applied was the Exploratory Buying Behaviour Scale (Baumgartner, Hans, and Jan-Benedict E. M. Steenkamp. 1996). This measures people's disposition to engage in exploratory acquisition of products. It also reflects their tendency to seek sensory stimulation in product purchase through risky and innovative product choices, and varied and changing purchase/consumption experiences. This scale is relevant for the dissertations, as it is intended to segment users according to their online shopping behaviour, Facebook behaviour and socio-demographic characteristics. Therefore, asking the respondents for their level of exploratory acquisition of products will complement the shopping behaviour profile of the clusters and will also inquiry the respondents on a shopping experience very related to the online channel.

The third and last psychometric instrument included in the questionnaire was the Consumer Susceptibility to Interpersonal Influence scale (Bearden, W. O., Netemeyer, R. G., & Teel, J. E. 1989). This scale assesses individuals' need to identify with or enhance one's image in the opinion of significant others, through the acquisition and use of products and brands. It also measures their willingness to conform to the expectations of others regarding purchase decisions and/or the tendency to learn about products and services by observing others or seeking information from others.

This scale was thought to be relevant for the dissertation as SNS are in nature, platforms to share, interact and connect with others. Therefore, understanding how susceptible the individuals are to third parts opinions, advices, comments and information should help determine how moved and affected these people are by information received and sent in SNS. It should also help determine the level by which they give importance to other people shopping experience in order to have their own.

### **3.4 Population, sampling and data collection**

Given the main objective of this dissertation and the research questions it intended to answer - as well as the essentially descriptive research approach undertaken and feasibility considerations -, the population of interest was defined as the Facebook page users of a Colombian apparel retailer who were prospect customers of the brand's online store, as of the last trimester of 2015.

This retailer specialised in women apparel, particularly swimwear, sportswear and accessories. It has been operating for around 12 years in Colombia and 5 years abroad and currently owns 45% of the market share of swimwear in the Colombian market. Its main consumer target is affluent women between 25 and 40 years old, with a high income and high acquisition power and thus the possibility to buy luxury goods. These women are fashion conscious, modern, technology habilitated, educated, and feminine and do not mind spending money on fashion items for status and hedonic reasons. The size of this population was estimates to be about 30.000 users.

A convenience sample of users was gathered among the population to answer the survey by posting a link to the survey (hosted by Qualtrics) in the Facebook page and offering the chance to participate in raffle for a gift upon survey completion (Annex 3). This was undertaken between the 5<sup>th</sup> and the 15<sup>th</sup> of December of 2015. Appropriate measures were put in place to guarantee that each population member could complete the survey just once (to obtain a truly cross-sectional data set). Respondents could opt to answer the questionnaire in English or Spanish, as versions in each language were made available.

### **3.5 Data analysis**

A sample of 274 started surveys was obtained, with 254 being completed in Spanish and only 20 in English. No marked differences were found between the answers of these two groups; their answers were thus merged into a unique dataset. From these, eleven surveys were terminated at the first section, given that respondents declared not to own or have access to a credit card. Nine were moreover finished at the start of the second section, since the respondents declared never to shop online; another 20 ended at the end of the second section, given that respondents declared never to buy apparel online.

The socio-demographic characteristics of this 40 respondents excluded were not markedly different from the remaining (Annex 2). A preliminary exploration of survey answers led to the elimination of an additional twenty surveys, primarily of respondents that in one or more sections of the survey gave repeated ratings or scores to several questions. Moreover, there were 24 men respondents that were also eliminated in order to assess a homogeneous sample of women. Additionally, one response was eliminated as it was not within the valid age. Finally, a valid sample of 211 surveys was hence obtained and underwent further statistical analysis.

Answers about the socio-demographic characteristics of respondents, as well as their general and brand-specific Facebook activities and shopping behaviour, were first summarised using the appropriate descriptive statistics. Next, answers to the psychometric scale items included in the questionnaire underwent exploratory factor analysis and reliability analysis to validate scale unidimensionality and screen out misperforming scale items (Hair, 2010).

Subsequently, a two-step clustering procedure was undertaken to identify groups of respondents with distinct patterns of shopping behaviour using specifically two variables, frequency of buying apparel online, and whether or not the respondents had bought the brand online.

The shopping behaviour will be the measure for the clusters to segment the current and potential female customers of the brand that are either following the brand page on Facebook or have friends that do that. Later, it will be the goal of the dissertation to analyse the arising clusters in what respects to their Facebook use and motives in general, and their use and motives of Facebook page of the brand in particular.

Hierarchical clustering is one of the most widely used clustering techniques, creating clusters by grouping elements together accordingly to their similarity, without a pre-defined number of clusters. On the contrary, the non-hierarchic methods develop the clusters according to a previous number of groups assigned by the researcher. Two-step clustering procedures, on the other hand, create the conglomerates first through a previous running of the groups, to later analyse them by hierarchical methods. It combines thus the best attributes of the other two approaches and, importantly, it can also accommodate both categorical and continuous variables in the same analysis. Lastly, significant differences in socio-demographic, psychographic and online shopping habits between clusters were investigated using inference testing – ANOVA with post-hoc analyses ( $p < .05$ ) or equivalent non-parametric tests, when applicable (Hair, 2010).

Not all behavioural questions intended at started could be used to try to identify clusters among respondents. For instance, answers to the question about how often respondents accessed Facebook revealed that the vast majority of them accessed this SNS daily. Therefore, this and questions with a similar distribution of answers could hardly be used to identify groups of users with distinct patterns of behaviour. The questions that were included regarded frequency of buying apparel online, and whether or not the respondents had bought the brand online. Regarding Facebook questions, the questions that were relevant included Facebook type of content they share and review, Facebook usage motivation, Frequency of website visits driven by a Facebook profile and Motivation to visit the company's profile in Facebook.

## 4. RESULTS AND DISCUSSION

### 4.1 Socio-demographic characteristics

Table 1 shows the socio-demographic characteristics of the respondent sample (see also ANNEX 4). The majority were Colombian women, aged between 18 and 30 years old, with a formal job and a college education. This socio-demographic profile is well aligned with the main target of the company, which are women between 25 and 45 years old of high purchasing power and life standards.

**Table 1- Socio-demographic characteristics of questionnaire respondents (n=211).**

<i>Nationality</i>	<i>Colombian</i>	<i>78%</i>
	<i>Other</i>	<i>22%</i>
<i>Age</i>	<i>18 to 25 years</i>	<i>38%</i>
	<i>26 to 30 years</i>	<i>39%</i>
<i>Occupation</i>	<i>Student</i>	<i>31%</i>
	<i>Employeeed</i>	<i>59%</i>
<i>Education</i>	<i>College</i>	<i>84%</i>

### 4.2 Facebook use

Table 2 depicts the patterns of Facebook use and activities of survey respondents (see also Annex 4). The majority of respondents accessed Facebook several times per day, primarily to keep in touch with family and friends and access/share visual, unbranded content. However, roughly a quarter of respondents accessed Facebook for other reasons, namely to follow brands, opinion leaders or celebrities and access/share branded content (essentially promotional discounts). Finally, 44% of respondents declared to always visit a company's website driven by its Facebook profile, whereas 24% of them declared to rarely or never do that. Regarding the apparel retailer's Facebook page, most of the respondents declared to visit it to learn about the brand's new collections, get up to date with brand news and events and learn about sales and discounts.

