



TESIS DOCTORAL

**Las redes sociales como una nueva
herramienta para el marketing en línea
de los alimentos**

**AHMED ADEL MOHAMED YOUSSEF
ELGHANNAM**

CIENCIA DE LOS ALIMENTOS

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PHD THESIS

**Social networks as a new tool for online
food marketing**

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2019

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Key definitions and concepts

Key definitions and concepts

Cookie: Is a small piece of data that sent automatically from a certain website and stored in someone's internet browser while the user is browsing the website. Once the user visits a website, the browser notifies about the user's previous activity by sending the cookie back to the server.

E-business: It is the fact of conducting business online, that is, the application of information and communication technologies to conduct all the activities related to business. This could involve the purchasing and selling of goods and services, together with providing technical support or customer services.

E-commerce: Electronic commerce is the performing of buying or selling process of products or services throughout electronic networks, such as the Internet or online social networks. The term often used in conjunction with e-business, and although they refer to different concepts, they are often used in an undifferentiated way.

E-marketing: Also known as Digital marketing, the term refers to the application of digital technologies to contribute to the marketing activities of an enterprise so as to strengthen the relationship with customers and create added value for the product. It is based mainly on the Internet, but also includes mobile phones and any other digital medium.

Protected Designation of Origin: is one of the Quality Schemes for food in the European Union. It is a kind of geographic indication applied to an agricultural product or foodstuff whose quality or characteristics are fundamental and exclusively to the geographical environment in which it is produced, transformed and developed. It differentiates products created in a given area, against producers from other areas who would like to take advantage of the good name that created the originals, in cultivation or manufacture. In order to

be branded with a PDO label, the entire product must be traditionally and completely manufactured (prepared, processed and produced) within the specific region and thus acquire unique properties.

Small and Medium Enterprise: The category of micro, small and medium-sized enterprises consists of firms that employ less than 250 people and which achieve an annual return of no more than 50 million Euros, and/or an annual balance sheet total not exceeding 43 million Euros. Within the SME category, a small enterprise is defined as an enterprise which employs not more than 50 persons and their annual turnover and/or annual balance sheet does not exceed 10 million Euros, whereas a micro enterprise is an enterprise which employs fewer than 10 persons and their annual turnover and/or annual balance sheet does not exceed 2 million Euros.

Social media: Social media are computer-mediated tools made up of a set of actors (such as individuals or organizations) that are related according to some criterion (professional relationship, friendship, etc.). They are normally symbolizing the actors as nodes and relationships as lines connecting them. The type of connection representable in a social network is a dyadic relationship or interpersonal tie. Within this concept, people, companies and even organizations can co-create, co-share, or exchange information, interests, views, and other virtual contents like pictures or videos. Till now there is no unanimity among the authors to propose a specific typology for social media however, they have some common features: (1) social media are Web 2.0 Internet-based applications; (2) user-generated content, as users create their own profiles for the website, and website facilitates the development of online networks by connecting a user's profile with those who share the same interest.

Community supported agriculture: is a socio-economic model that creates a connection between producers and consumers in which both of them share the

risk. In this system, consumers subscribe to the harvest of a farm. In return for subscription and labor they would receive a box of produce on a weekly or bi-weekly basis.

Solidarity purchasing groups: they are a sort of alternative food chains in which a collective of consumers come together to purchase products at wholesale prices. Then they redistribute them among the members of the group.

Electronic Word-of-Mouth: all kinds of feedbacks (comments, photos, reviews, etc...) given by internet users regarding their past purchase experiences with certain product or brand.

Introduction

Introduction

During the last years, remarkable changes have affected the food industry in Spain and other developed countries, mainly in terms of concentration among different links in the food chain (MAGRAMA, 2008). These changes have modified the configuration of the producer-distributor relationship, which has evolved from a situation in which manufacturers dominated the purchasing conditions of their products, to a new context in which distributors have enhanced their bargaining position (Oubiña, 2000) and got the power of driving the demand. The food distribution chains represented by wholesalers and retailers are the linkage between producers and consumers. So that, any changes in the distribution system would affect clearly the efficiency of any marketing transaction.

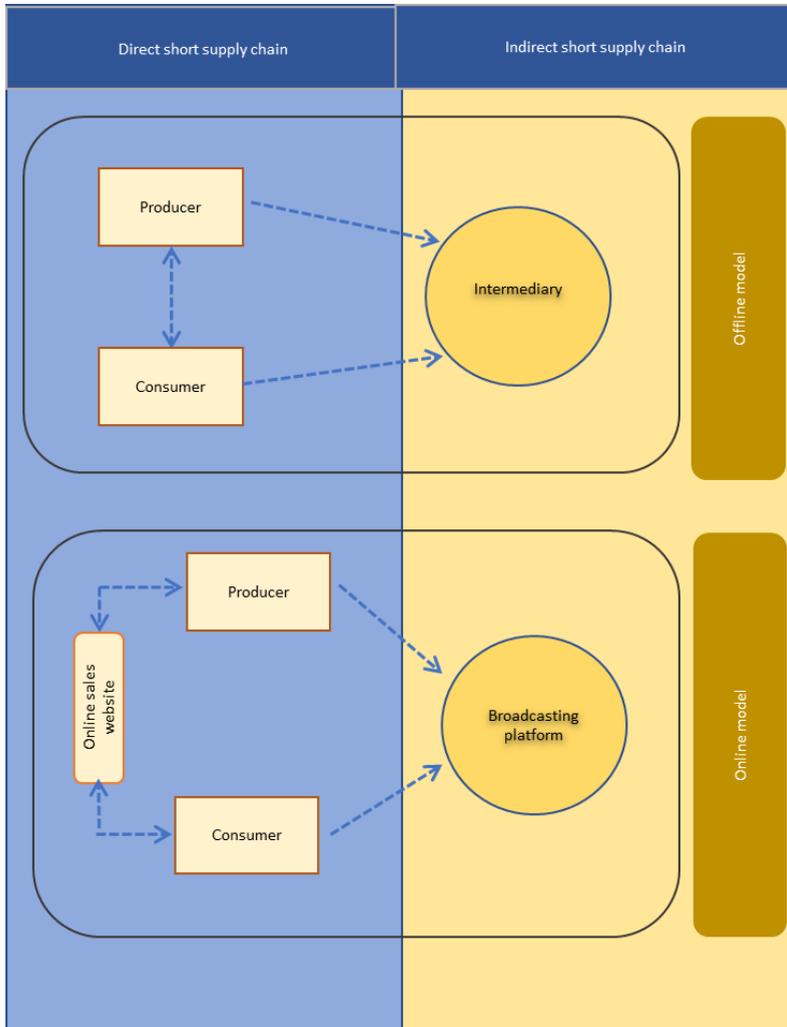
Nowadays, consumers are demanding a variety of products and services with the highest quality, best price, and added value. They are also seeking more information with respect to origin and safety of the purchased food (Röhr et al., 2005). Spanish consumers are using different shopping chains to purchase food and drinks with most of purchases being made via traditional chains (hypermarkets or supermarkets). However, there are segments of consumers who are still looking for more direct relationships with producers, claiming the right to choose the products they consume and to be informed about their origin and production model. Therefore, dealing directly with consumers through the creation of short food supply chains (SFSCs) and the removal of several intermediaries in the food chain could be a great opportunity for food companies.

Various remarkable social changes can take place through the implementation of SFSCs, as they can favor the interaction and direct relationships between farmers and consumers. They can therefore promote the development of trust and social capital. This can also result in the development of community sense and co-existence and can even cause changes in eating and shopping habits and enhance social and environmental awareness. In addition to the social impact, SFSCs would also generate some economic benefits that can be noticed regarding rural development and economic regeneration, as local agricultural systems and short chains would have a greater impact on the local economies than long ones, while they also help to maintain local employment especially in the rural areas (Santini & Gomez y Paloma, 2013).

Marketing via short supply chains can be developed according to different marketing structures. We can differentiate those structures according to the use of the Internet as online and off-line short supply chains (Figure 1). The online chain allows the direct connection between consumers and sellers either to purchase products directly through the network or just to get support or information. On the other hand, the offline short chains are those that do not offer their products via the web. This type of chains includes different purchasing outlets such as producer markets, direct sale shops, shipping door-to-door and consumer groups.

According to the above, this study defines short supply chain as “the one in which the number of intermediaries is equal to or less than one whether the transaction takes place through online or offline platforms”

Figure 1. Models and information flows in short food supply chains.



Generally, in the literature there are three main types of short food supply chains (Marsden et al., 2000; Renting et al., 2003) which are briefly described as follows:

1. **Face-to-Face:** In these short chains consumers buy products directly from producers on a face-to-face basis. Farm gate sales, pick-your-own and farmers' markets are some examples of face-to-face short food supply chains.

2. **Spatial Proximity:** The main characteristic of this model is that products are produced and sold through local market channels in the specific region of production. It includes farm shop groups, food service outlets, local food retailers and consumer cooperatives. Other interesting examples also reported in the literature about spatially proximate short food supply chains are Community supported agriculture (CSA) (Brown & Miller, 2008), Solidarity purchasing groups (GAS) (Migliore, 2014) and Associations for the maintenance of peasant agriculture (AMPA). All these types share the same essential principles whereby subscribers receive a share of the harvest in return for money and/or labor, although they can vary slightly according to different regions and countries (Santini & Gomez y Paloma, 2013).

3. **Spatially Extended:** In this case the products are sold not only to local consumers but also to consumers in other regions. Therefore, under this model labeling and certification programs could be used to emphasize the quality dimension that is used to differentiate the product (Abatekassa, 2011) Fair Trade and Protected Designations of Origin (PDO) are some tools that can be useful within this model.

Recently, the increasing use of internet, especially social media, has made social media marketing to be one of the contemporary topics in marketing. Social networks and online platforms give consumers new means for receiving and providing information (Rutsaert et al., 2013). Some social networks can support the maintenance of social ties and the establishment of new contacts which can be developed based on shared interests or activities, while others attract those users who share the same language, culture or nationality (Ellison, 2008). Social networking sites can also differ according to the extent to which they provide new information and communication tools, such as mobile connectivity, blogging, and photo or video-sharing (Ellison et al., 2007; Ellison, 2008).

It is worthy to refer that most social networking platforms provide free-of-charge services for their users, therefore they depend mainly on ads revenues to cover their expenses. This means that marketing aspects are a fundamental factor of success for this type of sites. Also, from a marketing point of view, social networks with their collections of users can be considered as an “Online Marketplace”. This circumstance would offer a good opportunity for businesses due to the potential benefits they can get from social media to promote brands or products. Thus, many agri-food businesses have recently decided to integrate social media marketing strategies to support their commercial activities (Mata & Quesada, 2014). MAGRAMA (2013) also recommended small and medium enterprises to bet on marketing development using websites or mobile phone applications, along with widening their presence on social media, which are low-cost and not excessively complex tools for non-expert users (MAGRAMA, 2013).

Within this framework, the advantages that would enable social media to build effective agri-food marketing chains are various:

The revolutionary increase in the use of social media allows food producers to build new chains for selling their products in a quick, low-cost and direct way. This may contribute to reduce market margins by enhancing the (producer-consumer) direct sales which consequently affect the price.

Concerning advertising, selling through social networks would result in saving advertising costs, as they enable the companies to create their own pages. Then marketers have the opportunity to communicate with people to start their free advertising campaigns by sharing pictures, information and even videos about their products. Customers may also share the companies’ advertisements among their own friends and get them leave a feedback about the product, its advantages, disadvantages and even their own purchasing experience. Those

feedbacks are known as “electronic Word-of-Mouth (eWOM)” which is considered a valuable source of information both for the company and the potential customers (Kim & Park, 2013).

Alternatively, businesses can pay to show ads to people who might be interested in their message, since social-media applications are designed to help advertisers show people ads they find interesting and relevant.

Facebook, among other social networks uses new technologies like cookies, pixel tags and local storage to help advertisers understand whether the sale of a product on its website is connected to an ad on Facebook. Moreover, social media sites provide advertisers and their partners with a report about the performance of their ads, such as how many people viewed or clicked and socio-demographic information of people who interacted with them. This helps firms understand and measure the effectiveness of their ads, which helps them show better and more interesting ads to their potential customers (Facebook, 2019).

Using social networks as a chain for marketing would make the identification of customers’ profiles an easier task for marketers, thus becoming the way by which the company could perfectly define its target segments and change or adapt their strategies.

Additionally, within the framework of social media marketing, users are a core element throughout the whole marketing process, since social media has provided consumers with both economic and social power. On one hand, the economic power is represented in the bargaining power, as social media has moved the balance of power in favor of consumers. On the other hand, the social power is characterized by the ability of consumers to communicate and work together to find solutions and even to place pressure on company’s decisions (Umit Kucuk & Krishnamurthy, 2007; Mrabet & Triki, 2014).

Moreover, social networks have allowed companies, especially in the food sector, to obtain more precise data on existing or potential clients at a relatively insignificant cost. Hence, agri-food companies have the chance to develop an improved relationship with their customers that focuses the marketing efforts on consumers (Mrabet & Triki, 2014). So, one of the ways by which food companies can create competitiveness is through the creation of social media-based short food supply chains, which is a new model that uses social networks to support social interaction and the contributions of users as well as helps in the online buying and selling of products and services (Pagani & Mirabello, 2011).

Today, companies are looking to increase their market and presence in these media (Shooner, 2011), trying to adopt social networks in their strategies and business models, identifying the most influential users and designing marketing strategies that adapt to their needs (Andzulis et al., 2012). Nowadays, the continuous thought of enterprises should be maintaining direct contacts with their clients as a strategy that would enable them to attract more customers in addition to obtain a competitive advantage

In this context, the objective of this work is to address the potential of social media to be used to create short food supply chains. The entire study is divided into 4 main chapters. The first is a review which summarizes the role that SFSC could play as an opportunity for small and medium enterprises (SMEs) in the agri-food sector. Moreover, to highlight a new perspective relying on social media platforms as potential short supply chains for SMEs. The specific questions addressed include: (1) how can SFSC be defined? (2) What are the main reasons of consumer interest in short supply chains? (3) How could social media applications serve as a short food supply chain? The second chapter aims to examine Spanish consumers' willingness to buy food through social networks, identifying the types of food that could be bought. A particular

interest is devoted to foods of animal origin, due to their great relevance in the agri-food market and in the consumers' diet. The third chapter is aiming to analyze consumer's predisposition and perception towards social networks as a short food marketing chain. Specifically, the chapter aims to address how Spanish consumers would perceive social networks as a marketplace for foodstuffs, analyzing whether they might be willing to deal with it and delving into the motivators and guarantees which could increase their likelihood of adopting this initiative. Finally, the fourth study is a multi-cultural analysis with the main objective of getting a consumer's cross-cultural insight on the potential of social networking sites as short food supply chains. To this end, a questionnaire was applied in three countries with different cultural backgrounds, namely, Mexico, Spain and Egypt. The specific questions to answer were: (1) How consumers from different cultures perceive the idea of creating short food chains on social media? (2) What types of food those consumers would be interested in purchasing? (3) What are the drivers and barriers perceived by consumers toward this initiative?

It is considered that this study is one of the first to address the use of social media as a short chain for food products from a multi-cultural perspective. It also provides knowledge about how different types of consumers would perceive that kind of online short chains. In addition, results of this work would help to uncover opportunities and challenges that would face food enterprises at the moment of adopting this marketing model in different markets.

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General structured summary

General structured summary

The first chapter reviews and summarizes the role that SFSCs could play as an opportunity for SMEs in the agri-food sector. It highlights a new perspective relying on social media platforms as potential short supply chains for small and medium enterprises. The literature review indicated that Spanish consumers purchase food from different sources, mainly via traditional/long chains. However, there are consumer segments seeking for more direct relationships with food producers, because they want to be informed about their food's origin and production model. So, dealing directly with consumers by creating short food supply chains could be a great opportunity for food small and medium enterprises. In this context, the huge increase in the use of social media offers producers the potential to build new short chains for promoting and selling their products in a rapid, low-cost and direct way. Benefits of social networks in this regard are various: they may contribute to reduce market margins by enhancing direct sales and they may also facilitate the identification of customers' profile, their preferences and the way they perceive certain products. In the present context of globalization and growing competition, small and medium enterprises must look for potential sources of advantage that can help them compensate their flaws. This situation is even more difficult in the agri-food sector, with a fragmented business fabric and great importance of perishable products. Nevertheless, the widespread use of Information and communications technologies (ICT) and especially social networks can open opportunities for these companies, especially to build up short supply chains.

The chapter highlights that, although consumers may be reluctant to buy food online, some products that do not require cold chain to be delivered or that are not affected by transport delays (preserves, canned food or chocolates) would be the most likely accepted to be bought online. However, it may be considered

that it is mostly on perishable products where agri-food small and medium enterprises can differentiate themselves and add value to their products.

For example, in the case of meat and meat products, internet meat sales have increased in the last years, but there stands the problem of matching the slaughtering of the animals with consumers' demands. The use of social networks, with its almost instantaneous spreading of information, can allow producers to overcome this issue, by creating a short and interactive supply chain, while giving the consumers the opportunity to share their feelings about the product. It might also reduce the impact of health scares that could be addressed with direct communication producer-consumer.

Fruits and vegetables are one of the most important productions of the Spanish agri-food sector. However, and due to their perishable nature, they are among the less likely food products to be sold online. In this sense, the experience of online sellers such as Amazon with consistently short delivery times may pave the way for consumers to accept the possibility of buying fresh products online. Social networks will play an essential role here as the tool that would allow producers to convey real time information to their customers about valued aspects such as harvesting schedules or ripening state.

The second chapter is dealing with consumers' perceptions towards the potential use of social media to create online short food supply chains. In this chapter, projective techniques (sentence completion tasks) have been used in order to uncover consumers' thoughts, incentives and hinders towards the topic under study, as they allow a wide range of responses and can be adapted for different research purposes. Furthermore, they help researchers to obtain the respondents' perceptions in an indirect and informal manner. Data were collected through an online questionnaire, and given the nature of the study it was decided to spread the survey through different social media platforms to

ensure that every respondent was a current user of at least one social network. Consumers were asked to fill out four different sentence completion tasks. Data were then subsequently analyzed in a qualitative way using a triangulation methodology to ensure the validity of results. The findings of this chapter introduce an insight into consumer's perception of opportunities and limitations that would enhance or hinder the development of this new system of distribution. The main highlighted finding from this study is that a large part of respondents would be willing to use the short food supply chains based on social media. Among the responses revealed, the most frequently mentioned reasons that can motivate consumers to buy food on social media-based chains are trust in the producer, having a good experience in previous purchases, quality assurance and competitive prices. Another interesting result is that regarding the delivery service, as consumers consider that efficient delivery systems are crucial to accept this kind of online purchases. The results also highlight the role of friends' recommendations (word of mouth) in food consumer's acceptance of social websites. On the other hand, the distrust in health, hygiene guarantees and product quality, unfamiliarity and the lack of trust in post-purchase process are the most mentioned obstacles that would hinder the development of short food chains on social networks.

The third chapter addresses consumers' willingness to buy certain food categories directly from producers through the use of social media applications. This piece of research is giving a special focus on food products of animal origin due to their great relevance in the agri-food market and in consumer's diet. A qualitative methodology (free listing task) was applied in order to determine which products consumers would/would not be willing to buy on social media-based short food chains. The inclusion of questions of opposite meaning was considered the best way to uncover not only products that are most prone to be sold via short food chains, but also those that could elicit

mixed feelings among respondents. After data had been analyzed and food categories had been determined, a k means cluster analysis was developed with the aim to find different consumers groups with similar purchasing behavior. Three groups were identified which can be described as follows: 1) mature-older people with high willingness to buy: this cluster is the smallest group and includes only 24.5% of the respondents who show a high willingness to buy food on social networks, 2) younger consumers with a moderate willingness to buy: it includes 31 % of respondents and displays the largest percentage of younger individuals with the highest presence on social media and a moderate willingness to buy food online and 3) highly educated, middle-aged and unwilling to buy: this is the biggest group which includes 44.5% of the sample who showed the lowest willingness to buy.

Once the groups were defined the content analysis of the data was repeated and differences among groups were discussed. One of the most highlighted results of this work is that consumers would be willing to buy a wide range of food products, especially those with a long shelf life and processed food such as legumes, rice, pasta, jam, honey, sugar, etc. Regarding the food products of animal origin, it can be appreciated that the willingness to buy them through social networks is much lower than that for vegetable-based food. It is also noteworthy that the most mentioned product is “preserved fish”, a food that shares the characteristics of non-perishability and long shelf-life. Whereas, fruits and vegetables, in addition to processed meat products, fresh fish and dairy products are the most mentioned categories that consumers would not be willing to buy on social media sites.

Finally, the fourth chapter shows a cross-cultural consumer’s perspective on social media-based short food supply chains. A qualitative approach, using free-listing tasks and sentence completion techniques, was adopted in this research. The researchers decided to apply the study in three countries (Mexico, Spain

and Egypt) with different cultural, geographic, demographic and economic backgrounds. The most significant result that emerges from this study is that a high percentage of consumers within the three countries might be interested in purchasing different categories of food through those new short food chains. It also offers food companies the most relevant motivations and barriers of consumers for their engagement in this initiative. Regarding the categories of food that consumers would purchase via these chains in each country, it has been found that Egyptians showed the highest predisposition to purchase preserved food and legumes while Mexicans were more willing to buy ready meals and fast food than Egyptians and Spanish respondents. Both Spanish and Mexicans expressed a higher willingness to purchase processed meat and cheese compared to Egyptians. On the other hand, findings showed a variety of food products consumers would not be willing to buy in the three countries such as fruits and vegetables along with foods of animal origin.

Concerning motivations and barriers, trust in the brand or having a good experience in previous purchases were the most frequently mentioned reasons that can motivate consumers in both Spain and Egypt. In Mexico, it has been found that having an efficient delivery service is the most important factor. In addition, Egyptian respondents were those who most elicited quality assurance and confidence in the company as the main factors that would encourage them to buy. Regarding the obstacles, some dissimilarities were also identified among the three countries; Spanish respondents, compared to Egyptians and Mexicans, were those who most like shopping in physical stores. It has been found that Egypt, compared to Spain and Mexico, was the country that most cited distrust in the post-purchase process as an obstacle that would affect negatively the adoption of such short food chains. It is supposed that the multicultural perspective of the study might open new opportunities for food businesses around the world, especially for SMEs, to develop short food supply chains

enabling them to increase sale levels and, therefore, increase profitability and reduce costs.

CHAPTER 1: Can social networks
contribute to the development of short
supply chains in the Spanish agri-food
sector?

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Resumen

La industria agroalimentaria se considera como la primera rama industrial en España, donde los consumidores adquieren sus alimentos a través de diferentes fuentes, principalmente vía las cadenas tradicionales/largas. Sin embargo, hay segmentos de consumidores que buscan relaciones más directas con los productores de alimentos, ya que quieren ser informados sobre el origen de sus alimentos y el modelo de producción. Por ello, el establecimiento de relaciones más directas con los consumidores mediante la creación de cadenas alimentarias cortas podría ser una gran oportunidad para pequeñas y medianas empresas. En este contexto, el enorme aumento en el uso de las redes de comunicación social ofrece a los productores el potencial para crear nuevas cadenas cortas para la promoción y la venta de sus productos de manera rápida, directa y de bajo costo. En este sentido las redes sociales pueden proporcionar diversos beneficios: contribuir a la reducción de márgenes de mercado favoreciendo la venta directa; facilitar la identificación del perfil de los clientes, sus preferencias y la forma en que perciben ciertos productos.

Can social networks contribute to the development of short supply chains in the Spanish agri-food sector?

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Abstract:

The food industry is the first industrial branch in Spain, with Spanish consumers purchasing food from different sources, mainly via traditional/long chains. However, there are consumer segments seeking for more direct relationships with food producers, because they want to be informed about their food's origin and production model. So, dealing directly with consumers by creating short food supply chains could be a great opportunity for food small and medium enterprises. In this context, the huge increase in the use of social media offers producers the potential to build new short chains for promoting and selling their products in a rapid, low-cost and direct way. Benefits of social networks in this regard are various: they may contribute to reducing market margins by enhancing direct sales; they facilitate the identification of customers' profile, their preferences and the way they perceive certain products.

Keywords: social marketing; e-marketing; small and medium enterprises; short food supply chains.

Résumé:

l'industrie alimentaire espagnole est le premier volet industriel en Espagne. Les consommateurs espagnols achètent de la nourriture provenant de différentes sources, surtout via les chaînes traditionnelles/long. Cependant, il y a des segments de consommateurs toujours à la recherche de relations plus directes avec les producteurs, parce qu'ils veulent être informés de l'origine et le système de production de leurs aliments. Ainsi, traiter directement avec les consommateurs en créant des chaînes d'approvisionnement alimentaire court pourrait être une excellente occasion pour les petites et moyennes entreprises. Dans ce contexte, l'augmentation de l'utilisation des médias sociaux offre aux producteurs la possibilité de construire une nouvelle courte chaîne pour promouvoir et vendre leurs produits d'une manière directe, rapide et peu coûteuse. Les avantages des réseaux sociaux sont diverses: elles peuvent contribuer à réduire les marges du marché en améliorant la vente directe; ils facilitent l'identification de profil du client, leur préférences et la manière dont certains produits sont perçus.

Mots-clés: marketing social; e-marketing; petites et moyennes entreprises; chaînes d'approvisionnement alimentaire court

1.1 Introduction

The food sector is one of the most important sectors of the economy, encompassing agriculture, the food industry, retail, and eventually, all members of society as consumers (Lehmann *et al.*, 2012). The European food and beverage sector's turnover was 1,048 billion Euros in 2012, and it employs 4.2 million people (FoodDrinkEurope, 2014). The sector is crucial in the European economy as Europe accounts for the largest share in the global food and beverage industry (FoodDrinkEurope, 2014). In addition, EU has 286.000 agri-food enterprises -99.1% of which are small and medium enterprises (SMEs) with fewer than 250 employees- representing 51.6% of the total sales of the agri-food sector and two thirds of employment (FoodDrinkEurope, 2015).

The Spanish food industry is ranked fifth in terms of the net sales value of the agri-food sector in the EU after Germany, France, Italy and United Kingdom (MAGRAMA, 2014). In Spain, the food and beverage industry is considered the first industrial branch, according to the latest statistical survey (INE, 2013), representing 20.6% of net sales, 18.2% of employed people and 15.3% of the added value.

In 2013, total net sales amounted to 91,450 million Euros, representing an increase of 1.4 % over the previous year. Meat industry represented 22.1% of that figure, followed by animal feed (9.7%), fats and oils (9.4%) and dairy (9.3%) (MAGRAMA, 2014).

The Spanish food industry shows a high degree of atomization. However, in recent years the food marketing and distribution have experienced remarkable changes, mainly in terms of concentration processes that have taken place mostly among large food companies (MAGRAMA, 2008). These changes had important and serious consequences on the configuration of the producer-distributor relationship, since it moved from a situation in which manufacturers

dominated the conditions of purchasing of their products, to a new context in which distributors have enhanced their bargaining position (Oubiña, 2000) and got the capacity of driving the demand. Therefore, this situation results in a state of dissatisfaction for producers, who do not find a stable market and a return for their activity, thus making little profit or even incurring losses.

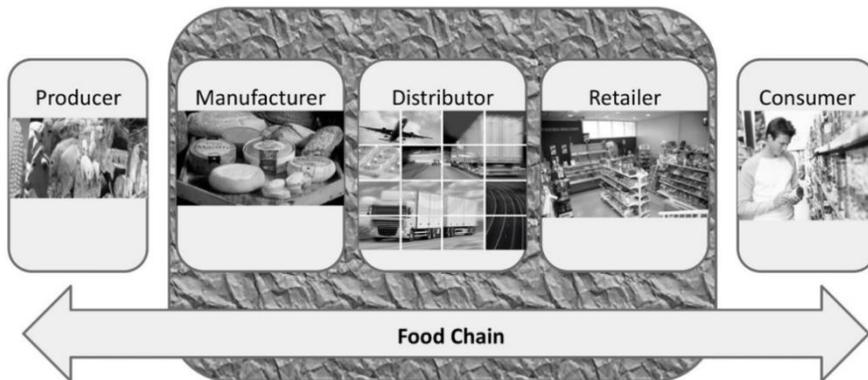
Commercial distribution is increasingly changing and complex both in the Spanish market and in the international environment. Most of these changes are taking place because consumers are demanding a variety of products and services with the highest quality, best price, and added value.

They are also seeking for more information with respect to origin, safety and wholesomeness of the purchased food (Röhr *et al.*, 2005), a trend linked to the increasing consumer concern about environment and health (Mesías *et al.*, 2011).

Spanish consumers use different shopping chains to purchase food and drinks. In this regard, the relative importance of supermarkets (53.6% of market share in 2012) has gradually increased compared with specialized shops (22.7% of market share) that along with other formats have a less noticeable presence. However, certain differences can be found in the choice of point of purchase by the Spanish consumers depending on whether they are to buy fresh or processed food. In the first case, specialized shops remain one of the most preferred choices, with a market share of 31.1% in meat and 40.6% in fresh fruits). For processed food, free service outlets have become clearly the preferred choice for households (supermarkets account for 70.7% of the sales of milk or 59.2% of sales of olive oil) (MERCASA, 2013). Moreover, consumers have started to use other formats that weren't common until recently, like delicatessen stores, 24 hours' shops and sales on the Internet (MAGRAMA, 2008). On the other hand,

70% of purchases are made via traditional (long) chains where hypermarkets or supermarkets are the final link between producer and consumer (Figure 1).

Figure 1.1. Traditional marketing food chain.



Nevertheless, there is a sector of the population seeking more direct relationships with the producer, claiming their right to choose the products they consume and to be informed about the source and model of production (MAGRAMA, 2013). So that, it would be a good opportunity for traditional enterprises to deal directly with consumers by creating short food supply chains (SFSC), eliminating the passage through several links in the food chain, thus facilitating the traceability of food products and a better price transmission between producers and consumers.

Within this context, the aim of this review is to summarize the role that SFSC could play as an opportunity for SMEs in the agri-food sector. Moreover, to highlight a new perspective relying on social media platforms as potential short supply chains for SMEs. The specific questions to address include: (1) How can SFSC be defined? (2) What are the main reasons of consumer interest in short chains? (3) How could social media applications serve as a short food supply chain?

The paper is structured as follows. It first defines the concept of short supply chain and describes the main perspectives identified in the literature. Subsequently, the paper develops a proper definition of a short supply chain in the context of online and offline models. Next, the paper presents the existing situation concerning the online marketing practices in food SMEs and highlights the empowering role of information and communication technologies. The paper concludes with a reflection about the different food products/food sectors that could take advantage of both, the creation of SFSC and a wider use of social networks as a marketing tool within those chains.

1.2 Concept of short supply chain

A literature review shows different definitions of short supply chains. For instance, the definition adopted by the European Council (Santini and Gomez y Paloma, 2013) is "a supply chain formed by a limited number of economic agents, committed to cooperation, local economic development and socio-economic relations between producers and consumers in a close geographical area".

Also, it is worthy here to differentiate between two main types of short supply chains. On the one hand, we find the direct short chains, where the number of intermediaries is zero and on the other hand the indirect short chains, which only have a single intermediary between producers and consumers (Mundubat, 2012).

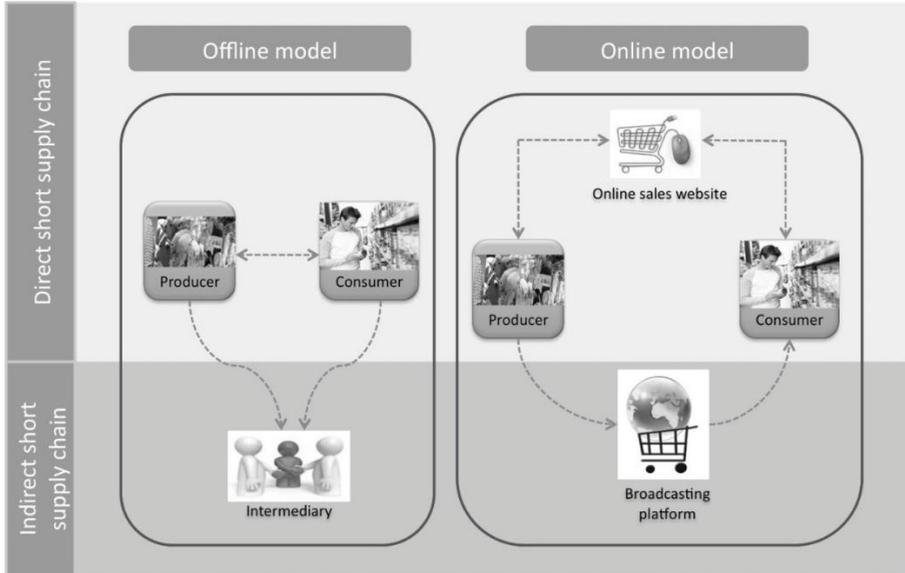
The marketing via these short supply chains can be done according to different marketing structures. We can differentiate those structures according to the use of the Internet as online and off-line short supply chains. The online chain allows either the possibility to purchase products directly through the network or just offers online support so that consumers are put into direct contact with sellers. Online chains may include: i) online platforms, such as the ones used for

broadcasting purposes, (the user only has access to the information and contact details of the producer) and those that allow purchasing online directly; and ii) on-line sales websites of producer or manufacturer where electronic commerce takes place (MAGRAMA, 2013).

Whereas the offline short channels are those who do not offer their products via the web. Within the so-called offline chains, there are various purchasing outlets such as producer market, direct sale shops, shipping door-to-door and consumer groups.

According to the above, a more inclusive definition of a short supply chain would be the one in which the number of intermediaries is equal to or less than one whether the transaction takes place through online or offline platforms (Figure 2). This concept is widely applicable to the food sector, in which case we would refer to short food supply chains.

Figure 1.2. Information flows in short food supply chain models



In terms of consumers' interest in SFSC, there is evidence that they have favorable impacts on both social and economic levels. They also favor interaction and direct connection between farmers and consumers (Canavan *et al.*, 2007; Migliore *et al.*, 2015) thus promoting the development of confidence and awareness of social capital (Chiffolleau, 2009). This can also result in the development of community sense and co-existence (Abatekassa and Peterson, 2011) and can even cause behavioral changes (Cox *et al.*, 2008) in eating and shopping habits, enhancing social and environmental awareness. Moreover, economic benefits can be noticed due to rural development and economic regeneration, as local agricultural systems and short chains have a greater effect on the local economies than long ones, with implications also for maintaining local employment especially in rural areas (Santini and Gomez y Paloma, 2013).