**Table 2- Facebook use and activities of questionnaire respondents (n=211).**

<i>Frequency of website visits driven by a Facebook profile</i>	<i>Always</i>	44%
	<i>Rarely</i>	19%
	<i>Never</i>	5%
<i>Facebook content reviewed</i>	<i>News, Newsfeed, Articles</i>	14%
	<i>Pictures, Images, Videos</i>	55%
	<i>Coupons &amp; Discounts</i>	31%
<i>Facebook content shared</i>	<i>News, Newsfeed, Articles</i>	29%
	<i>Pictures, Images, Videos</i>	46%
	<i>Coupons &amp; Discounts</i>	25%
<i>Facebook main use</i>	<i>To keep in touch with friends and family</i>	63%
	<i>To follow my favorite leaders, brands and celebrities</i>	19%
	<i>To discover new things</i>	12%
<i>Motivation to visit the company's profile in Facebook</i>	<i>To find out about new collections</i>	34%
	<i>To get updates about news and events of the</i>	21%
	<i>To see discounts and promotions</i>	21%
	<i>To find out about trends and fashion</i>	17%
<i>Facebook frequency of usage</i>	<i>Several times a day</i>	85%

Respondents provided as primarily reason to use Facebook the desire to communicate with friends and family. There were thus clear similarities between these results and those related to a previously identified cluster of Facebook users, the “introverts” (Alarcón del Amo et al., 2011). This group is characterized for having a more occasional use of Facebook, almost always with the aim of communicating with friends and family. Moreover, about 19% of respondents declared following brands, celebrities and others as their main motivation to access Facebook. This group is then more similar to the “expert communicators” (Alarcón del Amo et al., 2011), as they are exposed to/generate an important amount of marketing information by frequently carrying out such Facebook activities and commenting on advertising and brand-related content. Another group of consumers with similar

characteristics are the “socializers” (Shao et al., 2015), whom are highly motivated to socialize in Facebook and carry out entertainment activities.

Results also showed that the main motivations to access the brand page on Facebook were to learn about new collections, get up to date information about news and events and finally find out about discounts and sales. The brand’s current social media strategy is well-aligned with this, as they constantly use Facebook to showcase new collections and products, store openings and other brand-related news. Nevertheless, it was a surprise that users were expecting to find more about sales and discounts as historically the brand has never displayed this kind of information on social media and as it is a luxury brand considered as of high income customers, the fact that they expect discounts and sales exposes the industry trend of constantly expose the customer to promotions and discounts disregarding the type of business affecting the producers and benefiting the final customers.

**4.3 Online shopping behaviour**

Table 3 shows the main characteristics of respondents’ online shopping behaviour (see also Annex 4). Apparel and fashion accessories were the product category most often bought online by over 88% of respondents. Nevertheless, marked differences were observed in online shopping habits. Half of the respondents declared to shop online rather infrequently (2-4 times per year), whereas 33% of those declared to buy something online on a weekly basis, and 17% on a monthly basis. Similarly, nearly 55% declared to buy apparel online rather infrequently (2-4 times per year), while 30% declared to this on a weekly basis, and 15% on a monthly basis. Finally, more than half of the sample declared to have purchased apparel online from the company’s brand at least once.

**Table 3- Main characteristics of respondents’ online shopping behaviour (n=211).**

<i>Frequency Online shopping</i>	<i>2 to 4 times a year</i>	<i>50%</i>
	<i>Once a month</i>	<i>17%</i>
	<i>Once or twice a week</i>	<i>33%</i>
<i>Most purchased category</i>	<i>Apparel and accessories</i>	<i>88%</i>
<i>Frequency Apparel shopping</i>	<i>2 to 4 times a year</i>	<i>55%</i>
	<i>Once a month</i>	<i>15%</i>
	<i>Once or twice a week</i>	<i>30%</i>
<i>Specific brand online purchase</i>	<i>Yes, i have purchased the brand</i>	<i>57%</i>
	<i>No, i have not purchased the brand</i>	<i>43%</i>

E-commerce has been present in people’s lives for more than 15 years. It started with companies like Ebay and Amazon, some of the first online sellers, to later expand to small start-ups. Some brands became tremendously successful thanks to online sales, like Teespring in the United states, a company that in 2013 claimed that 1 in 75 Americans has a t-shirt made by them (Forbes.com, 2014).

Despite its impressive global expansion, online shopping in still in a growing phase in Colombia, the global forecasted revenues in the "Clothes & accessories" segment should amount to mUSD 223,851 in 2016 (Statista, 2016). In Colombia, according to (Güesguán Serpa, 2015), the electronic commerce chamber said that their channel will represent 4% of

the GDP for 2015. In a country where e-commerce is relatively new in comparison to United States or Europe, the 60% of the internet transactions represented by credit cards in 2013 exposes the evolution of the channel and the country.

This constant evolution is observed by half of the sample having bought the brand online, moreover, 88% of the sample recognizes apparel and accessories as their most purchased category, this shows coherence with the Colombian women preference for this category at the time of making online purchases. Still, a 50% declared that they buy apparel on the internet 2 to 4 times a year; this reveals the still growing phase where online shopping is in the country but also reflects the growing importance of the channel as for example 30% of the sample declared they make weekly purchases online.

#### **4.4 Psychometric variables**

Table 4 shows the results of the factor and reliability analysis of the items of the three scales included in the questionnaire (see also Annex 5). All scales showed very good unidimensionality and reliability (as assessed by Cronbach's alfa), after elimination of items with factor loadings lower than 0.80 (Hair et al., 2009). Means of final summed scales indicate that, on average, respondents scored moderately to high on fashion leadership and exploratory buying behaviour, as well as moderately to low on susceptibility to interpersonal influence.

**Table 4- Results of the factor and reliability analysis of the items of the three scales included in the questionnaire.**

<i>SCALES</i>	#	<i>FACTOR ANALYSIS</i>	
<i>Fashion leadership (Goldsmith, Freiden, and Kilsheimer 1993)</i> Cronbach Alfa for 4 items = 0,870 Mean= 16.32 +-4.53	1	<i>I am aware of fashion trends and want to be one of the first to try them.</i>	0,871
	2	<i>I am the first to try new fashion; therefore, many people regard me as being a fashion leader.</i>	0,774
	3	<i>It is important for me to be a fashion leader.</i>	0,882
	4	<i>I am confident in my ability to recognize fashion trends.</i>	0,856
	5	<i>Clothes are one of the most important ways I have of expressing my individuality.</i>	<b>0,604</b>
	6	<i>I don't spend a lot of time on fashion-related activities</i>	<b>0,679</b>
<i>Interpersonal influence (Bearden, Netemeyer, and Teel 1989)</i> Cronbach Alfa for 11 items = 0,965 Mean= 40.6 +-17.2	1	<i>If I want to be like someone, I often try to buy the same clothes that they buy.</i>	0,893
	2	<i>It is important that others like the clothes I buy.</i>	0,856
	3	<i>I rarely purchase the latest fashion styles until I am sure my friends approve of them.</i>	0,842
	4	<i>I often identify with other people by purchasing the same clothes they purchase.</i>	0,893
	5	<i>When buying clothes, I generally purchase those brands that I think others will approve of.</i>	0,843
	6	<i>I like to know what apparel brands make good impressions on others.</i>	<b>0,637</b>
	7	<i>I achieve a sense of belonging by purchasing the same clothes that others purchase.</i>	0,929
	8	<i>If other people can see me using a brand of clothes, I often purchase the brand they expect me to buy.</i>	0,886
	9	<i>I normally get good advice from my friends about which clothes to buy</i>	<b>0,720</b>
	10	<i>I frequently gather information from friends or family about clothes before I buy.</i>	0,903
	11	<i>To be sure of buying the adequate clothes i normally observe what other buy and use.</i>	0,898
	12	<i>If I do not have much experience about certain clothes, I rather ask friends about it.</i>	0,815
	13	<i>I frequently ask friends and family about clothes before buying them.</i>	0,844
	14	<i>I spend a lot of time talking with my friends about clothing and fashions.</i>	<b>0,772</b>
<i>Exploratory Buying behavior (Baumgartner and Steenkamp 1996)</i> Cronbach Alfa for 8 items = 0,970 Mean= 29.91 +-9.02	1	<i>Even though certain food products are available in a number of different flavors, I tend to buy the same flavors.</i>	0,863
	2	<i>I would rather stick with a brand I usually buy than try something I am not very sure of.</i>	0,922
	3	<i>I think of myself as a brand-loyal consumer.</i>	0,869
	4	<i>When I see a new brand on the internet, I'm not afraid of giving it a try.</i>	<b>0,707</b>
	5	<i>When I go to a restaurant, I feel it is safer to order dishes I am familiar with.</i>	0,780
	6	<i>If I like a brand, I rarely switch from it just to try something different.</i>	<b>0,761</b>
	7	<i>I am very cautious in trying new or different products.</i>	0,778
	8	<i>I enjoy taking chances in buying unfamiliar brands just to get some variety in my purchases.</i>	<b>0,450</b>
	9	<i>I rarely buy brands about which I am uncertain how well they perform.</i>	0,817
	10	<i>I usually eat the same kind of foods on a regular basis.</i>	0,887

According to the company's perception and information about their consumers, they know them as highly fashion leader women with moderate exploratory buying behaviour and moderate susceptibility to the interpersonal influence. It means that they are women highly aware of trends and fashion with willingness to try and explore new things at the time of buying but with a moderate susceptibility to others opinions towards their dressing and shopping habits. In general, it is a consumer moderate to high in the 3 psychographics variables analysed in the dissertation.