In addition to the aforementioned social and economic impacts, the literature review indicates that quality concerns are among the main reasons of consumers' interest in short chains (Migliore *et al.*, 2015; Abatekassa and Peterson, 2011; Sage, 2003). In this sense, the consumer can receive products embedded with information about production system, origin, and specific quality. This would help him/her to make value-judgments about the product (Marsden *et al.*, 2000; Abatekassa and Peterson, 2011). Furthermore, the reduced distance between the primary producer and the final consumer would enhance the creation of mutual trust and of differentiated products (Sage, 2003).

Thus, it would be of great value for food enterprises to take part in this type of marketing. They can even use short and long food chains combined in order to get the greatest benefit and reduce the risk.

Marsden *et al.* (2000) and Renting *et al.* (2003) identify three main types of short food supply chains (face-to-face, spatial proximity and spatially extended) which are briefly defined in the following paragraphs.

I. Face-to-face, where producers sell their products directly to the consumer on a face-to-face basis. Examples of face-to-face SFSCs are farmers' markets, farm gate sales, pick-your-own, and box schemes.

II. Spatial proximity, where products are produced and sold through local market channels in the specific region of production including farm shop groups, food service outlets, local food retailers and consumer cooperatives.

Other examples reported in the literature about spatially proximate SFSCs are Community supported agriculture (CSA) (Brown and Miller, 2008), Solidarity purchasing groups (GAS) (Migliore, 2014) and Associations for the maintenance of peasant agriculture (AMAP). All these types could vary according to different regions and countries, but they share the same essential

principles whereby subscribers receive a share of the harvest in return for money and labor (Santini and Gomez y Paloma, 2013).

III. Spatially extended, where products are sold not only to local consumers but also to consumers in other regions. In this case labeling and certification programs could be used to differentiate these products emphasizing the quality dimension (Abatekassa, 2011) such as in the case of Fair trade and Protected Designation of Origin (PDO).

Already in 2013, and based on a study on short commercialization chains in the agri-food sector, the Spanish Ministry of Food and Agriculture started promoting food marketing via short supply chains (MAGRAMA, 2013). To this end, it recommended SMEs to bet on the development of marketing using websites or mobile phone applications, along with building the presence in social networks, which can be considered as affordable and not overly complicated tools for non-experts (MAGRAMA, 2013).

Despite the high potentiality, some barriers can also limit the implementation of e-commerce¹ in the agri-food sector. These constraints are mainly linked to the uncertainty and lack of trust among stakeholders in terms of security issues. According to Haas *et al.* (2016) and Canavari *et al.* (2016), customers perceive electronic purchases as more risky than conventional ones. This may be due to the impersonal nature of online transactions and to the lack of direct contact between businesses and consumers, which can generate distrust among possible customers (Canavari *et al.*, 2010). Therefore, the creation of trusted relationships in an online environment (e-trust) is a key element for the adoption and development of e-commerce (Canavari *et al.*, 2010; Lehman *et al.*, 2012).

¹ Within the overall concept of e-business (the development of business via the Internet that could include buying and selling goods and services, along with providing technical or customer support) e-commerce is limited to the selling of goods and services on line. Both terms are, however, often used in an undifferentiated way.

The inability to experience the product and to judge quality prior to purchase is also a main barrier for e-commerce growth. The major limitation associated with online experience is the limited sensory input compared with direct experience (Daugherty *et al.*, 2005). Many consumers prefer to touch, feel, smell or even taste the product before they purchase. Hence, it is likely that consumers with high hedonic shopping motivations will prefer more direct interaction and go for traditional stores (Sarkar, 2011). In this context, and even though e-commerce could be a useful short supply chain, the relationship between producers and consumers is still weaker when compared with some of the aforementioned types of SFSCs (farmers market, community supported agriculture, etc.). In addition, e-commerce still needs to be understood and culturally accepted by the socio-economic actors who are very accustomed to face-to-face business (Briz *et al.*, 2016).

The lower improvement of delivery service in agri-food e-commerce, when compared with other aspects of the web supply chains, is also identified as a limitation to its development (Chen *et al.*, 2014). In an online transaction, consumers are left empty-handed for some time after making a purchase. They may be unsure about delivery dates or product packaging during transport. This problem could be the most difficult barrier for e-commerce in the case of perishable food products.

1.3 Agri-food e-marketing

E-marketing is a subset of e-business that uses electronic means to perform marketing transactions and accomplish certain marketing goals for an organization (Petrovic, 2010). It therefore implies the application of digital technologies to contribute to the marketing activities of an enterprise so as to strengthen the relationship with customers and create added value for the product. It includes both direct response marketing and indirect marketing elements, and uses a range of technologies to help connect businesses to their customers (Tsekouropoulos *et al.*, 2011).

The internet can be used to facilitate purchase transactions among all kinds of actors: among consumers, among businesses, between businesses and consumers (Grunertand Ramus, 2005). Studies dealing with consumer behavior in internet shopping concluded that people have a wide range of different motivations and different approaches which trigger their behavior and which include not only the pros of convenience, financial benefits and easy information accessing but also hedonic aspects of e-commerce like enjoyment, normative beliefs and self-efficacy (Mandilas *et al.*, 2013; Shang *et al.*, 2005; Joines *et al.*, 2003)

Over the last decade, online shopping has provided an open window for producers to market their products and has become one of the most rapidly growing forms of shopping (Zhu *et al.*, 2014). Potential uses of e-marketing are interesting for the agri-food sector due to both globalization in markets and fragmentation in supply (Hausen *et al.*, 2006). However, adoption of this approach by businesses is low (Canavari *et al.*, 2016), in particular by small and medium sized enterprises which represent the majority of agricultural production (European Commission, 2005; Fritz and Canavari, 2008; Bewley and Russell, 2010; Canavari *et al.*, 2010; Lehmann *et al.*, 2012). E-commerce in

Spain amounted to about M€ 16,000 in 2014, with a marked increase with respect to 2013 and 2012 (24.7% and 43.4%, respectively) (CNMC, 2014). The food sector turnover represented only 2.8% of the whole Spanish e-commerce in 2014 (with a similar figure in the previous year), much lower than the corresponding figure in other economic sectors, such as tourism (18%) and air transport (9.6%) (Marketing4Ecommerce, 2013). In particular, the food sector constituted 4.0% of the total number of e-commerce transactions (CNMC, 2014).

E-commerce development in the agri-food sector is still rather limited in Spain, with only 18% of consumers having purchased food on-line at least once in 2015 (Aral, 2016). More specifically, when breaking down this figure we find that fresh food is the least on-line purchased category (13%), although more than 40% of food consumers used the web to look for information or compare prices (Aral, 2016). This highlights the potential of internet food marketing, as those e-browsers should easily become future e-consumers.

According to the e-Business Index 2006, calculated by e-Business Watch (European Commission, 2007) for 10 different sectors in 10 EU countries, the food sector is found in the lowest two ranks in this benchmarking which express e-business adoption as "a percentage of firms in a sector with a certain activity", regardless the size of the firms (European Commission, 2007). Given that the European food sector, as it was mentioned before, is dominated by small and medium sized firms, we can interpret that these results mainly reflect the SMEs' relationship with new technologies, as many small companies still face diverse problems to get digitally connected with their suppliers and customers.

The food sector, in general, needs to be efficient. Efficiency, process control, and consumer communications are all closely related to the use of information and communication technology (Lehmann *et al.*, 2012). In a small enterprise,

information management, as a part of an e-business strategy, can be effectively and efficiently achieved with the use of less sophisticated and less expensive systems compared with those used by large companies (European Commission, 2007).

Moreover, the conclusion of the European e-business report (European Commission, 2007), showed the great potential of e-business for SMEs, which could be noticed as follows:

1. While SMEs need to cooperate, for example by building networks, information and communication technology (ICT) usage facilitates cooperation in many ways (e.g. through project management tools, or online collaboration tools for design).

2. Also, current technological developments hold opportunities for small companies, for example, Voice-over-IP telephone and mobile e-business solutions. Moreover, ICT companies are increasingly addressing the SME market by developing affordable, small-sized solutions such as Enterprise Resource Planning (ERP) which are computer systems organized for resource administration in an organization, or Customer Relationship Management (CRM) suites which are computer systems to support the management of relations with customers, sales and marketing. Such software can include several features to manage the company's sales and customers.

3. Finally, many SMEs are forced to expand their market area. E-Commerce can be an opportunity -maybe the only way- for them to go global.

1.4 Social networks as an e-marketing tool

Recently, the spectacular development of internet use -above all the Web 2.0 and online social networks- has aroused great interest in the marketing sector. Many companies have decided to incorporate social marketing (Marketing via

social networks) to support their commercial activities (Mata and Quesada, 2014). From a market perspective, social networks can be considered as collections of individuals which create what can be called a “Virtual Market”. This situation presents valuable opportunities to do business based on the potential benefits that a company can get from such networks to promote its brands or products (Dooley *et al.*, 2012; Mata and Quesada, 2014). From this perspective, both online social networks and e-commerce may be considered complementary e-marketing tools and not substitutes.

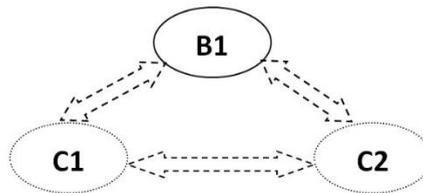
The proliferation of social media applications such as online communities, social networking sites or blogs gives the public new means for receiving, and, more importantly, providing information (Rutsaert *et al.*, 2013). Some online social networks support both the maintenance of existing social ties and the formation of new connections based on shared interests, political views, or activities, while other networks attract people based on common language or shared racial, sexual, religious, or nationality based identities. Social network sites also vary in the extent to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo or video-sharing (Ellison *et al.*, 2007; Ellison, 2008). It is worth mentioning that social networks offer their services for free most of the times, relying on advertisement revenues to cover their expenses. This means that marketing aspects are the core factor of success for such type of sites.

The free service together with the revolutionary increase in the use of social media offer producers the potential to build a new short channel for promoting and selling their products in a rapid, low-cost and direct way. It may also contribute to reducing market margins by enhancing direct sales (Business to consumer or B2C) as shown in Figure 3. In addition, by operating through social networks companies can create and manage their own pages to

communicate directly with their customers (followers or fans, as they are known in social network jargon) thus saving advertising costs.

Businesses could start their free advertising campaigns by sharing pictures, information and even videos about their products. Additionally, a direct flow of information among consumers (consumer to consumer or C2C) is supported. This enables fans to spread the word about the company performance by sharing and commenting with their friends while getting them to leave their experience about the product, its advantages, and disadvantages. The study of Sturiale and Scuderi (2013) provides evidence about the significant impact that purchasing experience has on consumers' intention to spread the word among their peers.

Figure 1.3. Information flows in social marketing models of short supply chains



Caption: B1: Business, C1: consumer 1 and C2: Consumer 2

1.5 Social networks as an opportunity for SME agri-food companies

One of the main uses of social networks as a chain for food marketing would be to facilitate the role of marketing managers to identify their customers' profile, their preferences and the way they perceive certain products. Thus companies may perfectly define their target segments and change their marketing policies when needed.

Producers can also request social networks to show ads to specific people who might be interested in their message, as these applications are designed to help

advertisers to find relevant/suitable customers through the use of new technologies like cookies². Cookies offer a useful way for advertisers to understand if the sale of a product on its website is connected to an ad on the social network. Cookies are also used to learn whether someone who saw an ad later visited the advertiser's site.

Moreover, Facebook and other social sites provide reports about the performance of the ads they show, such as how many people viewed or clicked on ads or demographic information about the people who viewed an ad. This information can help advertisers and producers to understand and measure the effectiveness of their ads, which helps them show better and more interesting ads to people.

The dependence of social networks on advertising revenues led them to improve some new marketing tools. For example, Facebook has recently added the "purchase button" to companies' pages with the idea of linking their Facebook pages with their online shops in order to facilitate the online purchasing process through social platforms. In Spain, firms such as El Corte Ingles and Carrefour (food retailers) or Navidul and Oleoestepa (food producers) are some examples of companies that have already taken the initiative to add this purchasing button to their Facebook pages, a move that most SMEs in the agri-food sector have not yet followed. The peculiarities of food marketing could be the reason for this slow movement towards a wider use of social media as a new and strong marketing tool within the Spanish agri-food sector.

There are multiple potential uses of social networks in the agri-food sector. For example, in the case of top-range foods (Delicatessen) or those with Designation of Origin, in which the ability to identify consumers with very

² A cookie is a small piece of data sent from a website and stored in a user's web browser while the user is browsing this website. Every time the user loads the website, the browser sends the cookie back to the server to notify the website about the user's previous activity.

specific characteristics is nowadays only available to large enterprises with powerful marketing research departments. With the use of social networks, any food producer can identify and interact with clients with high potential interest. Something similar could happen with organic food, where we now find a large number of small producers that on many occasions have to sell their products through conventional chains due to the lack of specific chains. Social networks can supplement this deficiency by providing farmers a direct connection and interaction with their customers.

Obviously, there are products in which the advantages are not so clear, such as those highly perishable, where the problem is more of logistics than of marketing. However, even in these cases, companies can benefit from valuable information coming directly from their present and prospective customers.

In addition, one of the greatest problems any SME may face is the creation of its brand image. Every company needs to communicate constantly with its -present or future- customers either to introduce new products and services or just to provide them with information about their actual products. An adequate solution here is to invest in online brand positioning strategies. Hence, social networks could play an essential role as cheap and simple short chains through which the company can offer a more social image for its customers. Once consumers browsing a brand page perceive emotional and informational supports that satisfy their needs, it would be natural for them to commit to this page. In turn, consumers themselves would participate in the co-creation of a strong brand for the company (Wang and Hajli, 2014).

1.6 Conclusions

In the present context of globalization and growing competition, small and medium enterprises must look for potential sources of advantage that can help them compensate their flaws. This situation is even more difficult in the agri-

food sector, with a fragmented business fabric and great importance of perishable products. Nevertheless, the widespread use of ICT and especially of social networks can open opportunities for these companies, especially to build up short supply chains.

Although consumers may be reluctant to buy food online, some products that do not require cold chain to be delivered or that are not affected by transport delays (preserves, canned food or chocolates) would be the most likely accepted to be bought online. However, it may be considered that it is mostly on perishable products where SMEs agri-food firms can differentiate themselves and add value to their products.

For example, in the case of meat and meat products internet meat sales have increased in the last years, but there stands the problem of matching the slaughtering of the animals with consumers' demands. The use of social networks, with its almost instantaneous spreading of information, can allow producers to overcome this issue, by creating a short and interactive supply chain, while giving the consumers the opportunity to share their feelings about the product. It might also reduce the impact of health scares that could be addressed with direct communication producer-consumer.

Fruits and vegetables are one of the most important productions of the Spanish agri-food sector. Yet due to their perishable nature are among the less likely food products to be sold online. In this sense, the experience of online sellers such as Amazon, with consistently short delivery times may pave the way for consumers to accept the possibility of buying fresh products online. Social networks will play an essential role here as the tool that would allow producers to convey real time information to their customers about valued aspects such as harvesting schedules or ripening state.

It can, therefore, be concluded that small and medium agri-food firms have within their reach a powerful tool that can compensate some of the disadvantages derived from their (lack of) size. In this context, the possibility to interact directly with their customers building short food supply chains must be highlighted as one of the most promising lines of growth for this sector. The development of these tools will allow companies to meet market trends and satisfy consumers' demands, who want to know what they eat and where it comes from. Firms will also be able to develop more accurate and cheaper marketing strategies, thus improving their position in the markets and gaining competitiveness, essential aspects to survive and thrive in today's global food markets.

1.7 Acknowledgement

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CHAPTER 2: Short food supply chains
from a social media marketing
perspective: a consumer-oriented study
in Spain.

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Resumen

El creciente uso de internet y especialmente la proliferación de las redes sociales ha ofrecido a las empresas de todos los sectores la oportunidad de estar en contacto con sus consumidores, recibir sus comentarios y quejas a diario e incluso han facilitado la creación de cadenas cortas que permiten a los consumidores comprar sus productos en línea. Esta tendencia se encuentra bastante limitada en el caso de productos alimenticios. El objetivo principal de este artículo es estudiar las percepciones del consumidor hacia el uso potencial de las redes sociales para la creación de cadenas cortas de suministro en línea. Las técnicas proyectivas (tareas de terminación de enunciados) se han utilizado en este estudio, ya que permiten a los investigadores descubrir motivaciones, creencias y emociones que condicionan la percepción y el comportamiento de los consumidores y que pueden no ser detectados por interrogación directa. Los resultados de este estudio han permitido obtener información sobre aquellos aspectos que los consumidores consideran como oportunidades o barreras para la implantación de estas potenciales cadenas cortas de alimentos. El principal efecto es proporcionar a las empresas una imagen de lo que sucede en la mente del consumidor. Esto podría abrir nuevas posibilidades para que las empresas alimentarias desarrollen nuevos canales cortos de comercialización de alimentos.

Short food supply chains from a social media marketing perspective: a consumer-oriented study in Spain.