Complementary to the company's consumer profile, the Colombian fashion consumer and more general the Latin culture is characterized by people very interested in looking good, in beauty and fashion. Latin America is a culture full of artists (Malaver Rojas, Rivera Rodriguez, Sierra Posada, & Cardona Madariaga, 2014). Consequently, it is a consumer with willingness to explore and share, to engage with new trends and to adopt fashion at an accelerated rhythm.

The sample showed behaviour moderate to high on fashion leadership, moderate to high on exploratory buying behaviour and moderate to low on susceptibility to interpersonal influence. These results are aligned not only with the company's profile but also with the Colombian consumer general perception.

Nevertheless, it is important to highlight that the sample exposed moderate to low susceptibility to interpersonal influence, a trait that was supposedly moderate to high according to the company's perspective. This discrepancy could be due to the lack of updates in the client's information of the company as consumer profile constantly changes and evolves. It can also be explained as consumers continuously gain information about trend and fashion, they are hipper-connected in a world where thanks to the so much mentioned in this dissertation, social media platforms and tools, everyone have the same access to information and therefore stop relying so much on others and start forming stronger personal criteria.

#### **4.5 Cluster analysis**

Results of the two-step cluster analysis and quality of the cluster solution found.

The cluster was exercised with two variables, frequency of online apparel shopping and whether the individual has bought the brand before or not. Four clusters were identified with a satisfactory measure of cohesion/separation and ratio of size of large to small cluster (lower than 3.0) (Hair et al., 2009). There was an outlier cluster of 12 people that was not taken into account for further clusters analysis so the final sample for the clusters is 199 respondents.

Cluster 1 n=61. (C1-31%), Cluster 2 n=65. (C2-33%), Cluster 3 n=23. (C3- 12%), Cluster 4 n=50. (C4-25%). Table 5 lists the questions used to cluster respondents and the differences in answers found across clusters.

The age mean differences test revealed that there are differences between the clusters (See annex 9).

**Table 5- Questions used to cluster respondents and differences in answers across clusters (n=199)**

<i>Conglomeration variables (Most frequent category)</i>	<i>Cluster</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<b><i>Frequency Apparel shopping</i></b>	<i>1 to twice a week</i>	<i>2 to 4 times a year</i>	<i>Once a month</i>	<i>2 to 4 times a year</i>
<b><i>Purchased the brand online in the past</i></b>	<i>yes</i>	<i>no</i>	<i>no</i>	<i>yes</i>

According to these conglomerates, C1 buys apparel online 1-2 times per week and has bought the brand online. They are high category purchasers and brand customers (Loyal to the brand).

C2 is the larger one; they buy apparel online 2-4 per year and have never bought the brand online. They are low category purchasers and non-customers.

Following is C3 who buys apparel online once a month and never bought the brand online. They are medium category purchasers and non-customers.

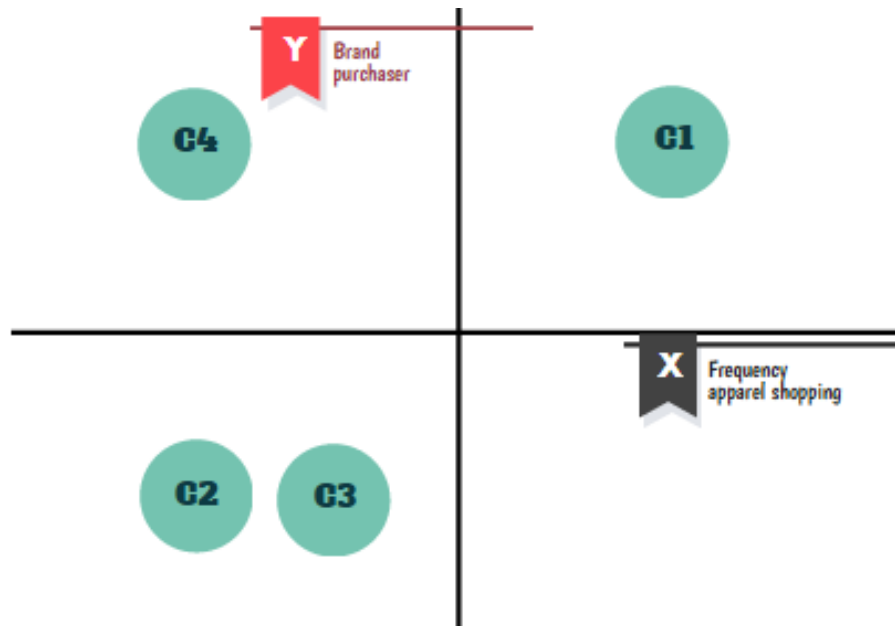
Finally, C4 buys apparel online 2-4 per year & have bought the brand online. They are low category purchasers and brand customers.

Figure 2 expresses graphically the position of four clusters regarding the two variables used in the clusters creation. C2 is the less desirable cluster for the company as they are non-customers with a rather infrequently category purchases behaviour. Contrary, the other 3 clusters C1, C3 and C4 represent opportunities for the company at the time of best target them through Facebook.

C1 is the one with more frequency in apparel online purchases and is also the one with brand customers, therefore, is the cluster that the company could target easily through Facebook as they have bought in the past and are frequent buyers.

Following is C3 which even though they buy in a rather frequent way, they have not bought from the brand, they are buying online so is an excellent opportunity to convert them into brand customers.

Finally is C4 which buy much less frequently that C1 and C3 and even though they have bought the brand online, it is a very sporadic purchase, therefore, the strategy with this cluster is to augment their purchase frequency.



**Figure 2- position of the clusters regarding frequency of apparel shopping and brand purchases. (N=199)**

Later, table 6 shows the profile of the four clusters in terms of socio-demographic variables and table 7 shows the profiles in terms of Facebook behavioural variables. Some variables were excluded as the vast majority of the sample felt into some category in particular. 195 respondents reported to have a college education and 196 visits Facebook more than one time per day. Consequently, these variables were not included in the analysis.

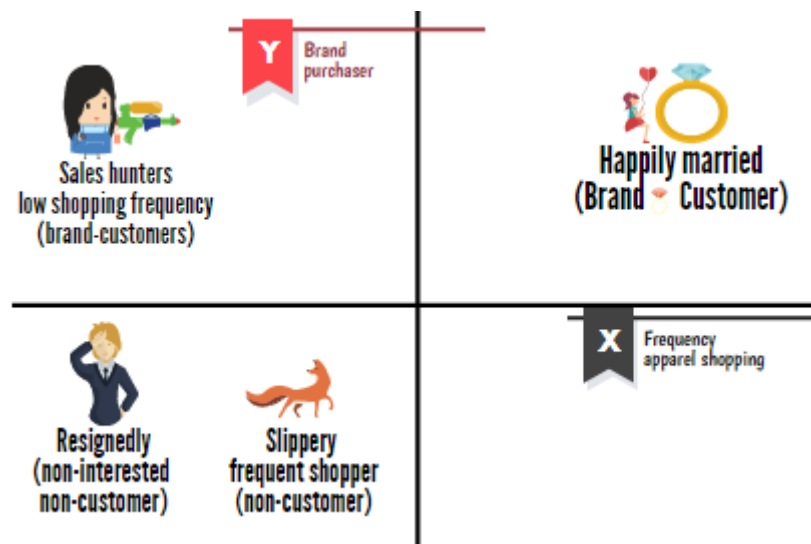
**Table 6- Size and socio-demographic profile of the four clusters identified (n=199).**

# Clusters		1	2	3	4
# People in each cluster		61	65	23	50
Percentual representation of each cluster (%)		31%	33%	12%	25%
Nationality	Colombian %	85%	63%	100%	80%
	Other %	15%	37%	0%	20%
Age	18 to 25 %	2%	58%	52%	58%
	26 to 30 %	89%	25%	30%	2%
	31 and more%	10%	9%	26%	12%
Occupation	Student %	0%	46%	26%	58%
	Independent %	26%	14%	4%	8%
	Employee %	67%	37%	65%	10%
	Stay home-no occupation %	8%	3%	4%	24%

**Table 7- Facebook behavioural profile of the four clusters identified (N=199)**

<i>Conglomeration variables (Most frequent category)</i>	<i>Cluster</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Most shared content in Facebook</i>	<i>Pictures</i>	<i>News</i>	<i>News</i>	<i>Coupons and discounts</i>
<i>Most reviewed content in Facebook</i>	<i>Pictures</i>	<i>Pictures</i>	<i>Pictures</i>	<i>Coupons and discounts</i>
<i>Main motivation to visit the company Facebook profile</i>	<i>News and events about the brand</i>	<i>New collections</i>	<i>New collections</i>	<i>Trends and fashion</i>
<i>Purchased the brand online in the past</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>
<i>Frequency of visiting a website driven by Facebook</i>	<i>Always</i>	<i>Rarely</i>	<i>Often</i>	<i>Sometimes</i>

After having the groups in terms of the clusters and crossing them with demographics and Facebook behavioural questions, 4 profiles have aroused from the segmentation exercise (See Figure 3).



**Figure 3- Position and names of the clusters regarding frequency of apparel shopping, brand purchases, segmentation and Facebook behaviour. (N=199)**

The Happily married consumers (C1) are those women that are mostly in their late twenties with a former job and a steady purchase capacity, they are techno-habilitated so they purchase online 1 or 2 times a week and on top of that they know the brand as they have bought it. So they are brand customers, loyalist, and their main motivation towards the brand Facebook page is to find about their news and events in a very visual way through pictures, videos and images. These woman are in the middle and late wave of millennials so are people very likely to engage with social media platforms and sites. They always visit a website driven by a Facebook profile so they are explorers in nature and the ideal target for the company, they should be targeted differently as this is the ideal group to talk to as they are more receptive

than the rest. They shop apparel more frequently and are already familiar with the brand so the goal is to augment their transactions number and amount as well as their responses and interactions with the brand. They are called the happily married consumers in this dissertation as they have a happy marriage with the brand where they have bought it online and present an active participation towards the category of apparel; these are content women towards the brand as it posts in a way they like (mostly through pictures and images) and presents information about local events and news about the brand. So they company is giving them what they expect and that is translated in purchases and very frequency of shopping dynamic customers.

The Resignedly non-interested and non-customers (C2) are those women mostly in their early twenties, students who their motivation towards the brand is to discover new collections. They rarely visit a website driven by its Facebook and they have never purchase the brand. Moreover, whenever they do apparel shopping its infrequent, 2 to 4 times a year. They do not buy that much apparel online and have never done it from this specific brand. They seem not to be interested in the brand for purchasing purposes and represent a much less attractive cluster for the firm than those who shop more or have even bought the brand.

The Slippery frequent shopper non-customer (C3) are the women, all Colombian, in their early and late twenties were more than half of them are employees. They are motivated towards the brand's page by the new collections and they often visit a website driven by its Facebook, even though they are frequent shoppers (once a month) they are not yet brand customers. This group are buying online with a good frequency so they brand should find a strategy to make them engage with brand purchases. They gather information in the form of pictures and images, so maybe through that type of information format or the new collections topic. The idea is that the once slippery customer becomes part of the C1 so that she shops more frequently and from the brand.

Finally, the sales hunters brand customers low frequency shoppers (C4) holds 80% of Colombian with more than half of them within 18 and 25 years old and more than half are students. Their main motivation to visit the brands Facebook profile is to discover information about trends and fashion, they are a cluster that searches and shares preferably about coupons and discounts and sometimes visits a website driven by its Facebook. Even though they are brand customers they buy rather infrequently and more importantly they review and share mostly coupons and discounts, therefore is a woman looking for constant sales, as the brand is a luxury one, with scarcity in terms of discounts or sales, it is very unlikely that the improvements in the Facebook page information towards this specific group conditions will augment their number of transactions and the brand purchases, unless the information regards coupons or discounts.

**Table 8- Descriptive Statistics and ANOVA test/Post Hoc results for clusters regarding behavioural scales (Goldsmith, Freiden, & Kilsheimer, 1993), (Bearden, W. O., Netemeyer, R. G., & Teel, J. E. 1989), (Baumgartner, Hans, and Jan-Benedict E. M. Steenkamp. 1996) (n=199)**

	<i>C1 (n=61)</i>	<i>C2 (n=65)</i>	<i>C3 (n=23)</i>	<i>C4 (n=50)</i>	<i>F statistics</i>	Sig.
	Happily married*	Resignedly	Slippery frequent customer	Sales hunters*		
Fashion Leadership (Goldsmith, Freiden, & Kilsheimer, 1993)	16,70 (3,28)	15,95 (3,81)	15,35 (4,46)	18,84 (5,27)*	5,86 (3,195)	0,001
Susceptibility to Interpersonal Influence (Bearden, W. O., Netemeyer, R. G., & Teel, J. E. 1989)	59,46 (12,49)*	34,37(11,09)	30,35 (10,61)	39,62 (17,21)	48,66 (3,195)	0,000
Exploratory buying behaviour (Baumgartner, Hans, and Jan-Benedict E. M. Steenkamp. 1996)	41,98 (8,98)*	28,43 (5,89)	28,78 (8,50)	36,78 (5,94)*	42,65 (3,195)	0,000

The ANOVA Test results revealed at significance levels that there exist differences between each cluster for each scale, being more significantly different scale 2 and 3 (See Table 8) and less significant the Fashion leadership scale.

Executing a more profound analysis, the major differences in between clusters are for the Fashion leadership scale in cluster number four, as for Interpersonal influence scale in cluster number one and as for the Exploratory buying behaviour scale they exist in cluster number one and four. So these clusters are significantly different in the scales behaviour from the others.

As for a post hoc analysis (See annex 10), in the fashion leadership scale it has been found that sales hunters are significantly different from the rest of clusters. As for the other three, all of them present similar mean scores.

Regarding the interpersonal influence scale, the happily married with the brand customers is a cluster with significant differences from the other three in terms of the mentioned scale. Particularly, Sales hunters are also different from the slippery frequent shoppers.

Analysing the third and last scale, the exploratory buying behaviour scale, it is been revealed that, similar to the interpersonal influence scale, the happily married is significantly different from the other three. Particularly, Sales hunters are different from cluster 2 and 3.

These differences between clusters are important for the firm at the time of enriching the already exiting profiles, and understanding each one of them in the scale terms so that at the time of choosing the ones that are strategically attractive to target they can also observe them within the scales characteristics.

It has been proved that the most attractive cluster, the happily married conglomerate, presents a particularly different behaviour in the interpersonal influence scale, having said so, it is important that at the time of addressing information to this cluster it is understood that they will have a different reaction from the rest of the clusters to third part opinions, as this should be the most relevant cluster for the firms for now, it is a delicate treat that should be considered separately. The happily married with the brand are specifically susceptible to others opinion and third part suggestions. Therefore, it is important to make the correct impact on them.

Also, this cluster presents differences with the other three in the exploratory buying behaviour, it means their willingness to explore is particularly higher than the other 3 conglomerates. Again, it is important that at the time of deciding for online shopping experiences, advertising and others, the degree of exploratory research that the happily married are willing to engage with, is higher than the rest of groups and therefore should be emphasized in order to elevate their interest and consequently their number of transactions.

As for the main mean differences found for each cluster regarding the exploratory buying behaviour scale, it is interesting to note that the higher the mean for the happily married cluster, the higher their apparel online shopping frequency. Also, brand purchases in the past are related to a higher mean in this scale.