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Abstract

The increasing use of internet, especially the proliferation of social networks has offered companies of all sectors the opportunity to keep in contact with their consumers; getting their feedbacks and complains on a daily basis and even to create short online chains enabling consumers to buy their products. This trend is found to be rather limited in the case of food products. The main objective of this article is to deal with consumer's perceptions towards the potential use of social media to create online short supply chains for food. Projective techniques (Sentence completion tasks) have been used in this study. As, they allow researchers to uncover motivations, emotions and beliefs that drive consumer's perception and behavior which may not be detected by straightforward questioning. The findings of this study have allowed to obtain insight into those aspects that consumers regard as opportunities or barriers of such potential short food chains. The main aspect is to put food enterprises in the picture about what is going on in consumer's mind. This might open new possibilities for food businesses to develop a new short food chain.

Keywords: Social media marketing; e-marketing; short food supply chains; projective techniques; sentence completion task.

Résumé

L'utilisation croissante d'internet, notamment la prolifération des réseaux sociaux a offert de tous les secteurs, les entreprises la possibilité de rester en contact avec leurs consommateurs ; obtenir leurs rétroactions et même de créer des courts circuits en ligne qui permet aux consommateurs d'acheter leurs produits. Cette tendance s'avère plutôt limitée dans le cas des produits alimentaires. L'objectif principal de cet article est de traiter avec les perceptions du consommateur vers les possibilités d'utilisation des médias sociaux pour créer des circuits courts en ligne pour se nourrir. Les techniques projectives (tâches de fin de phrase) ont été utilisés dans cette étude. Comme, ils permettent aux chercheurs de découvrir les motivations, les émotions et les croyances perception du que le consommateur lecteur et le comportement qui ne peut pas être détecté par un questionnement simple. Les conclusions de cette étude ont permis de le pour avoir aperçu de ces aspects que les consommateurs considèrent comme possibilités ou barrières de ces chaînes alimentaires courtes possibles. L'aspect principal est de mettre les entreprises agroalimentaires dans l'image de ce qui se passe dans l'esprit du consommateur. Cela pourrait ouvrir de nouvelles possibilités pour les entreprises du secteur alimentaire développer une nouvelle chaîne alimentaire courte.

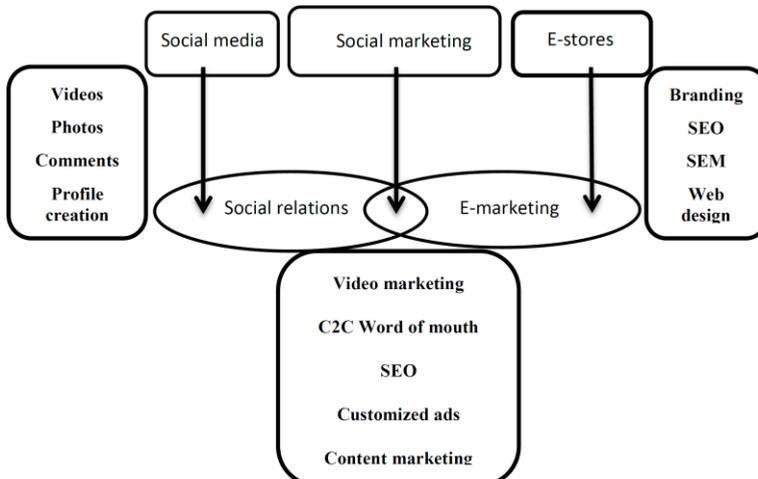
Mots clés : Social media marketing ; e-marketing ; chaînes d'approvisionnement alimentaire court ; techniques projectives ; tâches de fin de phrase.

2.1 Introduction

In the current context of globalization and widespread use of internet, one of the increasing trends that shape the markets is the use of cyberspace in performing marketing activities (e-marketing).

Generally, e-marketing refers to *the application of digital technologies to contribute to the marketing activities of an enterprise so as to strengthen the relationship with customers and create added value for the product* (Elghannam *et al.*, 2017). Although, for the most part, companies rely mainly on the usage of traditional websites for promoting or selling a certain product or service, some companies have recently noticed the potential of social networks -with their millions of users and their huge flow of information- to increase their market competitiveness, improve the company position and create a strong brand image. As a consequence, it has been noticed a greater presence of enterprises from all sectors on social networking sites and new concepts such as “social marketing” –or “social media marketing” have been forged, meaning the use of social networks as an e-marketing chain, as it can be shown in Figure 2.1.

Figure 2.1. Concept of social media marketing



As social networks can be defined as *those internet websites that allow individuals to build public or semi-public profiles, create connections and share information with other users within the system* (Boyd and Ellison, 2010). It can be considered that one of the main features of social marketing is that consumers can browse or purchase certain products or services online, but taking into account the comments, evaluations and recommendations of other internet users within the system, in which is commonly known as electronic word of mouth (e-WOM) which is one of the most powerful marketing actions to influence the online purchase decision (Kim and Park, 2013).

Social marketing also allows companies to identify their customers' profile, their preferences and the way they perceive certain products so they can address their actions to a specific group of users with regard to age, sex, interests and habits.

As it is the case with other internet marketing tools, social media can allow marketers to take advantage of the distinctive helpfulness that users display on social networks (Subramani and Rajagopalan, 2003). Producers can also pay to boost ads to specific people who might be interested in their message. Moreover, social media sites give a feedback to advertisers about how many people look at or clicked on their advertisements. This information can help marketers to evaluate the impact of their ads on customers, which would help them to improve its content and show better and interesting ads to people.

It is worthy to highlight that marketing is the core factor of success for social networks, as they mostly offer their services for free, depending on advertisement revenues to cover their costs.

Recently, Facebook, Google+, Twitter and Instagram are already turning out to become social marketing platforms by adding new call-to-action buttons to companies' pages. These buttons are used to book, call, contact, send a

message, use application, play, ask for more information, register, view video, send an email or even to buy directly. Customers can, therefore, purchase through the company's page without the need to visit the website. Following the same procedure that can be found in other online purchasing platforms, all the process from choosing the product to payment and delivering would be carried out through the social platform.

Within the current food market trends, direct consumer-producer relationships are a powerful incentive for food producers, who can take profit from the increasing number of citizens who want to know what they eat and how it has been produced. In this context, the creation of short food supply chains (SFSC) where producers deal directly –or almost directly- with their customers and where the food chain is shortened, could be an opportunity for agribusiness. Short supply chains could also facilitate the traceability of products and provide a better price transmission between producers and consumers.

According to the above, the widespread increase in the social media use gives companies the potential to build new short supply chains for promoting and selling their products in a quick, cheap and direct way. In this sense, social media could have various advantages, as it would facilitate the role of marketing managers to identify their customers' socio-demographic profiles, their demands and the way they act with certain products or brands. Consequently, companies may perfectly define their target segments and adapt their marketing strategies to satisfy their customers' needs.

Furthermore, this new system which enables online purchases to be proceeded through social media platforms can be considered a facility for producers to turn social networks into a powerful web-based short chain.

Although this trend can be found –with different levels of development– in companies of all sectors, in the case of food products these movements are still

rather limited. This may be due, on the one hand, to the basic features which characterize the food items (perishable nature, high weight in proportion to cost, etc.) and on the other hand to the attitudes and perceptions of consumers towards the use of such new chains which are unrelated to those commonly found in food purchasing.

Although encouraging the creation of physical short supply chains within the food sector is a well-studied topic in the literature on both the international (Filippini *et al.*, 2016; Mastronardi *et al.*, 2015; Wubben *et al.*, 2013; Aiello *et al.*, 2017; Sage, 2003; Abatekassa and Peterson, 2011; Migliore *et al.*, 2015; Giampietri *et al.*, 2016; Marsden *et al.*, 2000) and the Spanish level (Calatrava and Gonzalez, 2012; Guzman *et al.*, 2012; Mauleón, 2001), this article deals with a new approach through a social media marketing perspective.

These facts triggered the development of the present study in order to analyze consumer's predisposition and perception towards social networks as a short food marketing chain. Specifically, the article aims to address how consumers would perceive social networks as a marketplace for foodstuffs, analyzing whether they might be willing to deal with it and delving into the motivators and guarantees which could increase their likelihood of adopting such this initiative.

It was considered that the novelty of the topic could lead to possible biased answers from consumers if traditional questioning would have been used. Hence, it was decided to use projective techniques, as they allow researchers to uncover unconscious deep motivations and beliefs that drive consumer's perception. These subjective aspects would not be necessarily detected by more straightforward questioning (Steinman, 2009).

Projective techniques are qualitative research methods based on the assumption that consumers' unconscious perceptions and beliefs can appear when

individuals face forms with ambiguous or poorly structured questions. As respondents are free to respond with their own point of view, it can be expected that they will show their unconscious feelings in their answers (Donoghue, 2000).

Among the different projective techniques, it was decided to use completion tasks, where participants are requested to complete unfinished stimuli (sentences or stories). In this study, sentence completion has been applied since it is useful to understand consumers' perceptions and it also fits to be used online (Kujala *et al.*, 2014). In addition, it is a simple and suitable technique to be used in circumstances where respondents are facing a completely new perspective such as the use of social networks as online short food chains.

2.2 Material and methods

2.2.1 Data collection

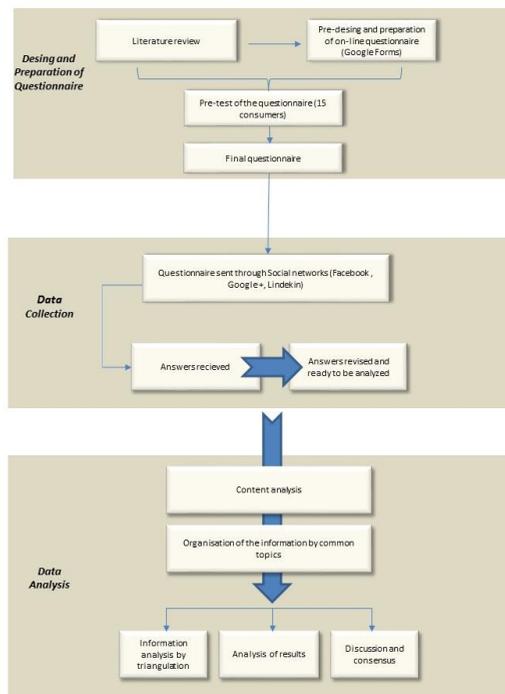
Given the nature of the study, where social media is being studied as a food marketing tool, the target population was set at regular users of social networks and it was also decided to use social media to spread the survey in order to ensure that all participants fulfilled the previous requisite. A non-probability convenience sampling has therefore been used in this study, a common approach used in qualitative research when the aim is to get an insight into a particular topic (Kinnear and Taylor, 1993). The final sample involved 209 Spanish consumers.

The online survey was developed during January- February 2016 using Google Forms – online (www.docs.google.com). A link to the questionnaire was posted and spread throughout three different social networks (Facebook, Google+ and LinkedIn) together with an introductory message about the definition of a short food supply chain. Then, they were given the following specific message: “Although at present it still not common, some platforms are developing new

tools that would give you the opportunity to use them as online short chains to buy foodstuff'. Then they were asked to fill out the questionnaire. Initially, a pre-test was performed with 15 consumers in order to assure the validity of the questionnaire and aiming to correct those questions which received improper answers or that were difficult to understand. These questionnaires were not included in the final sample.

Figure 2.2 describes the whole methodological procedure followed in this research.

Figure 2.2. Methodological procedure



2.2.2 Sentence completion task

Among the projective techniques applied in market research, completion of statements is one of the most frequently used, being also widely found in food research (Vaca and Mesias, 2014; Vidal *et al.*, 2013; Masson *et al.*, 2016).

Within this methodology, respondents can be asked to finish a varied type of stimuli: sentences, stories, arguments or conversations (Donoghue, 2000), although. The most common completion procedures are sentence completion and story completion (Steinman, 2009).

In sentence completion, respondents are given incomplete sentences and are requested to finish them with the first words that come to their mind, while in story completion tasks the participants receive part of a story that they must conclude with their own words.

In our research, it was decided to apply a sentence completion task (Sacks and Levy, 1950), as it permits a wide range of responses and can be adapted for different research purposes. Also, it helps researchers to obtain respondents' perceptions in an indirect and informal manner (Holaday *et al.*, 2000; Dykens *et al.*, 2007).

Participants were asked to complete four different completion sentences as it is shown in table 2.1.

Table 2.1. *The study's main topics and related sentence completion questions.*

(Perceptions of consumers)	(Reactions on food advertising)
For me, using social networks as a direct food marketing chain seems...	If I am using my social media and I watch food advertising, I think of...
I would buy food from a short food chain on social networks if...	I would not buy food from a short food chain on social networks because...
(Incentives)	(hinders)

At first, respondents were suggested to fill in the blanks mentioning their ideas about the use of social networks as short chains for food purchasing; they got the task "for me, using social networks as a direct food marketing chain seems....". They were then asked to complete another question related to food

advertising on social media. This question intended to get their different reactions to food ads that may appear while browsing social media sites.

Furthermore, consumers were requested to indicate the conditions that, from their point of view, could encourage them to adopt this initiative. Finally, in the fourth task, respondents were guided to mention reasons why they would not be willing to deal directly with a food producer on social networks.

2.2.3. Data analysis

Data analysis, based on the use of content analysis, was performed similarly in each of the completion questions. All answers provided by respondents were subsequently analyzed in a qualitative way and separately for each question. To do this, first and foremost, those expressions or words with similar meanings were identified and grouped into different categories. This task was held independently by each of the members of the research team, considering both the strict meaning of the expressions used and the possible synonyms. This methodology, usually called triangulation, aims to improve the validity of the results by analyzing them from several points of view (Patton, 1999; Cohen *et al.*, 2000). Once this step was done, definitive categories were agreed upon in a subsequent meeting and their names were defined. The frequencies in every category were determined by counting the number of consumers that used the same word or an equivalent term. Similarly to what can be found in other qualitative research papers, only those concepts mentioned by more than 5% of the participants were considered (Vidal *et al.*, 2013; Eldesouky *et al.*, 2015; Elghannam and Mesias, 2018).

2.3. Results and discussion

2.3.1. Consumers perceptions towards the use of social media as short food marketing chain.

As previously stated, in this task participants were asked to elicit their feelings about the use of social networks as a food short chain by filling in the sentence “for me, using social networks as a direct food marketing chain seems...”. Table 2.2 shows a summary of the answers together with some examples provided by the participants.

Table 2.2 *Categories identified regarding perceptions towards the use of social media as short food marketing chains.*

Category	Example	Percentage of mention (%)
Good and useful	Good idea; interesting and useful; great option; it is awesome	33.5%
Weird and unusual	Weird; ridiculous; absurd; bad; uninteresting; unusual	23.6%
Risky	Untrustworthy; insecure; sort of risky; not reliable	15.4%
Unnecessary	Unnecessary; inadequate	10%
Innovative	Innovative; a new alternative that can make life easier; novelty; a future trend; an advance	9.3%
Practical and convenient	Accessible; rapid; convenient; practical; helps to save time	8.2%

As can be observed in Table 2.2, 51% of respondents described the idea as a good, useful, practical and innovative one, a finding which is in line with the original objective of replacing or enhancing the traditional market chains by the creation of what can be called a webshelf or web-based storefronts (Molla and Licker, 2001). However, 49% of the participants claimed that it seems to be a strange, weird, risky and unnecessary option. In this case, even though double-

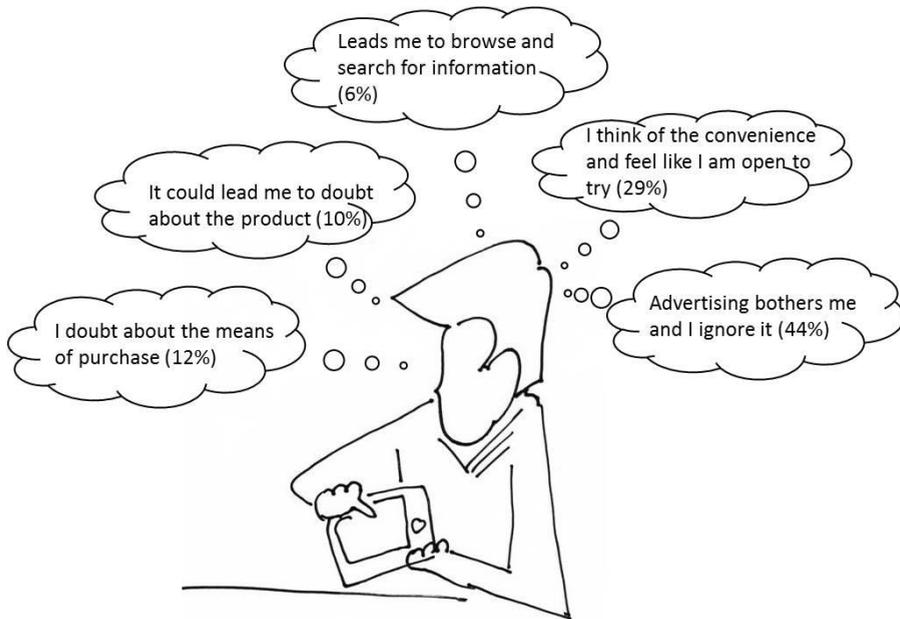
edged results have been found, the positive connotations outweighed the negative ones. These findings open an undeniable opportunity for food marketers that is a large part of those surveyed would be willing to accept the social media in their online purchases of food, This result is consistent with the study of Kumar *et al.* (2015) who reported that using Facebook as a means for selling products on brand's page will positively affect consumers' intentions to use it as a source for online buying.