The second highest mean for the exploratory buying behaviour scale is for the sales hunters, even though their apparel online purchases are rather infrequently due to their specific motivation for discounts and sales, they have purchased the brand in the past, they are also higher in mean than the other two clusters that have not bought the brand online before.

Finally, the slippery frequent customers and the resignedly non-customers have lower means for exploratory buying behaviour and indeed, they have never bought the brand online before.

This information exposes a direct relationship between having bought the brand in the past and the clusters degree of exploratory buying behaviour.

## 5. CONCLUSIONS AND IMPLICATIONS

In chapter one of this dissertation, it was discussed how digital technology can habilitate firms in order to maximize results, the importance of social media in modern society was highlighted along with the impact of SNS in firm's operations.

It was stated that spite the importance of Facebook in both consumers and B2C brands' activities, it is a tendency to consider Facebook users as a single segment rather than understanding the nuances of different page user segments (Shao et al., 2015).

This makes it hard for marketers and brand managers to fully exploit the potential of Facebook audiences and monetize social media engagement. The general aim of this dissertation was then; to identify and explore the existence of consumer segments based on individual Facebook behaviour and personal characteristics such as socio-demographics and online shopping behaviour.

Along the literature review (chapter 2), market segmentation was explored based on social media and Facebook page usage, there was also research about the apparel industry and social media usage arriving to conclusions about the type of relevant variables that were found in distinct previous studies and which were the ones for this particular dissertation.

As this dissertation was willing to understand the online customers at the apparel industry, the variables that were considered to form the conglomerates were frequency of buying apparel online, and whether or not the respondents had bought the brand online.

The methodology undertaken for the study regarding a research approach was a descriptive analysis with an online survey administered by the company itself as a research method.

The data analysis was primarily two step cluster analysis along with descriptives, ANOVA test, Post Hoc tests, frequencies, Factor tests among others.

This dissertation provides a segmentation analysis of the Facebook audience of an apparel e-tailer; results indicate that, according to their previous brand purchases and frequency of apparel online shopping, it exists 4 segments mentioned above. The study further reveals the distinctive profile for each of these segments regarding Facebook behaviour, socio-demographics and psychographics.

Four clusters were found with an outlier cluster of 12 people which was not considered for further cluster analysis. The four clusters were analysed in terms of Facebook behavioural questions, Psychometric variables, demographics and online shopping behaviour. The conglomerates were named the happily married customer, the resignedly non-interested non-customer, the slippery frequent shopper non-customer and the sales hunter low frequency shopping customer.

The initial aim of the dissertation was to understand which types of Facebook behaviour might constitute relevant and meaningful segmentation criteria for consumer brands. After analysing the results it was clear that variables regarding what type of content that customers share and review along with the frequency with which they go to a website driven by a Facebook profile are relevant variables at the time of segmenting a whole big Facebook audience.

Questions regarding the frequency with which they access Facebook or Facebook's main usage revealed that the majority of the sample is hyper-connected being able to access the site several times a day and they do it mainly to connect with friends and family so these are not as revealing as the ones above.

Additionally, another goal was to understand how such criteria can be combined with demographic and psychographic variables to develop an effective segmentation approach.

Variables such as occupation and age proved to be demographics that were relevant at the time of segmenting the sample, on the contrary, education and nationality proved the homogeneity of the sample in these aspects.

More importantly, the variables used to create the clusters revealed that in terms of online shopping behaviour, frequency of apparel shopping along with the specific brand online purchases are relevant for clusters creation while most purchased category and frequency of online shopping proved a similar sample regarding those variables.

This dissertation can be replicated and it contributes to further research about online consumer segmentation, findings suggest a promising segmentation because it clearly showed four heterogeneous clusters with different patterns of online shopping consumption.

SNS advertisement and posts that consider this segmentation can automatically customize their messages according to the different clusters. These findings can help managers to effectively target by segmenting their Facebook audience according to their online shopping patterns. Findings further indicate that the happily married can be approached through pictures and videos about news and events on a weekly base, not only through Facebook but also through other SNS as they are brand-customers so emailing could help augmenting the number of transactions.

The Sales hunters with low shopping frequency but that have bought the brand in the past can be approached with coupons and discounts, despite the fact that the company's strategy is not towards this kind of activities they could perhaps align a short term tactic in order to pilot the rise of transaction and sales by having some discounts posts.

Continuing with, the slippery non-customers frequent online shoppers are those who despite buying apparel frequently, they have not done it from the brand; they can be attracted with information about new collections in the form of pictures and videos, the same as C1. Consequently, posting in the form of images, pictures and videos seems to be the way to attract both C1 and C3 and increase their interest and purchases.

Finally, C2 is not buying on internet a lot and is not a brand customer; therefore, this group is not as attractive for the brand as the rest and should not be taken into account at the time of aligning short and middle term tactics with the global firm strategy.

This research can be considered for practical implications at the time of following a digital marketing, more specifically a Social Network Sites resources-based plan, the different clusters characteristics should be considered for an optimal allocation of marketing expenditure.

Additionally, Marketing and advertising strategies can be developed according to the different Facebook segments. Further, companies can use this existent profiles to predict or compare their customer's segment.

This paper is the first to perform a segmentation analysis to the Facebook audience of an online apparel brand based on their shopping behaviour patterns. The results showed that frequency of apparel online shopping and whether the individual purchased the brand in the past can be used as a segmentation base.

### **5.1 Limitation and future research**

Whereas this study increases our understanding of segmentation analysis of the Facebook audience of an apparel e-tailer, it has limitations. The data came from an online survey. Thus, the results reflect the patterns within the sample and lies upon the participant's collaboration. The sample had to be filtered 4 times which restricted the clusters size, moreover, the company's Facebook audience response rate was significantly low (0.2%).

Future research can be exercised with different retailers and own brand companies, moreover, the study can be replicated in other sub-industries such as lingerie, accessories, shoes or garments. Ideally, the sample should be large enough so that each cluster holds 30 to 35 people.

This research can also be replicated in other industries that have a considerable amount of online sales in the country such as plane tickets, technology, entertainment and holidays. It can also be replicated in other countries understanding their Facebook presence and importance as well as adjusting the several variables to the specific context.

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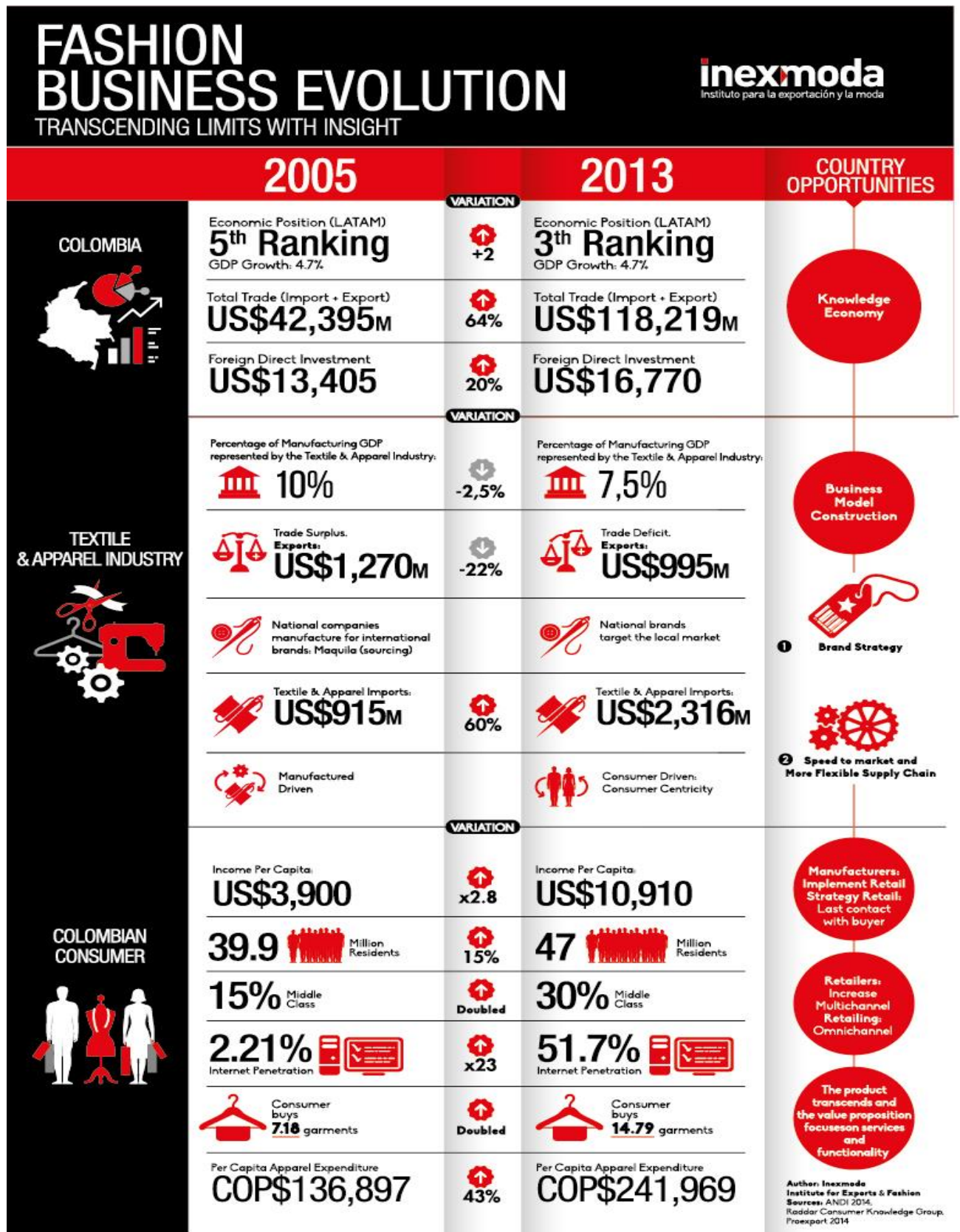
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# ANNEXES