Some of the positive aspects highlighted can be linked to modern family structure, with an increasing integration of women in the workforce with less time available for household chores and therefore more involved in buying online (Stark and Meier, 2001). It is, therefore, a group of people who can find an opportunity with any innovation leading to saving time at home.

Despite the growing usage of social networks, it is shocking that more than 23% of the answers refer to terms linked to weirdness or oddity. The explanation for this fact may lie on consumer habits, where food is mainly bought in the physical shop. This is in line with the study of Visser and Lanzendorf (2004) who suggested that physical shopping trips depend on the type of product and are significantly higher for groceries than for any other product. Changes in food consumer behavior and perceptions of new food chains would, therefore, imply previous information actions that may be far of reach for many producers and agri-food industries.

A second question was intended to find the associations between social media marketing and food. Although consumers are quite used to receive advertising when they browse the internet, it could be assumed that food advertising on social media might generate suspicion or rejection among users. Figure 2.3 shows the main comments brought out by the respondents.

Figure 2.3. If I am using my social media and I watch food advertising, I think of... (% of mentions)



As shown in Figure 2.3, most of the comments refer to the fact that consumers are annoyed by this type of advertising and therefore, they tend to ignore it. Moreover, if we take into account that it also raises doubts in more than 20% of the participants about products and payment systems, it can be concluded that social media is still not considered as an optimal chain for food advertising, at least nowadays.

2.3.2 Guarantees that could encourage the use of social networks as food chains

Consumers were then asked to reveal the conditions that could foster their use of social networks as a food marketing chain. In this sentence, and to obtain a different perspective from the respondents, purchasing was adopted as a proxy of usage. Results obtained from this question are summarized in Table 2.3.

Table 2.3. Categories identified regarding the question “I would buy food from a short food chain on social networks if.....”

Category	Example	Percentage of mentions (%)
Confidence in the company or brand / self-experience	I knew them beforehand; if I know the brand; I trust the producer or the webpage	19.3
Quality assurance	I was offered quality assurance; the products meet certain quality standards; the products have some kind of certification; guarantee the product and its reliability and the processes it has followed	14
Lower price than conventional channels	If it was not more expensive than in the supermarket; they were reasonably priced; there were any special promotions	12.5
If it were the only possible alternative	I do not have any other option closer; It was not possible to go out of my home; I have no time to go shopping	9.4
Products not found at regular outlets	It was difficult to find them in supermarkets; hardly found in traditional channels	8.9
Non-perishable / long-lasting food	Non-perishable; were not fresh products; packaged and canned	7.8
Fast and efficient delivery service	If it gets home quickly; if they gave me the guarantee that the order arrives in a short time and fresh; If I am offered home delivery service; if I am sure about the time I will receive the requested product	6.8
Word of mouth/ peer effect	Some friends would have recommended it to me; if people around me have done this before; if it was a friend’s recommendation; if people speak well of it	6.3
Trustworthy online platforms/ (payment platforms)	If there are secure payment platforms; if the form of payment and management of processes is reliable; a secure payment process.	5

As shown in Table 2.3, the trust in the brand and company or even to have a good experience in previous purchases is the most frequently mentioned reason that can motivate consumers. These results are in agreement with those included in some studies dealing with the determinants of e-commerce development (Canavari *et al.*, 2010; Lehman *et al.*, 2012). These authors found that customers perceive electronic purchases as riskier than conventional ones. Therefore, the creation of trusted relationships in an online environment is a core factor for the adoption and development of a direct social marketing chain.

Another important issue highlighted by the participants was quality assurance. This means that consumers are interested in products that have a certificate of quality assurance or that fulfil certain regulations that would ensure its reliability. In one way or another, this result is linked with that of lack of trust, so consumers are seeking for some sort of guarantee that could enhance their adoption of such short chains. This can open up an opportunity for food companies which are registered under PDO or PGI systems to expand more on social media sites to promote and even to sell their products.

Our findings also indicate that consumers give a certain importance to price, as it is the third mentioned category. As it is shown, a competitive price, lower than that of conventional chains, could motivate consumers to deal directly with producers through social networks. This result is in line with other previous studies which reported that consumers aim to get the best value for their money (Kang *et al.*, 2014) and they tend to be comparison shoppers (Kamaruddin and Mokhlis, 2003).

In addition, results show that there are possibilities for products that are not easily found in conventional points of purchase. In this regard, it is interesting to highlight that some consumers mentioned exotic and organic food, as both types of food have sometimes distribution difficulties that can generate

problems for their regular users to get them. Taking advantage of these new online chains may allow accessing this type of consumers, who also tend to be particularly loyal in the case of organic foods.

Our study suggests that consumers prefer not to buy fresh or perishable food; nevertheless, they are willing to buy packaged or canned foods. These results agree with other studies related to food sale through online platforms that have found consumers also preferring non-perishable products (Ramus and Nielsen, 2005).

In this case, the possibility of creating short food supply chains using social networks, where the consumer could know the origin of the food, its system of production, date of harvest, etc., could encourage the incorporation of new consumers, since they would get additional utilities that are not provided by traditional chains.

Another interesting result is that of delivery service, as consumers consider that efficient delivery systems are a key motivation to accept this kind of online transactions. This result is in agreement with that of Chen *et al.* (2014) who found that a little-developed delivery service in the agri-food sector is identified as a constraint to the growth of online outlets. Therefore, the agri-food companies that intend to create new marketing/distribution chains in social media must be aware of the need of fast and reliable distribution systems, as a way not only to meet consumers' expectations but also to create new values and services (direct information about origin and production system, ripening, harvesting...) that should open new market niches.

The results also highlight the role of friends' recommendations (word of mouth) in food consumer's acceptance of social websites. This is a positive outcome regarding the future increase of this trend as many other studies have indicated that consumers who show loyalty to a brand tend to recommend it to others on a

social networking site (Anderson *et al.*, 2014; Chan *et al.*, 2014; De Vries and Carlson, 2014; Gamboa and Gonçalves, 2014; Gummerus *et al.*, 2012; Labrecque, 2014; Laroche *et al.*, 2012; Rapp *et al.*, 2013; Zheng *et al.*, 2015).

2.3.3 Obstacles that would hinder the development of short food chains on social networks.

In this last task, respondents were encouraged to elicit the negative aspects why they would not be willing to use social networks for food marketing purposes. Although this question complements the former to a certain extent, it was considered that the negative approach could reveal some features that had not emerged previously. Table 2.4 shows the answers generated in this question.

Table 2.4. *I would not deal with a short food chain on social networks because...*

Category	Examples	Percentage of mentions (%)
Distrust in health and hygiene guarantees and product quality	It seems unsecure; I do not trust that the quality is the expected; I'm not sure of its origin; traceability; quality.	40
They prefer to do it physically because they think it would be more efficient	I think that the purchase will be more efficient; I can get a better product.	19
They prefer to do it physically for social aspects	I like more being in contact with people in a shop or supermarket than with a machine; I prefer to go to the supermarket and leave home	15.5
Unfamiliarity	I am not convinced; for lack of habit	7
Lack of trust in post-purchase process	What if they arrive in a bad state; how can you complain if the product is not in good conditions?	7

As can be observed in Table 2.4, the first obstacle identified by the participants is the distrust in hygiene guarantees and quality of products, a finding in accordance with those mentioned in the former section, It is remarkable that confidence appears here with a negative character and linked to wholesomeness and quality, while in the previous question the participants elicited other trust-related issues such as payments or brands. That is, the mistrust in intrinsic attributes -health and quality aspects- is a barrier for the incorporation of new buyers, while the confidence in extrinsic attributes -such as the firm or the online payment systems- are incentives. Although trust in extrinsic features can be easily generated and transmitted –e.g. through the use of secure and familiar payment platforms such as PayPal, companies must have a more direct control regarding food quality and safety, which should be improved and transmitted to their target consumers in order to eliminate their reluctance towards these new marketing chains.

Another important reason why consumers are not willing to engage in social media short food chains is that they prefer to purchase directly in the shop, as they consider that in this way the process will be more efficient and they will be able to choose better products. This result is in line with other research (Daugherty *et al.*, 2005; Sarkar, 2011) who stated that the limited sensory input is one of the biggest limitations associated with the web experience in comparison with the direct experience (Daugherty *et al.*, 2005). This reaction may be expected since many consumers prefer to touch, feel, smell, or even taste the food before they buy. Therefore, it is likely that those consumers with high hedonic shopping motivations will show a higher preference towards the direct interaction and would rather go to traditional shops (Sarkar, 2011). The lack of a clear post-purchase policy was found to be another obstacle, as consumers can be concerned about their money in case of giving back any product that doesn't meet their expectations.

2.4 Conclusions

In the food market, where producers and agri-food industries are losing power in relation to large-scale distribution, the use of social networks as a new food chain is a tool that can offer exciting opportunities in food marketing. The advantages are clear for both consumers and producers, since establishing short distribution chains may allow improving trade margins while at the same time providing new services highly valued by consumers.

The novelty of the use of social networks in food marketing, where respondents may be prejudiced led us to the selection of qualitative research in this research. In this context, the use of projective techniques has allowed to obtain insight into those aspects that consumers regard as barriers or facilitators regarding their foody use of social networks. The main aspect highlighted is that a large part of the participants would be willing to use the short food chains created on social media, which could be considered an undeniable opportunity for food companies.

Regarding the incentives, results have shown that the first reason which motivates consumers is having confidence with respect to the brand or even to have a good experience in previous shopping with the same company.

Furthermore, consumers are requesting products with quality guarantees and complying with regulations and standards. This finding can encourage food companies to produce under a certain type of quality schemes in order to take advantage of social media platforms to promote and sell their products. Likewise, it was found that a competitive price -lower than that of conventional chains- would also motivate consumers.

Regarding the barriers and apart from the distrust that has been previously mentioned, the main obstacle is that a large part of consumers still prefer to buy food physically in conventional outlets either because they perceive it the best

way or even for unfamiliarity with online food purchasing. Food companies must, therefore, educate consumers by showing them the great advantages they can get through more direct and immediate contact with the firms.

The outcomes of this research might open new possibilities for food agribusinesses, and especially for the smaller ones, as the combination of social media marketing and short food supply chains could lead to the development of new shopping channel, which could allow producers to increase sale levels and, therefore, improve their profitability.

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CHAPTER 3: Social networks as a new marketing channel for animal food products: a qualitative study in Spain

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Resumen

Este estudio pretende profundizar en la disposición de los consumidores a comprar alimentos a través de las redes sociales, ya que existen pocos estudios sobre el uso del marketing social en el sector alimentario y con especial atención a los alimentos de origen animal. Debido a la naturaleza del tema, se ha utilizado la investigación cualitativa en este estudio y se decidió difundir la encuesta a través de las redes sociales. Los participantes completaron dos tareas de listado libre relacionadas con los tipos de alimentos que comprarían o no comprarían en las redes sociales, realizándose un análisis posterior por triangulación.

El estudio muestra las categorías de alimentos más importantes en las que el uso de las redes sociales podría ser de gran interés para las empresas agroalimentarias. Los resultados de este trabajo muestran que los consumidores estarían dispuestos a comprar una amplia gama de alimentos y bebidas, entre los que destacan las conservas, legumbres, arroz, pasta, mermelada, miel, azúcar, etc. Estos resultados deben considerarse como preliminares y sujetos a confirmación adicional con una muestra representativa de la población, debido al carácter cualitativo del estudio y al muestreo de conveniencia no probabilístico utilizado. El estudio puede abrir nuevas posibilidades para las empresas alimentarias, especialmente las PYME, de cara al desarrollo de nuevos canales electrónicos de comercialización que les permitan aumentar los niveles de venta de sus productos y, por tanto, aumentar la rentabilidad y reducir los costes.

Social networks as a new marketing channel for animal food products: a qualitative study in Spain

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Keywords: Social marketing of food; Qualitative analysis; Free listing; Social networks; E-commerce.

Abstract

This study aims to delve into consumers' willingness to buy food through social networks, as there are few existing studies addressing the use of social marketing within the food sector, and with a special focus on foods from animal origin. Due to the nature of the topic, qualitative research has been used in this study and social networks were chosen to spread the survey. Participants completed two free-listing tasks related to types of food they would/would not buy on social networks, with further analysis performed by triangulation. The analysis suggests the most important food categories where the use of social media could be of great value for agri-food businesses. Some significant findings that emerge from this study are that consumers would be willing to buy a wide range of food and beverages, among which stand out the preserved food, legumes, rice, pasta, jam, honey, sugar etc...The results should be considered as preliminary and subject to further confirmation with a representative sample of the population due to the qualitative character of the study and the non-

probability convenience sampling used. The study might open new possibilities for food businesses, especially for SMEs, to develop a new electronic shopping channel enabling them to increase sale levels of these products and, therefore, increase profitability and reduce costs.

Resumen

Este estudio pretende profundizar en la disposición de los consumidores a comprar alimentos a través de las redes sociales, ya que existen pocos estudios sobre el uso del marketing social en el sector alimentario y con especial atención a los alimentos de origen animal. Debido a la naturaleza del tema, se ha utilizado la investigación cualitativa en este estudio y se decidió difundir la encuesta a través de las redes sociales. Los participantes completaron dos tareas de free-listing relacionadas con los tipos de alimentos que comprarían o no comprarían en las redes sociales, realizándose un análisis posterior por triangulación. El estudio muestra las categorías de alimentos más importantes en las que el uso de las redes sociales podría ser de gran interés para las empresas agroalimentarias. Los resultados de este trabajo muestran que los consumidores estarían dispuestos a comprar una amplia gama de alimentos y bebidas, entre los que destacan las conservas de alimentos, legumbres, arroz, pasta, mermelada, miel, azúcar, etc. Estos resultados deben considerarse como preliminares y sujetos a confirmación adicional con una muestra representativa de la población, debido al carácter cualitativo del estudio y al muestreo de conveniencia no probabilístico utilizado. El estudio puede abrir nuevas posibilidades para las empresas alimentarias, especialmente las PYME, de cara al desarrollo de nuevos canales de compras electrónicas que les permita aumentar los niveles de venta de sus productos y, por tanto, aumentar la rentabilidad y reducir los costes.

3.1 Introduction

E-commerce, as a tool that allows buying and selling goods through the internet, is a means by which businesses and consumers can obtain and transmit information, build and maintain relationships, and conduct transactions or payments through telecommunication technologies (Carpio and Lange 2015). These processes include business to business (B2B) transactions, consumer to consumer (C2C) purchases and transactions between businesses and consumers (B2C). In the B2C model, consumers have a wide range of different motivations and different approaches which trigger their use of online platforms to purchase (e-shopping). E-shopping not only provides convenience, financial benefits and easy information accessing but also hedonic aspects like enjoyment and satisfaction (Mandilas et al. 2013; Shang et al. 2005; Joines et al. 2003).

Within the food sector, the use of e-commerce shows very high growth rates in the figure of consumer purchases per year. However, online food sales still represent a very small proportion of total food sales (Carpio and Lange 2015). In 2012, data on the relevance of online food purchases across the European Union shows that 9% of internet users purchased food and groceries on the internet. UK was the country with the highest proportion of food e-shoppers with 21%, while only about 6 % of Spanish internet users bought food and groceries online.

During the past decade, the spectacular development of internet use -especially the Web 2.0 and online social networks- has aroused great interest in social marketing (marketing via social networks). Social networking sites and online communities give the public new means for receiving and providing information (Rutsaert et al. 2013). Some social networks support both the maintenance of existing social ties and the formation of new connections based on shared interests, or activities, while others attract people based on common

language or shared cultural, or nationality (Ellison 2008). Social networking sites also vary in the extent to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo or video-sharing (Ellison et al. 2007; Ellison 2008). Most social networks offer their services for free, relying on advertising revenues to cover their expenses. This means that marketing aspects are the core factor of success for this type of sites.

From a market angle, social networks with their collections of individuals can be considered a “Virtual Market”. This situation presents valuable opportunities for businesses due to the benefits they can get from social networks to promote its brands or products. In this sense, many companies involved in the food sector have recently decided to incorporate social marketing to support their commercial activities (Mata and Quesada 2014). These aspects are especially relevant for animal food products, and mainly for meat, where the possibility of interacting directly with consumers can provide great advantages to producers.

Due to their potential, many studies have been published analyzing the effect of social networks as a new e-marketing tool (Harris and Rae 2009; Rolland and Parmentier 2013; Edwards et al. 2013). Nevertheless, it is not so common to find studies addressing the use of social marketing within the food sector (Sturiale and Scuderi 2013; Khan and Boehner 2013) and depicting the types of food products that consumers would be willing to buy through social networks.

Therefore, this study aims to examine the role that social networks could play in Spain as an opportunity for agri-food small and medium enterprises. The study intends specifically to delve into consumers’ willingness to buy food through social networks, identifying the types of food that could be bought. A particular interest will be devoted to foods of animal origin, due to their great relevance in the agri-food market and in the consumer diet.

This task is especially complicated if one takes into account the multiple aspects involved in consumer perception of social networks, due to the novelty of the topic (many consumers may not even have considered buying food via social networks, or they may think it is impossible) and also to the privacy and trust aspects involved. For those reasons, qualitative research has been considered a more valid approach than quantitative methods.

Qualitative research has the potential to overcome barriers to communicate with respondents and delve into aspects of their experience that can be difficult to study in a different way (Vaca and Mesías 2014). Among the different qualitative techniques, we decided to use the free listing technique, since it is a simple and powerful method that provides a huge amount of data in a little time and does not require trained facilitators or special materials (Wilson 2009). It is also a technique that fits quite well with the objectives of this research, where participants are requested to elicit (to list) different types of food according to the tasks described in the material and methods section.

3.2 Material and Methods

3.2.1 Free listing

Free Listing is a qualitative technique which relies on asking participants to list as many items or ideas as possible related to a certain topic (Carrillo et al. 2014). It is a technique designed to elicit data about a cultural domain -concepts or sentences that refer to a single conceptual field- (Gravlee 1998; Bernard 2006). According to Hough and Ferraris (2010), free listing can be used to gain insight into a food category and to find which foods are considered appropriate for certain uses or occasions, therefore offering an indirect approach to analyze consumer responses to specific scenarios. Free listing can also be used to understand the cultural and cognitive domains of users and other stakeholders (Wilson 2009). It can provide an insight into the attitudes of consumers,

especially when they face a completely new environment such as food shopping on social networks.

Even as it is a simple tool, its potential and easy administration has made free-listing a widely used qualitative technique (Morizet et al. 2011). Specifically it has been used in research dealing with diverse food topics, such as the analysis of different categories of foods (Hough and Ferraris 2010) or to explore consumers' motives underlying food choices in different contexts (Machín et al. 2014).

Free listing provides mainly two types of information: on the one hand the frequency of the different concepts has been mentioned and on the other the average position of each concept in the list. Some researchers state that the most important result from free listing is the frequency with which each word or concept is cited (Gravlee 1998), being the item with the higher number of mentions the most relevant for respondents (Antmann et al. 2011). Other authors consider that the relevance of a category in free listing tasks is determined by both its frequency of mention and its average position on the list (Melby and Takeda 2014). Under this approach, a category is more relevant if it is mentioned by a large proportion of participants and if it is located at the beginning of their lists (Machín et al. 2014). Finally, the difference in rank between concepts in a list can provide an insight of the association of those concepts in the mind of the respondent (Bernard 2006).

Due to the objectives of this research, it was decided to analyze just the frequency of mention. This approach is applied in other papers where the main results are the number of terms elicited and not so especially the relationship among those terms (Fizman et al. 2014; Vidal et al. 2015).

3.2.2 Data collection

An online survey was used in this research for data collection. The widespread Internet access has allowed researchers to reach more segments of society, thus turning online surveying into a frequently used tool in this type of research (Carrillo et al. 2014; Vidal et al. 2015). Although online data collection has both advantages (quick and cheap procedure) and disadvantages (sample representativeness) for researchers (Wright 2005; Koutsimanis et al. 2012), it provides valid data in qualitative research, as its main aim is just for obtaining preliminary information (Eldesouky et al. 2015).

It was decided to choose social networks to spread the survey -rather than using regular emails- in order to ensure that all individuals are current users of at least one social media platform. It can, therefore, be considered that a non-probability convenience sampling has been used in this study, an approach commonly used in qualitative research when the aim is to get an insight into a specific topic. The final sample consisted of 209 Spanish people (57% female, 43% male; 41% in the age level of 18-35 years old, 37% aged 35-50 and 22% more than 50 years old), all of them actual users of social networks.

The online survey was developed during January 2016 using Google Forms – online (www.docs.google.com). A pilot questionnaire was administrated to 15 consumers (not included in the final sample) to revise the validity of questions in the questionnaire. Finally, a link to the questionnaire was sent to respondents together with an introductory message.

Participants completed two free-listing tasks related to types of food they would/would not buy on social networks. They were given the following specific instructions: “Although at present is not common to purchase directly on social networks, some platforms are developing new tools that would give you the opportunity to buy directly from the social site. All the process, from

purchasing to payment would be carried out from the same app”. They were then asked, first to list all the food they would buy on social networks, and secondly, to write down a list of all the food they would not buy through these channels. The inclusion of two questions with opposite meanings was considered as the best way to uncover not only the products that participants thought were appropriate for this type of marketing, but also those other that could elicit mixed feelings among them.

3.2.3 Data analysis

Once the data were collected they were analyzed using content analysis (Stewart and Shamdasani 1990), a research technique used to make replicable and valid inferences from texts or other meaningful materials (Krippendorff 2004). In order to carry out this task, the answers were categorized using as a basis the food classification found in online pages of major Spanish supermarkets, i.e. Mercadona and El Corte Inglés.

Given the qualitative nature of the study, and to improve the validity of the results, the analysis was performed by triangulation, a procedure that is often used in qualitative studies (Antmann et al. 2011). This methodology aims to improve the validity of the results by analyzing them from several points of view (Patton 1999). Consequently, each of the authors developed his/her analysis, after which a meeting of the research team was conducted to search for consensus between the different classifications and categories generated.

Initially, a search for recurrent terms within each question was developed. Subsequently, those terms with similar meaning were grouped into categories. Products were grouped according to the main categories and subcategories used by supermarkets, but also taking into consideration food concepts mentioned by the participants. Frequencies of each of the products listed by respondents were counted separately. The frequencies in every category were determined by

counting the number of consumers that used the same word or an equivalent term. Finally, percentages of each category/concept were calculated by dividing the total of frequencies of each category/subcategory or concept between the total of terms mentioned by respondents.

In accordance with the criteria often used in qualitative research, categories that were mentioned by at least 5% of respondents were considered for analysis (Machín et al. 2014; Vidal et al. 2015).

3.2.4 Cluster analysis

One of the most remarkable features of social media is that it gives producers the ability to identify consumers' profiles, thus allowing a differentiated interaction with their potential customers. In this sense, identifying potential segments of consumers who are interested in certain types of food could be of great interest.

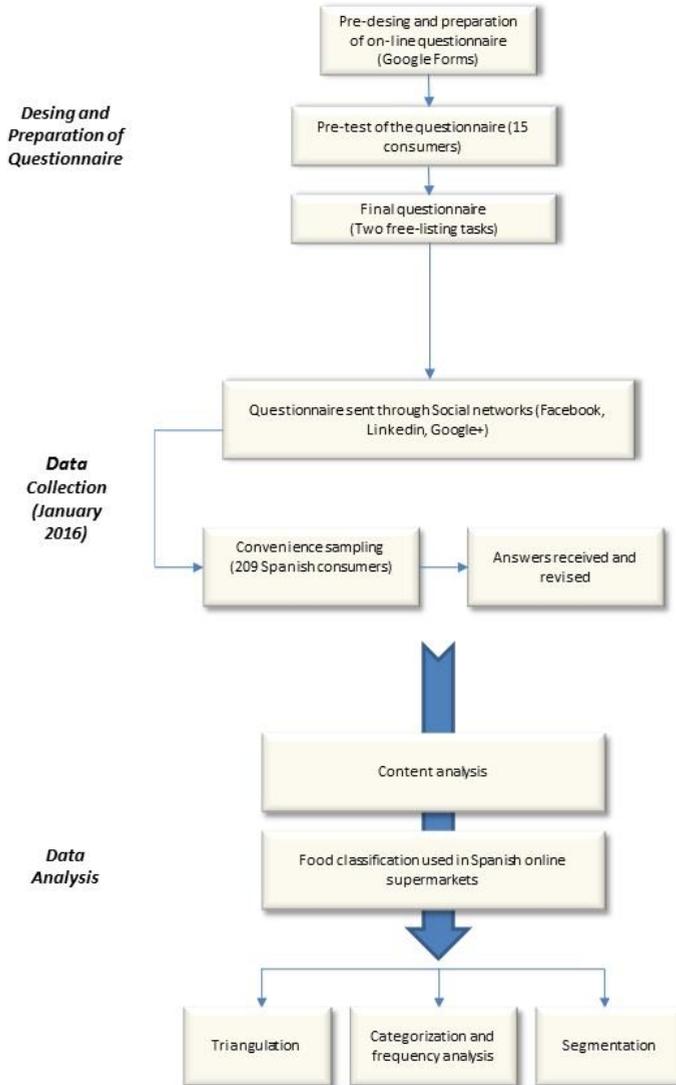
Therefore, a K-means cluster analysis has been applied using IBM SPSS statistics ver. 21 to allow a deeper study of consumers' preferences by identifying homogeneous subgroups of consumers which could show different preference patterns towards social media food purchasing.

The inputs used were the socio-demographic variables (age, gender and study level), a variable of usage intensity of web 2.0 applications (linked to frequency habits and the number of accounts belonging to every respondent) and another reflecting consumer willingness to buy food online (directly on social platforms).

A final solution with a three-cluster classification was provided, chosen in the light of subgroups size and the statistical significance. ANOVA indicated that the clusters differed significantly ($p < 0.05$) with respect to most of the input factors, thus indicating the validity of the results. Once segments were

determined, the qualitative analysis explained previously was applied again to each cluster. Figure 3.1 describes the methodological procedure followed in this research.

Figure 3.1. Methodological procedure



3.3 Results and discussion

3.3.1 Free listing test

Table 3.1 shows the food products that consumers stated they would buy via social media in the free listing task, grouped into the different supermarket categories. As can be observed, cupboard food is the food group most frequently mentioned by respondents with about 37% of total answers, followed by beverages and drinks with 18%.

The high willingness of consumers towards such types of food products can be linked to their intrinsic characteristics: dry, canned or bottled food, mainly non-perishable and long-lasting. These products are characterized by long shelf life and airtight containers that would ensure their good conditions for consumption after delivery. So that consumers would have no fears about freshness or refrigeration conditions when purchasing in an online environment. Results regarding beverages (sodas and wine) are in line with those of Spain, where wine was the second most frequently sold food product (25%) through online channels (MAGRAMA 2013). Similarly, Grunert and Ramus (2005) and Phau and Poon (2000) indicated that wine was one of the most likely products to be bought on the internet.

Regarding the foods of animal origin, it can be appreciated that the willingness to buy them through social networks is much lower than that for vegetable-based food. Although the three groups show similar frequencies of mention, it is noteworthy that the most mentioned product is “preserved fish”, a food that shares the aforementioned characteristics of non-perishability and long life. With respect to fresh food of animal origin, we can see that fresh fish is one of the less mentioned products, while meat is not even mentioned. These results are in line with other studies (MAGRAMA 2013) where fresh fish and meat were the least-sold food products through online channels in Spain.

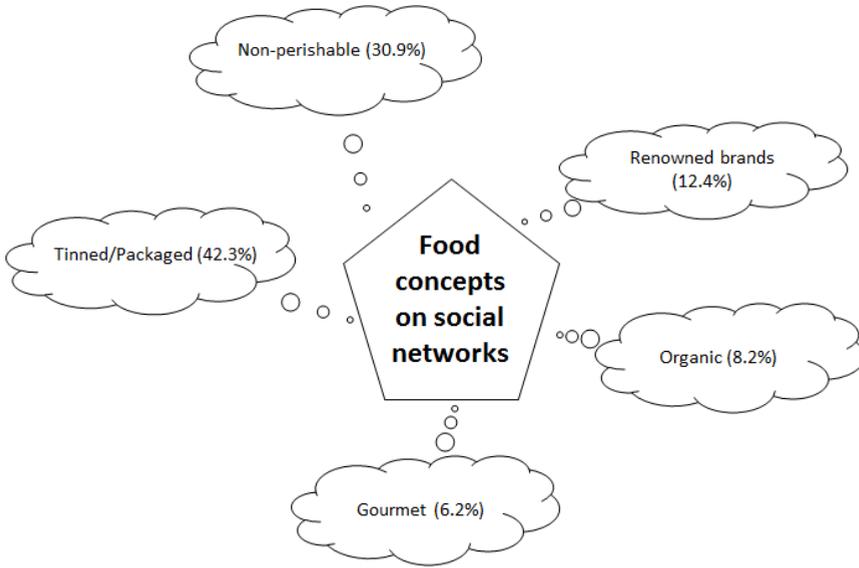
Table 3.1. *Products that consumer would buy through social networks*

	Groups (% mention for each category)	Products	Percentage of mention*	
Foods of animal origin	Dairy Products (7.3)	Milk and yoghurts	3.8	
		Cheeses	3.5	
	Fish (6.5)	Preserved fish	5.6	
		Fresh fish	0.9	
	Processed meat products (6.3)	Processed meat products	3.9	
		Cured ham	2.4	
	Foods of vegetal origin	Food Cupboard (37.2)	Jam, honey and sugar	6.2
			Rice, legumes and pasta	8.6
			Cereals and flours	5.3
			Oils	5.9
Spices, sauces and salt			4.4	
Coffee and tea			2.7	
Processed vegetables			2.5	
Soups and ready meals			1.6	
Water			0.9	
Juices & soft drinks (sodas)			8.6	
Drinks/beverages (18.1)	Wine	8.6		
Bakeries/ bread (7.7)	Bread and bakery	7.7		
Fruits and vegetables (5.9)	Fruits and vegetables	5.9		
Appetizers (5.6)	Nuts	3.8		
	Appetizers and snacks	1.8		

* Food items mentioned by less than 5% of participants have been removed, unless they belong to a bigger group in which the total percentage is higher than this limit.

Although the participants had been asked to list the foods they would buy via social networks, almost one fourth of the answers (23.3%) made reference to food concepts, and not really to food. Figure 3.2 shows the food concepts elicited by the participants as suitable to be bought through social networks.

Figure 3.2. Food concepts that participants indicated they would buy through social networks (% mentions)



As expected, the concepts showed in Figure 3.2 mainly refer to the non-perishable character of the food, with the most mentioned being “tinned/packaged foods” followed by “non-perishable foods”. However, Figure 2 also presents two interesting aspects, such as “renowned brands” and “organic foods”. These findings could indicate that some consumers, who look for specific products (certain brands, organic products, perhaps not always easy to find in their usual marketing channels) may be open to consider buying food via social platforms. In the case of organic food, various researchers stated that its limited availability is one of the main determinants that drive consumers to buy online (Ramus and Nielsen 2005). It is therefore noteworthy the potential role that social networks could play as an alternative short supply chain within the Spanish organic market, where organic foods are mainly marketed using direct marketing or via specialised shops.

It was considered that the elicitation of terms from the previous question could not reveal all the dimensions involved in consumers' attitudes and perspectives, and therefore another question was posed asking participants to list all the foods they would not buy through social networks (table 3.2).

Table 3.2. *Products that participants would not buy through social networks (% of mention for each category)*

	Group (% of mentions for each category)	Product	Percentage of mention*
Foods of animal origin	Processed meat products (23.9)	Processed meat products	23.9
	Fish (22.6)	Fresh fish	22.6
	Dairy products (11.4)	Milk yoghurts	10.7
		Cheeses	0.7
Foods of vegetal origin	Fruits and vegetables (35.8)	Fruits and vegetables	35.8

* Food items mentioned by less than 5% of participants have been removed, unless they belong to a bigger group in which the total percentage is higher than this limit.

Table 3.2 shows some interesting aspects, with “fruits and vegetables” being the most mentioned group of foods, and somewhat shockingly, “processed meat products” being the second. Although processed meat products were among the foods of animal origin most cited in table I, they are also mentioned -although with a negative intention- here. Nevertheless, and considering that the number of respondents to both questions was similar, it can be deduced that “processed meat products” has more negative than positive connotations.

Another interesting finding is the high percentage of mention for “fresh fish”, consistent with the highly perishable nature of these products. Nevertheless, it is noteworthy the lack of negative associations with “fresh meat”, which is not even mentioned. This bias can be explained by the long experience of meat

producers with online sales, which can have increased consumers' familiarity with web sales of meat.

Another result that draws attention is that of dairy products, with more than 11% of mentions. The result is consistent with those found by Phau and Poon (2000) where milk products were categorized as one of the least likely to be bought over the Internet.

3.3.2 Consumer segmentation

The final solution of the applied K-means cluster analysis produced three well defined clusters which can be defined as follows:

Cluster 1 – (Mature-older people with high willingness to buy). This cluster is the smallest group, including only 24.5% of the respondents. It shows a high willingness to buy food online and includes those people with moderate intensity of social networks usage.

Cluster 2 – (Younger consumers with a moderate willingness to buy). It includes 31 % of respondents and displays the largest percentage of younger individuals with the highest presence on social media and moderate willingness to buy food online.

Cluster 3 – (Highly educated, middle-aged and unwilling to buy). This is the biggest group and includes 44.5% of the sample. It presents the highest percentage of middle-aged and highly educated people with the lowest willingness to buy and moderate intensity of use of social applications.

Once the clusters were defined, the analysis was repeated within each segment in order to look for differences that could be associated with their underlying characteristics. Table 3.3 shows, per cluster, the categories of food products that the participants stated they would buy via social media.

Table 3.3. *Frequencies of food products that would be bought via social networks for each cluster**

Group		Product	Group (1). Mature- older people with high willingness to buy	Group (2). Younger consumers with moderate willingness to buy	Group (3). Highly educated, middle- aged and unwilling to buy
Foods of animal origin	Processed meat products	Processed meat products	5.7	7.3	5.6
		Cured ham	0.7	3.7	6.5
	Fish	Preserved fish	6.6	4.1	10.7
		Fresh fish	0.7	0.0	0.0
	Dairy products	Milk and yoghurts	6.4	1.2	0.0
		Cheese	2.8	6.1	0.9
	Cupboard items	Jam, honey and sugar	7.1	3.7	3.2
		Rice, legume and Pasta	7.1	8.5	16.1
		Coffee and tea	6.4	1.2	0.0
		Cereals and flours	2.8	7.3	3.2
Processed vegetables		3.3	2.0	5.4	
Spices, sauces and salt		2.8	4.9	3.2	
Oils		9.2	2.4	9.7	
Soups and ready meals		2.1	1.2	0.0	
Foods of vegetal origin	Appetizers	Nuts	3.5	9.8	0.0
		Appetizers and snacks	1.4	2.4	3.2
	Drinks/beverages	Water	2.1	0.0	0.0
Juices and soft drinks (sodas)		5.7	11.0	12.9	
Fruits and vegetables	Wine	13.5	9.8	3.2	
	Fruits and vegetables	2.1	7.3	3.2	
Bakeries/ bread	Bread and bakery	6.4	2.4	12.9	

* Food items mentioned by less than 5% of participants have been removed, unless they belong to a bigger group in which the total percentage is higher than this limit.