## ANNEX 1- Fashion Business Evolution for Colombia. 2005-2013



## ANNEX 2- Questionnaire

We want to know you better, for this reason we designed this survey as the most important is to know your opinion. ¡Thanks for participating!

1. Gender
  - Female
  - Male
2. ¿Which is your nationality?
  - Colombian
  - Other. Which?
3. What is your age?
  - 18 or younger
  - Between 19 and 25
  - Between 26 and 30
  - Between 31 and 35
  - Between 36 and 40
  - Between 41 and 45
  - Between 46 and 50
  - Between 51 and 57
  - 57 or more
4. Which is you occupation?
  - Housewife
  - Employee
  - Retired
  - Student
  - Independent worker
  - Other. Which?
5. Which is you education level so far?
  - Elementary school
  - High-school
  - College
  - Superior studies

6. Do you have access or own a debit or credit card in order to purchase online? FILTER QUESTION

- Yes, I do.
- No, I do not.

7. How often do you visit a company's website driven by its Facebook profile?

- Never
- Rarely
- Sometimes
- Often
- Always

8. How often do you check Facebook?

- Several times a day
- Once a day
- Several times a week
- Once a week
- Several times a month
- Once a month
- Once a year

9. What type of content do you check on the most at the time of checking Facebook?  
Chose only one.

- Facebook status updates
- Coupons and discounts
- Articles
- Pictures and images
- Quizzes
- News
- Videos
- Other. Which?

10. What type of content do you share the most at the time of checking Facebook? Chose only one.

- Facebook status updates
- Coupons and discounts
- Articles

- Pictures and images
- Quizzes
- News
- Videos
- Other. Which?

11. What do you mainly use Facebook for? Chose only one

- Following brands, celebrities and leaders
- Discovering new things
- Staying update with news and events
- Keeping up with friends and family
- Other. Which?

12. Which is your main motivation to visit the company's Facebook page?

- To find about trends and fashion
- To share their posts
- To know their collections
- To find out about discounts and sales
- Other. Which?

13. How often do you shop online? FILTER QUESTION

- Twice a week
- Once a week
- Once a month
- 3 or 4 times per year
- I never shop online

14. Which category do you shop online the most? Choose only one

- Apparel
- Technology
- Books
- Entertainment
- Food
- Other. Which?

15. How often do you shop apparel online?

- Twice a week
- Once a week
- Once a month
- 3 or 4 times per year
- I never shop apparel online

16. Have you ever purchased this brand online?

- Yes
- No

For each statement select the option that better describes you.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
I am the first to try new fashion; therefore, many people regard me as being a fashion leader.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important for me to be a fashion leader.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of fashion trends and want to be one of the first to try them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
I am confident in my ability to recognize fashion trends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't spend a lot of time on fashion-related activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clothes are one of the most important ways I have of expressing my individuality.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For each statement select the option that better describes you.

	Strongly Disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
If other people can see me using certain clothes, I often purchase the brand they expect me to buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to know what clothes make good impressions on others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I achieve a sense of belonging by purchasing the same clothes that others purchase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently identify myself with other people that buys the same clothing as me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At the time of shopping for apparel I tend to buy the clothing that is approved by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I want to be like someone, I often try to buy the same clothes that they buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that others like the clothes I buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely purchase the latest fashion styles until I am sure my friends approve of them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For each statement select the option that better describes you at the time of doing online shopping

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
If I have little experience with clothes, I often ask my friends about it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently gather information from friends or family about clothing before I buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To make sure I buy the right clothes, I often observe what others are buying and using.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree
I often seek out the advice of my friends regarding which clothes I buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My friends or neighbours usually give me good advice on what brands of clothes to buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I spend a lot of time talking with my friends about clothing fashions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For each statement select the option that better describes you.

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
I usually eat the same kind of foods on a regular basis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think of myself as a brand-loyal consumer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rather stick with a brand I usually buy than try something I am not very sure of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I see a new brand on Internet, I'm not afraid of giving it a try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I like a brand, I rarely switch from it just to try something different.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I enjoy taking chances in buying unfamiliar brands just to get some variety in my purchases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even though certain products are available in a number of different options, I tend to buy the same.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely buy brands about which I am uncertain how well they perform.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very cautious in trying new or different products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I go to a restaurant, I feel it is safer to order dishes I am familiar with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*You finished the survey. Again, thank you for your help!*




*If you want to participate in the raffle please give us your email.*

(By doing so, you agree we collect personal data that you submit in the survey and use it for company-related purposes. We may also use Cookies and other tracking technology and the same technologies we use for Marketing (including CRM Databases, Targeted Email & Combining and Analysing Personal Data.)

**ANNEX 3. Facebook post announcing the launch of the questionnaire and associated raffle.**



**ANNEX 4- Socio-demographic characteristics of the respondents whose questionnaires were excluded from the final sample (n=40).**

<i>Filter</i>	<i>Gender</i>	<i>Age</i>	<i>Occupation</i>	<i>Education level</i>
1. Access to online shopping card n=11	10 women 	No relevant differences	Students = Lower financial tools access	No relevant differences
2. Online shopping frequency n =9	All of them women 	No relevant differences	All of them employed	No relevant differences
3. Apparel online shopping frequency=20	All of them women 	All of them between 19 and 25	All of them employed	No relevant differences

**ANNEX 5- SPSS Outputs of the analyses of survey responses (n=211): socio-demographic variables and behavioural measures.**

**Nationality**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Colombian	164	77,7	77,7	77,7
	Other	47	22,3	22,3	100,0
	Total	211	100,0	100,0	

**AgeClass2**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	18-25	81	38,4	38,4	38,4
	26-30	82	38,9	38,9	77,3
	31-	48	22,7	22,7	100,0
	Total	211	100,0	100,0	

**Occupation2**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Student	66	31,3	31,3	31,3
	Self-employed	31	14,7	14,7	46,0
	Employed	92	43,6	43,6	89,6
	No occupation	22	10,4	10,4	100,0
	Total	211	100,0	100,0	

**Which is your education level?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highschool	5	2,4	2,4	2,4
	Technical studies	9	4,3	4,3	6,6
	College	178	84,4	84,4	91,0
	Superior studies	19	9,0	9,0	100,0
	Total	211	100,0	100,0	