Table 3.3 shows some interesting comparisons among the consumer segments, although some results were also expected, such as the importance of the food cupboard category, which is the most mentioned group in all the clusters.

Some of the observed differences can be related to the demographic structure of the segments, such as the much higher frequencies of mention of Cluster 1 for “coffee and tea” and of “wine”. According to MAGRAMA (2015) and MERCASA (2015), the consumption of coffee and teas in Spain is higher in those households consisting of older people, and similar situation is found for wine, a product where consumption is linked to tradition and that has seen strong declines in consumption among younger consumers.

The case of appetizers is also interesting, and especially that of “nuts”, where the high percentage of mentions in cluster 2 (almost 10%) may be consistent with the attributes and the perceived image of these foods as an energy food consumed mostly by young people.

Regarding the foods of animal origin, it can be observed that the behaviour of the three groups is mainly associated with the willingness to buy through social networks, as those unwilling to buy (cluster 3) have only indicated long lasting or unperishable foods, while consumers in clusters 1 and 2 have also mentioned dairy products (they are the most mentioned category in cluster 1) and even fresh fish.

Finally, Table 3.4 shows per each cluster the food products that the participants would not buy on social networks.

Table 3.4 *Frequencies of food products that would not be bought via social networks for each cluster*

	Group	Product	Group (1). Mature- older people with high willingness to buy	Group (2). Younger consumers with moderate willingness to buy	Group (3). Highly educated, middle-aged and unwilling to buy
Foods of animal origin	Processed meat products	Processed meat products	25.9	29.8	32.6
	Dairy products	Milk and yoghurts	6.5	11	16.4
		Cheeses	1.1	2.2	0.0
	Fish	Fresh fish	26.0	24.0	22.5
Foods of vegetal origin	Fruits and vegetables	Fruits and vegetables	36.0	28.0	24.5
	Bread and bakery	Bread and bakery	4.5	5.0	4.0

Results in Table 3.4 are in line with those shown in Table 3.2, with “fruits and vegetables” and “processed meat products” being the most mentioned groups of foods, a trend that is repeated along all the clusters with just slight differences. Fresh fish also appears again, with high frequencies of mention in all the consumer groups. It is therefore clear that, despite socio-demographic or behavioral differences; these categories are generally rejected regarding purchasing via social media.

However, and within such important categories for the Spanish agri-food sector as that of cured ham and cheeses, both products present a certain potential, with higher percentages of positive than negative mentions. If we also consider that both products are heavy -at least in their full-piece size- and have high prices

per kg, they can be among the most demanded online food-products (Campo and Breugelmans 2015)

It is also noteworthy the discrepancy between Cluster 1's highest willingness to buy food on line and its lowest willingness to buy fresh and perishable food online, as can be stated from Table IV (Cluster 1 showed the highest frequency of mention for fruit and vegetables and fresh fish). This fact can be explained by the characteristics of the cluster, with mature-older people who had been taught for years to look for signs to distinguish rotten fish or overripe fruit and therefore are not willing to buy a product they cannot test before.

3.4 Conclusions

Social media represents a bi-directional communication line that could provide an interactive relationship among businesses and consumers offering some sort of dialogue prior, after or even during the purchasing process. It also encourages information co-sharing, and links groups of consumers with each other, allowing the exchange of views among individuals with common interests. It is therefore remarkable the potential role that social networks could play as an online direct sale platform in the food sector. The use of free-listing has provided a useful approach to gain an insight into consumer's willingness to purchase food through social networks, allowing to define those food products most prone to be bought via this new and promising supply chains. Additionally, the methodology used in this study could be easily used by agri-food enterprises as a cheaper and faster way to undertake further and wider research.

One of the more significant findings that emerge from this study is that consumers would be willing to buy a wide range of food and beverages, among which stand out long lasting and processed foods, such as legumes, rice, pasta, jam, honey, sugar, preserved fish, etc... Potential for the marketing of foods of

animal origin through social networks in Spain has been found, although consumers' predisposition focuses on processed animal foods, such as preserves or dairy products, which is related to the low perishability of foodstuffs and their greater ease of transport. However, there is also an opportunity for high-perishable foodstuffs in which consumers are very susceptible to information on freshness (e.g. in meat, animal breeding information, date of slaughter, etc.).

These findings might open new possibilities for food businesses, especially for SMEs, to develop a new electronic shopping channel enabling them to increase sale levels of these products and, therefore, increase profitability and reduce costs.

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CHAPTER 4: A cross-cultural
consumers' perspective on social
media-based short food supply chains

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Resumen

El objetivo principal de este estudio es tener una visión transcultural desde el punto de vista del consumidor sobre el potencial de usar redes sociales como cadenas cortas de suministro de alimentos. En esta investigación se adoptó un enfoque cualitativo, utilizando tareas de listado libre y técnicas de terminación de enunciados. El equipo de investigación decidió aplicar el estudio en tres países con diferentes contextos culturales: México, España y Egipto. La muestra final consistió en 424 encuestados en total, incluyendo 209 españoles, 111 mexicanos y 104 egipcios, todos los cuales eran usuarios actuales de las redes sociales. El resultado más significativo que se destaca de este estudio es que un alto porcentaje de los consumidores dentro de los tres países puede estar interesado en estas nuevas cadenas cortas de alimentos.

Además, el estudio ofrece a las empresas de alimentos las motivaciones y las barreras de los consumidores para tomar parte en esta iniciativa. El artículo también proporciona las categorías de alimentos que los consumidores adquirirían a través de estas canales en cada país. La perspectiva multicultural de este estudio podría abrir nuevas oportunidades para las empresas de alimentos del mundo, y especialmente para las PYME, para desarrollar nuevas cadenas cortas de comercialización de alimentos, permitiéndoles aumentar los niveles de ventas y, por lo tanto, aumentar la rentabilidad y reducir costes.

A cross-cultural consumers' perspective on social media-based short food supply chains

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Abstract

Purpose: The main objective of this study is to get a consumer's cross-cultural insight on the potential of using social networking sites as short food supply chains.

Design/methodology/approach: A qualitative approach, using free-listing tasks and sentence completion techniques, was adopted in this research. The research group decided to apply the study in three countries with different cultural backgrounds; Mexico, Spain and Egypt. The final sample consisted of 424 respondents in total, including 209 Spanish, 111 Mexicans and 104 Egyptians, all of them actual users of social networks.

Findings: The most significant result that emerges from this study is that a high percentage of consumers within the three countries might be interested in these new short food chains. Also, the study offers food companies the most relevant motivations and barriers of consumers for their engagement to this initiative. Also, the study provides categories of foods that consumers would purchase via these chains in each country.

Originality/value: The multicultural perspective of this study might open new opportunities for food businesses around the world, especially for SMEs, to develop new short food supply chains enabling them to increase sale levels and, therefore, increase profitability and reduce costs.

Keywords: short food supply chains; social media marketing; qualitative analysis; cross-cultural study

4.1 Introduction

The increasing use of social media has changed the tools and approaches businesses use for communicating with customers (Paquette, 2013). Due to the prominent role of social media, the concept of social media marketing has become more common in the literature during the last decade (Thackeray *et al.*, 2012; Atwong, 2015; Ashley and Tuten, 2015; Chang *et al.*, 2015). According to Chi, (2011), social media marketing is “*a connection between the brands and consumers, which offers a personal channel and currency for user-centred networking and social interaction*“.

Within the framework of social media marketing, users are a crucial component of the entire social marketing process. Social media has provided consumers with both economic and social power. The economic power is represented in the bargaining power, as social media has shifted the balance of power in favor of consumers, whereas the social power is characterized by the ability of consumers to communicate with each other and collaborate to create solutions and even to put pressure on company’s decisions (Kucuk and Krishnamurthy, 2007; Mrabet and Triki, 2014).

Also, social media has provided companies, especially in the food sector, with a great source of information, a way that allows them to obtain more precise information on actual or potential customers at little or no cost. Hence, they got in their hands the chance to develop an improved customer relationship that will allow to focus the marketing efforts on consumers (Mrabet and Triki, 2014). They also allow to build shorter, more direct and effective supply chains (short food supply chains) with their customers, especially with those who keen for having detailed information about the products they are up to purchase.

In the literature, many studies have addressed short food supply chains from a farm perspective (Filippini *et al.*, 2016; Mastronardi *et al.*, 2015; Wubben *et al.*,

2013), while others have focused their research on examining drivers and behavior of consumers towards short food supply chains (Aiello *et al.*, 2017; Sage, 2003; Abatekassa and Peterson, 2011; Migliore *et al.*, 2015; Giampietri *et al.*, 2016). Most of these studies concluded that the main reason for consumers' interest in short chains is the quality concern. In this sense, the consumer can receive products embedded with information about production system, origin, and specific quality. This would help him/her to make value-judgments about the product (Marsden *et al.*, 2000; Abatekassa and Peterson, 2011). Furthermore, the reduced distance between the primary producer and the final consumer would enhance the creation of mutual trust (Sage, 2003; Mundler and Laughrea, 2016). Thus, it would be of great value for enterprises to have a hand in this type of marketing.

Although social media marketing is a well-studied subject, to the best of our knowledge no studies have addressed the potential of social media to be used as short food supply chains. According to Elghannam *et al.*, (2017), creating online short food supply chains using social networks is supposed to be a future game-changing in social media marketing. The important role of consumers throughout the entire social marketing process led the research group to plan the current research as a consumer-focused study. Due to the novelty of the topic, qualitative analysis (sentence completion and free-listing techniques) has been adopted in this research.

The main objective of this study is to get a consumer's cross-cultural insight on the potential of using social networking sites as short food supply chains. To this end, it was decided to apply the questionnaire in three different countries; Mexico, Spain and Egypt. All of them are very different from one another in terms of location, culture, language, economic level, population, internet use and even in terms of consumer expenditure, which makes them clearly conform to the objectives of the study. Some of those differences are shown in table 1.

Table 4.1. *Some differences among the selected countries.*

Country	Total population (Millions)	Internet users (% of total population)	Social media users (% of total population)	Income per capita in 2015 (USD)	Spending on food and beverages (% of the total expenditure)
Spain	46.07	82	54	25.683	14.6
Mexico	129.40	59	59	9.143	25.1
Egypt	94.30	37	37	3.547	34.4

Data obtained from several sources

The specific questions to answer are:

How consumers from different cultures perceive the idea of creating short food chains on social media? What types of food those consumers would be interested in purchasing? What are the drivers and barriers perceived by consumers towards this initiative?

4.2 Material and methods

4.2.1. Data collection

In this study social media is being studied as a food marketing tool, so the target population was set at regular users of social networks. Social media was also used to spread the survey in order to ensure that all participants fulfilled the previous requisite. A non-probability convenience sampling has been applied in this study, a common approach used in qualitative research when the aim is not to get information from a representative sample of the population, but to reach an understanding of a particular topic (Kinnear and Taylor, 1993). The final sample consisted of 424 respondents in total, including 209 Spanish (57% women & 43% men), 111 Mexicans (58% women & 42% men) and 104 Egyptians (52% women & 48% men), all of them actual users of social networks. The research group intended to get a varied and well- structured

sample which would reflect the socio-cultural context of each country aiming to improve the consistency of the findings.

The online survey was developed during January- February 2016 using Google Forms – online (www.docs.google.com). The questionnaire was prepared in three different languages (Castilian-Spanish, Mexican-Spanish and Egyptian-Arabic). A link to the questionnaire was posted and spread throughout three different social networks (Facebook, Google+ and LinkedIn) together with an introductory message. Respondents were given the following specific message: “Although at present it still not common, some social media platforms are developing new tools that would give you the opportunity to use them as online short channels to buy foodstuff”. Afterwards, consumers were asked to fill out the questionnaire. As a first step, a pre-test was performed with 15 consumers in each country in order to assure the validity of the questionnaire and aiming to correct those questions which might receive improper answers or that were difficult to understand. Data collected from these questionnaires were not included in the final sample.

4.2.2. Free listing

Free Listing is a qualitative technique based on asking participants to list as many items as possible regarding certain subject (Ares and Deliza, 2010; Carrillo *et al.*, 2014). Free Listing is a useful technique to get a deep understanding of a certain food category and/or to find out which foods are considered suitable for certain uses, therefore it provides an indirect approach to examine consumer responses to specific scenarios (Hough and Ferraris, 2010). Free listing can also be used to understand the cultural and cognitive domains of users and other stakeholders (Wilson, 2009) and it can help to get an insight into the attitudes and behavior of consumers, especially, when they experience

completely new circumstances, as in this case of dealing with food channels on social networks.

Even though Free Listing is a simple tool, it has been widely used in the literature because of its effectiveness and easy administration (Morizet *et al.*, 2011). In food domain, it has been used in research dealing with diverse topics, such as the study of menus in populations with different levels of income Libertino *et al.*, (2012) or the analysis of different categories of foods (Hough and Ferraris, 2010). It has been also used to explore consumers' motives underlying food choices in different contexts (Machin *et al.*, 2014) or to analyze children's lexical knowledge of vegetables (Morizet *et al.*, 2011).

Using the free listing technique researchers can get two types of results: the first one is related to the total frequency of mentions for each item -the more mentions the item receives, the more important it is in the consumers' perception-; the second type of data in a free listing task is the average position of each item in respondent's list. Some researchers state that the most important result from free listing is the frequency with which each word or concept is cited (Gravlee, 1998), being the item with the higher number of mentions the most relevant for respondents (Antmann *et al.*, 2011). According to other studies, the importance of a category in a free listing task is determined by both frequency of mention and its average position on the list (Melby and Takeda, 2014). Under this approach, a category is more relevant if it is mentioned by a large proportion of respondents and if it is located at the beginning of their lists (Libertino *et al.*, 2012; Machin *et al.*, 2014). Finally, the difference in rank between items in a list can provide an understanding of the association of them in the mind of the respondent (Hough and Ferraris, 2010; Bernard, 2006).

Within this framework, participants in this study were asked to make two different free-listing tasks related to food products they would be interested to

buy and those products they would not think to purchase via these channels. Therefore, and due to these objectives, it was decided to analyze just the frequency of mentions. This approach is applied in other papers where the main results are the number of terms elicited and not especially the relationship among those terms (Fiszman *et al.*, 2014; Vidal *et al.*, 2015).

4.2.3. Sentence completion task

Sentence completion is one of the projective techniques most frequently used in market research. It is also widely used in food research (Vaca and Mesias, 2014; Vidal *et al.*, 2013; Masson *et al.*, 2016). This methodology is based on asking respondents to complete different types of stimuli and it permits a wide range of responses and can be adapted for different research purposes. These stimuli could be sentences, stories, arguments or conversations (Donoghue, 2000). The most common completion procedures are sentence completion and story completion (Steinman, 2009).

In the case of sentence completion, respondents are requested to finish incomplete sentences with the first words that come to mind at the moment of responding, while in a story completion the participants are given part of a story and they are asked to conclude it with their own words.

In this study, it was decided to apply a sentence completion task, as it could provide a view into the respondents' perceptions in an indirect and informal way (Holaday *et al.*, 2000; Dykens *et al.*, 2007).

Participants were asked to complete three different completion sentence tasks. At first, respondents were suggested to fill in the blanks mentioning their ideas about the use of social networks as a short channel for food purchasing; they were offered the task "using social networking sites as a direct food marketing channel seems.... ". Furthermore, consumers were requested to indicate the conditions that, from their point of view, could encourage them to adopt this

initiative-“I would buy food on short food chains on social media only if... ”-. Finally, in the third task, respondents were guided to mention reasons why they would not be willing to deal directly with a food producer on social networks; the stimulus used in this case was “I would not buy food on social medias’ short food chains because...”.

4.2.4. Data analysis

Data were analyzed using content analysis which was performed similarly in each of the completion and free-listing questions in each country. All answers provided by respondents were initially translated into English (a common language for the research group members), subsequently analyzed in a qualitative way and separately for each question. To do this, firstly, the expressions or words that had a similar meaning were recognized and categorized into different groups/categories. This task was held independently by each of the members of the research group (triangulation), taking into account both the strict meaning of the terms used and the possible synonyms. The use of triangulation mainly aims to improve the validity of the results by analyzing them from several points of view (Patton, 1999; Cohen *et al.*, 2000). Later on, definitive categories were agreed upon and their names were defined. The frequencies for each category were calculated by counting the number of consumers who used the same word or an equivalent. Likewise to what is used in similar research studies, only the concepts mentioned by at least 5% of the participants were considered (Eldesouky *et al.*, 2015; Roininen *et al.*, 2006; Piqueras-Fiszman *et al.*, 2011; Vidal *et al.*, 2013).

4.3 Results and discussion

4.3.1 Consumers’ perceptions towards social media-based short food chains

Table 4.2 shows different impressions of respondents towards the use of short food chains on social media. As one can see, a wide percentage of mentions in

the three countries showed optimistic views. In Egypt and Mexico, even though respondents' negative thoughts outweighed their positive impressions, the percentage of overall acceptance ranged around 40.5% and 46.6% respectively. Even more, in the case of Spain, positive mentions overweighed the negative ones with more than 50% of total frequency. On the other hand, the bad connotations have been mainly linked to the unusualness or inadequacy of such channels according to participants' perspectives followed to a lesser extent by the uncertainty and lack of trust among users in terms of security issues. Especially the lack of trust among consumers and producers and the uncertainty about the outcome of the deal can be considered as some of the main constraints that can limit the development of social media marketing in the agri-food sector.

In an online environment, trust is a crucial factor even more important than in conventional transactions (Haas *et al.*, 2016, Canavari *et al.*, 2016). Therefore, the creation of trusted relationships is a key element for effective social media marketing. Also, food consumers' behavior is still mainly based on touching, smelling or even tasting the product before they purchase it (Daugherty *et al.*, 2005). Therefore the inability to experience the product and to judge quality prior to purchase can create an uncertain environment for consumers, making them less receptive to the use of social media-based food chains.

Table 4.2. Categories identified regarding perceptions towards food purchasing through social media (% of mentions).

Category	Example	Mexico	Spain	Egypt
Good and useful	Good idea; interesting and useful; great option; it is awesome	24.3	33.5	28.7
Innovative	Innovative; a new alternative that can make life easier; novelty; a future trend; an advance	6.8	9.3	5.9
Practical and convenient	Accessible; rapid; convenient; practical; helps to save time	15.5	8.2	5.9
Weird and unusual	Weird; ridiculous; absurd; bad; uninteresting; unusual	27.2	23.6	37.6
Risky	Untrustworthy; insecure; sort of risky; not reliable	20.4	15.4	14.8
Unnecessary	Unnecessary; inadequate	5.8	10.0	6.9

It is also noteworthy to indicate that the Egyptian respondents were the ones who described the idea as weird and unusual in the highest proportion. This result could be caused by the low percentage of internet and social media use compared with Spain and Mexico as it was previously reflected in table 4.1.

Although Mexicans have been those who most depicted the idea as practical and convenient, they were also the ones who least considered it as a good or interesting option, which explains the large percentage of responses describing social media chains as risky or insecure. The reason that would clarify this is that in Mexico the levels of corruption are high, and are found throughout the society. So consumers might be scared of being scammed on social networks.

Therefore, it is kind of normal to find 27% of the total responses describing the initiative as weird or unusual.

4.3.2 Different cultures, different predisposition

Table 4.3 reflects categories of food that consumers perceive proper to be sold on social media. One of the most significant findings that appear from Table 3 is that consumers within the three countries would be willing to buy a wide range of food and beverages, among which stand out the preserved food, legumes, rice, pasta, ready meals etc.... The high willingness of consumers towards such types of food products can be linked to their features as dry, canned or bottled food. These products are characterized by long shelf life and/or airtight containers that would ensure their good conditions for consumption after delivery. So that consumers would have no worries about freshness or refrigeration conditions when purchasing in an online environment.

Table 4.3. *Products that consumers would buy through social networks (% of mentions).*

Groups	Products	Mexico	Spain	Egypt
Food Cupboard	Jam, honey and sugar	1.4	6.2	2.0
	Rice, legumes and pasta	2.7	8.6	9.0
	Coffee and tea	4.1	2.7	1.0
	Cereals and flours	5.4	5.3	2.0
	Preserved food	11.6	7.1	22.0
	Oils	0.7	5.9	1.0
	Spices, sauces and salt	0.7	4.4	-
	Ready meals	10.2	1.6	8.0
Drinks/beverages	Water	2.7	0.9	1.0
	Juices & soft drinks (sodas)	8.2	8.6	6.0

	Wine	4.8	8.6	-
Meat products and cheeses	Processed meat products	3.4	3.9	-
	cheeses	1.4	3.5	-
	Fresh meat	2.0	-	3.0
Bakeries/ bread	Bread and bakery	10.9	7.7	16.0
Fruits and vegetables	Fruits and vegetables	12.2	5.9	7.0
Appetizers	Nuts	1.4	3.8	1.0
	Appetizers and snacks	-	1.8	3.0
Fast food	Fast food	14.3	-	9.0

However, some dissimilarity is found which might be due to the cultural differences among the three different societies which can be shown as follows.

Egyptian consumers showed the highest predisposition to purchase preserved food (22%) and legumes (9%). This result is deeply rooted to Egypt's traditional dietary pattern, which has survived until now and is evidenced by the important place that preserved foods and legumes represent in the daily diet of modern Egyptians and in the composition of food stores in a traditional household (Wassef, 2004).

Table 3 also shows that Mexicans express seeking ready meals more than Spanish and Egyptians, which may be due to the dynamics of social life in Mexico, where people spend time at work much more than they spend at home and in some cases their trips back home are long. So people seek to eat well, rather than eating healthy. They prefer to have a meal with at least two supplements (pasta, rice and/or beans) and the main course (meat, pork or chicken). It is also worthy here to mention that Mexican respondents showed the highest willingness to buy fast food meals while this category has not been

mentioned by Spanish consumers. The case of processed meat and cheese in Spain and Mexico is also noteworthy. Although these products cannot be considered as non-perishable, most of them have long usage periods, and they are part of the traditional food in both countries.

On the other hand, findings show a variety of food products consumers would not be willing to buy via social networking sites. Table 4.4 shows some interesting aspects, with “fruits and vegetables” being the most mentioned group of foods, although fruits and vegetables were also among the categories cited in table 4.2. Considering that the number of respondents to both questions is similar, it can be deduced that “fruits and vegetables” has more negative than positive connotations within the three countries.

Table 4.4. *Products that participants would not buy through social networks (% of mentions)*

Groups	Product	Mexico	Spain	Egypt
Fruits and vegetables	Fruits and vegetables	31.4	35.8	19.0
Fresh foods of animal origin	Meat products	22.9	23.9	35.0
	Fresh fish	13.3	22.6	12.0
	Milk and cheese	7.6	11.4	11.0
	Chickens	5.7	-	6.0
Fast food		-	-	6.0
Fresh food		13.3	-	3.0

Another interesting finding is the high percentage of mentions for “foods of animal origin” such as; Meat, fish, dairy products and chicken, consistent with the highly perishable nature of these products.

4.3.3 Motives and barriers for social short supply chains.

Figure 4.1 shows the percentage of consumers' motivations for the engagement in short food supply chains within the three countries. As it is clearly shown, differences within the same factor among countries are slight except in a few cases where they are noteworthy. The trust in the brand and company or even to have a good experience in previous purchases is the most frequently mentioned reason that can motivate consumers in both Spain and Egypt. In Mexico, it has been found that having an efficient delivery service is the most important factor perceived as a driving factor of such type of marketing. This is something that can be easily achieved in the Mexican food market where food businesses have the opportunity to recruit other companies specializing in home-delivery and charge some extra money to ensure a good delivery service. This result goes in accordance with other studies where the improvement of delivery service in agri-food online supply chains is identified as a driver of its development (Chen *et al.*, 2014). Also home delivery service was thought to be one of the most difficult barriers in the case of food products. As in an online transaction, customers stay empty-handed for a while of time after making a purchase, they might be unsure about delivery dates or product packaging during transport (Elghannam *et al.*, 2017).

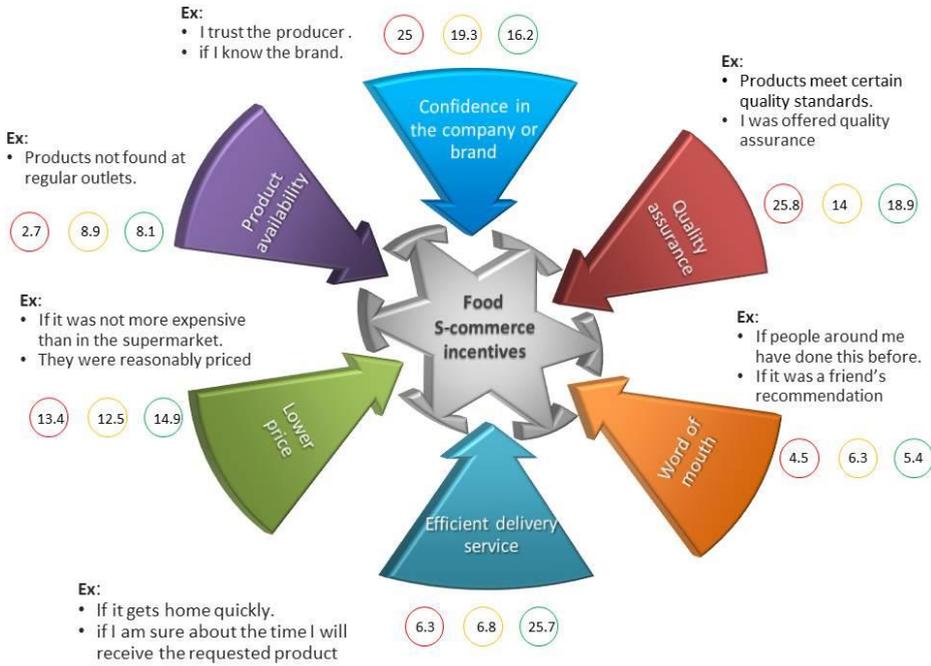


Figure 4.1. Driving factors towards the adoption of social short food chains (%)

Ex: examples given by the respondents.

Colors → indicate countries; Egypt ○ Spain ○ Mexico ○

Findings also show that Egyptian respondents were those who most elicited “quality assurance” and “confidence in the company” as the main factors that would encourage them to buy on a short food supply chain.

On the other hand, Figure 4.2 shows the most frequently mentioned barriers to the development of short food supply chains on social media.



Figure 4.2. Barriers to the engagement in social short food chains (%)

Ex: examples given by the respondents.

Colors → indicate countries; Egypt ○ Spain ○ Mexico ○

As can be observed in Figure 4.2, the first obstacle identified within the three countries is the distrust in quality guarantees. This may be due to the impersonal nature of these chains and to the lack of personal contact between businesses and consumers, which can generate distrust among possible customers (Canavari *et al.*, 2010). Therefore, it can be deduced that companies that operate under a certain type of quality-assurance would have a higher likelihood to attract clients on social media; as they would be able to transmit a mutual trust between them and their customers.

Other important reasons why consumers would not be willing to engage in social media short food chains are the lack of familiarity and the preference towards direct purchasing in the shop. As one can see, the Spanish respondents, compared to Egyptians and Mexicans, were those who most like shopping in

physical stores. They consider that with a real purchase experience, the process would be more efficient and they will be able to choose better products. This may be because a great part of Spanish people tends to purchase food at supermarkets where they feel comfortable to choose among a wide variety of products. Also, the good geographical distribution of supermarkets in Spain would contribute to make a real shopping process to be most preferred by consumers. However, in countries like Egypt the lack of well-distributed supermarket chains allows a small proportion of consumers to do food purchases in supermarkets. So that people for the most part are accustomed to making food purchases at small grocery shops and local markets, which makes a shopping process to be a tedious and time-consuming job.

The high tendency of consumers to buy in physical shops is also reported in other studies like those of Daugherty *et al.*, (2005) and Sarkar, (2011) who reflected that the limited sensory input is one of the biggest constraints associated with the web experience in comparison with the direct experience. This reaction may be expected since many consumers prefer to touch, feel, smell, or even taste the food before they buy.

The lack of a clear post-purchase policy was found to be another obstacle, as consumers can be concerned about their money in case of giving back any product that doesn't meet their expectations. In this sense, it has been found that Egypt, compared to Spain and Mexico, was the highest in citing the distrust in the post-purchase process as an obstacle that would affect negatively their adoption of such short food chains. This finding together with the results indicated in figure 1 concerning "quality assurance" and "confidence in the company", might reflect the worries and confusion that the Egyptian food markets suffer due to the weakness or almost the absence of clear governmental quality control policies.

4.4 Conclusions

The use of qualitative analysis has provided a useful approach to gain an insight into consumer's acceptance of food purchasing through social networks. One of the most significant findings that appear from this study is that consumers from very different cultural backgrounds -Spain, Egypt and Mexico- agree in their willingness to use social networks as a short supply chain for a wide range of food and beverages, among which stand out preserved foods, rice, pasta and ready meals. Cultural differences among the three different societies also showed some variation in consumers' intention to buy some products over others; Egyptian consumers showed the highest intention to purchase preserved food and legumes, while Mexican respondents showed the highest percentage of mentions for fast food and ready meals. On other side, consumers in the whole sample seemed to be sceptical about buying fresh and highly perishable products especially fruits and vegetables.

This research has also addressed the most important incentives and barriers that would enhance or discourage consumers within the three countries to opt on social-media short food chains. The trust in the brand and company or having a good experience in previous purchases is the most frequently mentioned reason that can motivate consumers in both Spain and Egypt. While in Mexico, it has been found that having an efficient delivery service is the most important driver for this initiative. Also we shed the light on the distrust in quality guarantees as the first obstacle identified within the three countries.

Agri-food companies have found in social media marketing a powerful tool that can help them to compensate some of the drawbacks derived from their inherent characteristics. In this context, the building of short food supply chains can offer the possibility to deal directly with their customers, while at the same time, getting direct feedback from them. Both factors will allow companies to meet

market trends and satisfy consumers' demands, but firms must improve their technological capabilities and learn to interact with their customers, not only as recipients of their products, but as real partners in a new entrepreneurial system.

4.5 References

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General conclusions

General conclusions

Social media represents a bi-directional communication line that could provide an interactive relationship among businesses and consumers offering some sort of dialogue prior to, after or even during the purchasing process. It also encourages information co-sharing, and links groups of consumers with each other, allowing the exchange of views among individuals with common interests. The potential role that social networks could play as an online direct sale platform in the food sector is therefore remarkable.

The use of social networks, with their almost instantaneous spreading of information, can allow producers to create a short and interactive supply chain, while giving the consumers the opportunity to share their feelings about the product. It might also reduce the impact of health scares that could be addressed with direct communication producer-consumer.

In the food market, where producers and agri-food industries are losing power in relation to large-scale distribution, the use of social networks as a new food chain is a tool that can offer exciting opportunities in food marketing. The advantages are clear for both consumers and producers, since establishing short distribution chains may allow improving trade margins while at the same time providing new services highly valued by consumers.

The use of projective techniques has allowed to obtain an insight into those aspects that consumers regard as barriers or facilitators regarding their foody use of social networks.

The main aspect highlighted is that a large part of the participants would be willing to use the short food chains created on social media, which could be considered as an undeniable opportunity for food companies.

Regarding the incentives for the use of short food supply chains, results have shown that the first reason which motivates consumers is having confidence with respect to the brand or even to have a good experience in previous shopping with the same company.

Furthermore, consumers are requesting products with quality guarantees and complying with regulations and standards. This finding can encourage food companies to produce under a certain type of quality schemes in order to take advantage of social media platforms to promote and sell their products. Likewise, it was found that a competitive price -lower than that of conventional chains- would also motivate consumers.

Regarding the barriers hindering short food chains and apart from the distrust that has been previously mentioned, the main obstacle is that a large part of consumers still prefers to buy food physically in conventional outlets, either because they perceive it to be the best way or due to unfamiliarity with online food purchasing. Food companies must, therefore, educate consumers by showing them the great advantages they can get through more direct and immediate contact with the firms.

The use of free-listing has also provided a useful approach to gain an insight into consumer's willingness to purchase food through social networks, allowing to define those food products most prone to be bought via this new and promising supply chains.

One of the most significant findings that emerge from this study is that consumers would be willing to buy a wide range of food and beverages, among which stand out long lasting and processed foods, such as legumes, rice, pasta, jam, honey, sugar and preserved fish.

Potential for the marketing of foods of animal origin through social networks in Spain has been found, although consumers' predisposition focuses on processed

animal foods, such as preserves or dairy products, which is related to the low perishability of foodstuffs and their greater ease of transport. However, there is also an opportunity for high-perishable foodstuffs in which consumers are very susceptible to information on freshness.

Another significant finding that appears from this study is that consumers from very different cultural backgrounds -Spain, Egypt and Mexico- agree in their willingness to use social networks as a short supply chain for a wide range of food and beverages, among which stand out preserved foods, rice, pasta and ready meals.

Cultural differences among the three different societies also showed some variation in consumers' intention to buy some products over others. Egyptian consumers showed the highest intention to purchase preserved food and legumes, while Mexican respondents showed the highest percentage of mentions for fast food and ready meals. On other side, consumers in the whole sample seemed to be sceptical about buying fresh and highly perishable food products, especially fruits and vegetables. We Also shed the light on the distrust in quality guarantees as the first obstacle identified within the three countries.

It can, therefore, be concluded that small and medium agri-food firms have within their reach a powerful tool that can compensate some of the disadvantages derived from their (lack of) size. In this context, the possibility to interact directly with their customers building short food supply chains must be highlighted as one of the most promising lines of growth for this sector. The development of these tools will allow companies to meet market trends and satisfy consumers' demands, who want to know what they eat and where it comes from. Firms will also be able to develop more accurate and cheaper marketing strategies, thus improving their position in the markets and gaining

competitiveness, essential aspects to survive and thrive in today's global food markets.