**How often do enter to facebook?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Several times a day	179	84,8	84,8	84,8
	Once a day	25	11,8	11,8	96,7
	Several times a week	2	,9	,9	97,6
	Once a week	2	,9	,9	98,6
	Several times a month	1	,5	,5	99,1
	Once a month	1	,5	,5	99,5
	Once a year	1	,5	,5	100,0
	Total	211	100,0	100,0	

**Visit website from FB**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Never	11	5,2	5,2	5,2
	Rarely	40	19,0	19,0	24,2
	Sometimes	39	18,5	18,5	42,7
	Often	29	13,7	13,7	56,4
	Always	92	43,6	43,6	100,0
	Total	211	100,0	100,0	

**FB Content\_Review3**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	News, Newsfeed, Articles	30	14,2	14,2	14,2
	Pictures, Images, Videos	116	55,0	55,0	69,2
	Coupons & Discounts	65	30,8	30,8	100,0
	Total	211	100,0	100,0	

**FB Content\_Share3**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	News, Newsfeed, Articles	62	29,4	29,4	29,4
	Pictures, Images, Videos	97	46,0	46,0	75,4
	Coupons & Discounts	52	24,6	24,6	100,0
	Total	211	100,0	100,0	

**FB\_UseMotive2**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	To discover new things; To be update on news and events	40	19,0	19,0	19,0
	To keep in touch with friends and family	132	62,6	62,6	81,5
	To follow my favorite leaders, brands and celebrities	39	18,5	18,5	100,0
	Total	211	100,0	100,0	

**Motivation2visit brand FB profile**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	To find out about trends and fashion	37	17,5	17,5	17,5
	To have updates about news and events of the brand	45	21,3	21,3	38,9
	To find out about discounts and promotions	44	20,9	20,9	59,7
	To find out about new collections	71	33,6	33,6	93,4
	Don't enter	14	6,6	6,6	100,0
	Total	211	100,0	100,0	

**Freq\_OnlineShop2**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Between 2 and 4 times a year	106	50,2	50,2	50,2
	Once a month	35	16,6	16,6	66,8
	Once or twice a week	70	33,2	33,2	100,0
	Total	211	100,0	100,0	

**FreqBuy\_ApparelOnline2**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Between 2 and 4 times a year	115	54,5	54,5	54,5
	Once a month	32	15,2	15,2	69,7
	Once or twice a week	64	30,3	30,3	100,0
	Total	211	100,0	100,0	

**BuyMostOnline**

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Clothes and Accessories	186	88,2	88,2	88,2
	Other	25	11,8	11,8	100,0
	Total	211	100,0	100,0	

**Did U ever buy brand online?**

	Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos Yes	120	56,9	56,9	56,9
No	91	43,1	43,1	100,0
Total	211	100,0	100,0	

**ANNEX 6- SPSS Outputs of the analyses of survey responses (n=234): validation of psychometric scales.**

**Descriptive Statistics**

	Mean	Std. Deviation	Analysis N
I am aware of fashion trends and want to be one of the first to try them.	3.99	1.405	234
I am the first to try new fashion; therefore, many people regard me as being a fashion leader.	3.48	1.311	234
It is important for me to be a fashion leader.	3.99	1.403	234
I am confident in my ability to recognize fashion trends.	4.86	1.223	234
Clothes are one of the most important ways I have of expressing my individuality.	5.29	1.121	234

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.764
Approx. Chi-Square		715.955
Bartlett's Test of Sphericity	Df	10
	Sig.	.000

### Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Even though certain food products are available in a number of different flavors, I tend to buy the same flavors.	4.42	1.385	234
I would rather stick with a brand I usually buy than try something I am not very sure of.	4.23	1.452	234
I think of myself as a brand-loyal consumer.	4.55	1.284	234
When I see a new brand on the internet, I'm not afraid of giving it a try.	3.26	1.062	234
When I go to a restaurant, I feel it is safer to order dishes I am familiar with.	4.06	1.368	234
If I like a brand, I rarely switch from it just to try something different.	3.55	1.673	234
I am very cautious in trying new or different products.	3.99	1.425	234
I enjoy taking chances in buying unfamiliar brands just to get some variety in my purchases.	3.56	.849	234
I rarely buy brands about which I am uncertain how well they perform.	4.36	1.417	234
I usually eat the same kind of foods on a regular basis.	4.30	1.455	234

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.883
Approx. Chi-Square		2643.564
Bartlett's Test of Sphericity	Df	45
	Sig.	.000

**Descriptive Statistics**

	Mean	Std. Deviation	Analysis N
Even though certain food products are available in a number of different flavors, I tend to buy the same flavors.	4.42	1.385	234
I would rather stick with a brand I usually buy than try something I am not very sure of.	4.23	1.452	234
I think of myself as a brand-loyal consumer.	4.55	1.284	234
When I go to a restaurant, I feel it is safer to order dishes I am familiar with.	4.06	1.368	234
If I like a brand, I rarely switch from it just to try something different.	3.55	1.673	234
I am very cautious in trying new or different products.	3.99	1.425	234
I rarely buy brands about which I am uncertain how well they perform.	4.36	1.417	234
I usually eat the same kind of foods on a regular basis.	4.30	1.455	234

**KMO and Bartlett's Test**

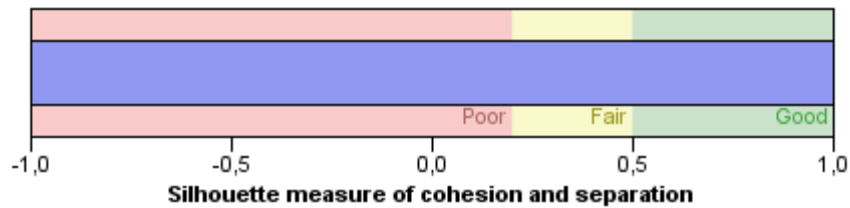
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.887
Approx. Chi-Square		2301.073
Bartlett's Test of Sphericity	Df	28
	Sig.	.000

**ANNEX 7- SPSS Outputs of the analyses of survey responses (n=199): two-step clustering.**

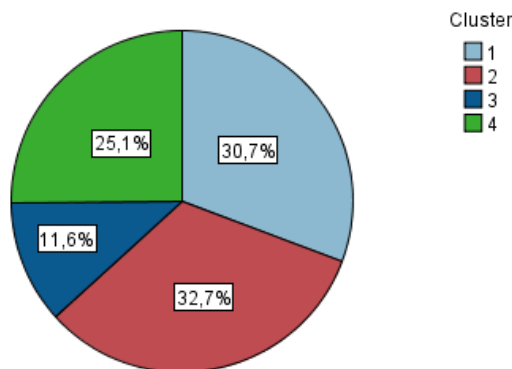
### Model Summary

<b>Algorithm</b>	TwoStep
<b>Inputs</b>	1
<b>Clusters</b>	4

### Cluster Quality



### Cluster Sizes



<b>Size of Smallest Cluster</b>	23 (11,6%)
<b>Size of Largest Cluster</b>	65 (32,7%)
<b>Ratio of Sizes: Largest Cluster to Smallest Cluster</b>	2,83

**ANNEX 8- SPSS Outputs of the analyses of survey responses (n=199): tests of the significance of differences in socio-demographic and psychographic variables between clusters.**

**AgeClass2 \* TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
AgeClass2	18-25	1	38	12	29	80
	26-30	54	16	7	1	78
	31-	6	11	4	20	41
Total		61	65	23	50	199

**Nationality \* TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
Nationality	Colombian	52	41	23	40	156
	Other	9	24	0	10	43
Total		61	65	23	50	199

**Occupation2 \* TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
Occupation2	Student	0	30	6	29	65
	Self-employed	15	9	1	4	29
	Employed	41	24	15	5	85
	No occupation	5	2	1	12	20
Total		61	65	23	50	199

**Visit website from FB \* TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
Visit website from FB	Never	1	5	0	3	9
	Rarely	0	33	4	1	38
	Sometimes	3	14	7	12	36
	Often	3	10	9	3	25
	Always	54	3	3	31	91
Total		61	65	23	50	199

**FB Content\_Review3 ^ TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
FB Content_Review3	News, Newsfeed, Articles	1	15	7	4	27
	Pictures, Images, Videos	46	44	12	5	107
	Coupons & Discounts	14	6	4	41	65
Total		61	65	23	50	199

**FB Content\_Share3 ^ TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
FB Content_Share3	News, Newsfeed, Articles	1	40	11	6	58
	Pictures, Images, Videos	46	22	9	12	89
	Coupons & Discounts	14	3	3	32	52
Total		61	65	23	50	199

**FB\_UseMotive2 ^ TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
FB_UseMotive2	To discover new things; To be update on news and events	14	11	7	3	35
	To keep in touch with friends and family	47	49	15	15	126
	To follow my favorite leaders, brands and celebrities	0	5	1	32	38
Total		61	65	23	50	199

**Freq\_OnlineShop2 ^ TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
Freq_OnlineShop2	Between 2 and 4 times a year	0	54	4	48	106
	Once a month	0	10	17	0	27
	Once or twice a week	61	1	2	2	66
Total		61	65	23	50	199

**BuyMostOnline \* TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
BuyMostOnline	Clothes and Accessories	61	48	18	48	175
	Other	0	17	5	2	24
Total		61	65	23	50	199

**Motivation2visit brand FB profile \* TwoStep Cluster Number Crosstabulation**

Count

		TwoStep Cluster Number				Total
		1	2	3	4	
Motivation2visit brand FB profile	To find out about trends and fashion	0	2	2	33	37
	To have updates about news and events of the brand	42	2	0	1	45
	To find out about discounts and promotions	14	14	7	2	37
	To find out about new collections	4	42	11	12	69
	Don't enter	1	5	3	2	11
Total		61	65	23	50	199

**ANNEX 9- SPSS Outputs of the analyses of significance of mean differences in age. ANOVA TEST (n=199)**

Dependent Variable: AgeClass2

(I) TwoStep Cluster Number	(J) TwoStep Cluster Number	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	,497*	,131	,001	,16	,84
	3	,430	,180	,082	-,04	,90
	4	,262	,140	,244	-,10	,62
2	1	-,497*	,131	,001	-,84	-,16
	3	-,068	,178	,981	-,53	,39
	4	-,235	,138	,324	-,59	,12
3	1	-,430	,180	,082	-,90	,04
	2	,068	,178	,981	-,39	,53
	4	-,168	,185	,801	-,65	,31
4	1	-,262	,140	,244	-,62	,10
	2	,235	,138	,324	-,12	,59
	3	,168	,185	,801	-,31	,65
1	2	,497*	,131	,000	,24	,76
	3	,430*	,180	,018	,08	,78
	4	,262	,140	,063	-,01	,54
2	1	-,497*	,131	,000	-,76	-,24
	3	-,068	,178	,705	-,42	,28
	4	-,235	,138	,090	-,51	,04
3	1	-,430*	,180	,018	-,78	-,08
	2	,068	,178	,705	-,28	,42
	4	-,168	,185	,365	-,53	,20
4	1	-,262	,140	,063	-,54	,01
	2	,235	,138	,090	-,04	,51

1	3	,168	,185	,365	-,20	,53
	2	,497*	,104	,000	,22	,78
	3	,430	,167	,095	-,05	,91
	4	,262	,145	,381	-,13	,66
2	1	-,497*	,104	,000	-,78	-,22
	3	-,068	,188	1,000	-,59	,45
	4	-,235	,169	,664	-,69	,22
3	1	-,430	,167	,095	-,91	,05
	2	,068	,188	1,000	-,45	,59
	4	-,168	,213	,967	-,75	,41
4	1	-,262	,145	,381	-,66	,13
	2	,235	,169	,664	-,22	,69
	3	,168	,213	,967	-,41	,75

\*. The mean difference is significant at the 0.05 level.

#### ANNEX 10- SPSS Outputs of the analyses of significance of mean differences. ANOVA TEST (n=199)

##### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
MergedFashionScale	4,316	3	195	,006
MergedSusceptibilityScale	12,765	3	195	,000
MergedBuyingScale	11,874	3	195	,000

Dependent Variable		Sum of Squares ANOVA TEST	df ANOVA TEST	Mean Square ANOVA TEST	F ANOVA TEST	Sig. ANOVA TEST	Mean ANOVA TEST	Std. Deviation ANOVA TEST	Std. Error ANOVA TEST	Homogeneity of Variances ANOVA TEST Sig
FashionScale	Between Groups	303,36682	3	101,12227	5,85565	0,001	16,70	3,28	0,42	0,006
	Within Groups	3367,4875	195	17,269166			15,95	3,81	0,47	
	Total	3670,8543	198	-			15,35	4,46	0,93	
							18,84	5,27	0,74	
SusceptibilityScale	Between Groups	25618,264	3	8539,4214	48,6594	0,000	59,46	12,49	1,60	0,000
	Within Groups	34221,283	195	175,49376			34,37	11,09	1,38	
	Total	59839,548	198	-			30,35	10,61	2,21	
							39,62	17,21	2,43	
BuyingScale	Between Groups	6812,3839	3	2270,7946	42,6454	0,000	41,98	8,98	1,15	0,000
	Within Groups	10383,415	195	53,248283			28,43	5,89	0,73	
	Total	17195,799	198	-			28,78	8,50	1,77	
							36,78	5,94	0,84	

Dependent Variable	Post Hoc Test	Mean Difference (I)	Mean Difference (J)	Mean Difference (H-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
FashionScale	Tukey HSD	1	2	,751	,741	,742	-1,17	2,67
			3	1,357	1,017	,542	-1,28	3,99
			4	-2,135*	,793	,038	-4,19	-,08
		2	1	-,751	,741	,742	-2,67	1,17
			3	,606	1,008	,932	-2,01	3,22
			4	-2,886*	,782	,002	-4,91	-,86
		3	1	-1,357	1,017	,542	-3,99	1,28
			2	-,606	1,008	,932	-3,22	2,01
			4	-3,492*	1,047	,006	-6,21	-,78
		4	1	2,135*	,793	,038	,08	4,19
			2	2,886*	,782	,002	,86	4,91
			3	3,492*	1,047	,006	,78	6,21
SusceptibilityScale	Tukey HSD	1	2	25,090*	2,362	,000	18,97	31,21
			3	29,111*	3,241	,000	20,71	37,51
			4	19,839*	2,527	,000	13,29	26,39
		2	1	-25,090*	2,362	,000	-31,21	-18,97
			3	4,021	3,214	,595	-4,31	12,35
			4	-5,251	2,492	,154	-11,71	1,21
		3	1	-29,111*	3,241	,000	-37,51	-20,71
			2	-4,021	3,214	,595	-12,35	4,31
			4	-9,272*	3,338	,030	-17,92	-,62
		4	1	-19,839*	2,527	,000	-26,39	-13,29
			2	5,251	2,492	,154	-1,21	11,71
			3	9,272*	3,338	,030	,62	17,92
BuyingScale	Tukey HSD	1	2	13,553*	1,301	,000	10,18	16,92
			3	13,201*	1,786	,000	8,57	17,83
			4	5,204*	1,392	,001	1,60	8,81
		2	1	-13,553*	1,301	,000	-16,92	-10,18
			3	-,352	1,770	,997	-4,94	4,24
			4	-8,349*	1,373	,000	-11,91	-4,79
		3	1	-13,201*	1,786	,000	-17,83	-8,57
			2	,352	1,770	,997	-4,24	4,94
			4	-7,997*	1,839	,000	-12,76	-3,23
		4	1	-5,204*	1,392	,001	-8,81	-1,60
			2	8,349*	1,373	,000	4,79	11,91
			3	7,997*	1,839	,000	3,23	12,76

\*. The mean difference is significant at the 0.05 level.

## ANNEX 11-Kruskall-Wallis test.

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of MergedFashionScale is the same across categories of TwoStep Cluster Number.	Independent-Samples Kruskal-Wallis Test	,000	Reject the null hypothesis.
2	The distribution of MergedSusceptibilityScale is the same across categories of TwoStep Cluster Number.	Independent-Samples Kruskal-Wallis Test	,000	Reject the null hypothesis.
3	The distribution of MergedBuyingScale is the same across categories of TwoStep Cluster Number.	Independent-Samples Kruskal-Wallis Test	,000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.