

Dropshipping in e-commerce: the Spanish case

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Abstract

This article analyzes the workings of the Spanish *dropshipping* market for e-commerce. This logistics and distribution model, which supports e-commerce, has experienced strong growth, especially since the beginning of the economic crisis. It has expanded in parallel with the growth of e-commerce entrepreneurship and transactions; nevertheless, it is a business model that has not been scientifically studied and which, despite the advantages of direct distribution from producers to consumers, is not very transparent.

To develop a better understanding, an exploratory study via structured interviews with the main players in the Spanish *dropshipper* market was carried out. The main conclusion is that it is a very simple business model, characterized mainly by the presence of small businesses and freelancers, a lack of seniority and experience amongst *dropshipping* providers, high levels of returns (6% of invoiced products) and with annual abandon cart rates above 63% for the online stores that used these services.

Nevertheless, the projections of Spanish *dropshippers* for e-commerce for the coming years leads us to think that the model will continue to grow, but with a higher level of specialization.

Keywords: dropshipping, dropshipper, business model, e-commerce.

JEL codes: L81, L26, L10.

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直运在电子商业中的角色：西班牙的案例

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文章摘要

本文章分析西班牙市场的直运在电子商业中的运作情况。该物流及分配模型有助电子商业的发展，而且电子商业也经历了重要的增长，尤其是经济危机爆发之后。其扩展跟创业界和电子商业交易有着平衡的增长。然而，此模型还没有通过深入的科学研究；而且，虽然该模型提供从生产商到消费者的直接分配优势，但其运作模式还缺乏透明度。

为了深入研究本课题，我们跟几家主要的西班牙直运商进行了结构性访问，以此为基础作了探讨性研究。主要结论是此商业模式还处于早期发展阶段，其特点包括以下几点：大部分的案例都是小企业和自由职业人士；缺乏直运服务供应商的历史背景和经验；客户退货水平高（占发货量的6%）；而且用户每年在网上商店的放弃交易率为63%。纵然如此，我们还是期望用于电子商业的西班牙直运商在未来几年会持续增长，尽管其会有专业化趋势。

关键词: 直运、三角测量运输、直运商、电子商业。

JEL 分类号: M31、D24、A22。

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1. Introduction

Today, there is no doubt about the importance of e-commerce for consumers to satisfy their requirements to purchase goods and services. The increasing communications channels by which to carry out business allows companies to interact with their customers at anytime from anywhere in the world, facilitating commercial transactions online. In the dynamic environment that is e-commerce, *dropshipping* has emerged as a service designed to save warehousing and stockholding costs for e-commerce retailers.

The economic crisis which began in 2008 turned out to be a stimulant for this business model, since *dropshipping* has apparently grown in parallel with the increase in e-commerce transactions (Kaluzhsky, 2014).

The triangulation of delivery services, or *dropshipping*, is a logistics and distribution strategy whereby orders placed by customers on e-commerce sites are delivered directly from *dropshipper* facilities.

In this new business model generally called “*dropshipping*”, the expectations of retailers that entrust providers to offer this service, that is, *dropshippers*, are principally to undertake in both a secure and cost-effective way their e-commerce operations, taking responsibility for only the marketing and sales of the product or service, leaving the *dropshipper* in charge of logistics (shipping, warehousing etc.).

In this way, the retailer focuses on the marketing and development of their products and renounces his decision-making power in terms of inventory location, order delivery, transit times or even shipping costs for delivery to customer, with these being decisions for the *dropshipper* to take along with their associates.

On the other hand, *dropshipping* providers broaden potential distribution and sales channels with the model. It should be noted that the largest *dropshippers* are located in China rather than in Europe or the United States.

In Spain this model has an emergent nature. Consequently, we find barely any information on *dropshippers* offering this type of service, neither details of how the model work nor its performance. Similarly, we wonder how the model works and what is looming for e-commerce retail supported by *dropshipping* in Spain?

The goal is to find out how *dropshipping* works in Spain through information obtained from the sector itself. For this purpose, a prospective research study was undertaken of *dropshippers* who had implemented the triangulation delivery system for e-commerce companies in Spain. The present research takes into account 78 *dropshippers* with whom we conducted structured interviews.

Through an exhaustive review of scientific literature, we failed to find empirical research on *dropshipping* in Spain. However, still on a limited basis, references can be found on the workings of this business model in other countries. These studies focus on some aspects relevant to the model such as *dropshipping* feasibility in case of stock shortages, logistical aspects and supply system improvements (Khouja, 2001; Ayanso, Diabi and Nair, 2006; Khouja and Stylianou, 2009; Ma, Jemai, Sahin and Dallery, 2017).

Others turn their attention to the opposite problem, that is, the dangers of high demand coming from customers of the retailers that impact the *dropshippers* logistics decisions (Netessine and Rudi, 2004; Hovelaque, Soler and Hafsa, 2007). More relevant to our study is research that highlights the profits for retailers, which concludes that their profits are lower than those of the *dropshipper* (Li, Yijian, and Xiaolong, 2011; Rabinovich, Rungtusanatham and Laseter, 2008).

The remainder of the research is organized as follows: Section 2 - we delve into the characteristics and recent evolution of e-commerce, with emphasis on Spain, being the framework to develop this e-commerce retail model carried out by *dropshipping*. Additionally, it explains in detail the concept and origins of *dropshipping*, the characteristics of the model and the stakeholders, leading to a better understanding of the advantages, disadvantages and success factors for each of them.

In section 3, we review the literature that covers this business model. In section 4, we shed light on the methodology to achieve understanding of how the model operates in Spain. The research results are analyzed in Section 5, and in the last section the main conclusions of the research are presented.

2. E-commerce and dropshipping

2.1. E-commerce in Spain

The expansion of e-commerce has presented new opportunities for companies to compete and scale up. Likewise, it contributed to reducing barriers to entry for new companies to launch into the market and compete with traditional companies. This has led to e-commerce to become the main driver of economic growth and increased levels of employment across Europe (Ecommerce Foundation, 2017):

- E-commerce directly and indirectly employed 2.5 million people in 2016.
- There are an estimated 750 thousand businesses with e-commerce activity in Europe, with an annual 4.2 billion deliveries per year.
- E-commerce transactions in Europe amounted to €510 million in 2016, a 12% increase on the previous year.
- 296 million people shop online (43%).
- However, we should emphasize that the growth in popularity of e-commerce varies greatly amongst the member states of the European Union (EU).

Consequently, and without a doubt, it can be confirmed that e-commerce is one of the most dynamic and important sectors in economy, characterized by the ease at which it overcomes physical, cultural and generational boundaries. Thanks to this, consumers can purchase online, even from the most remote corners of the earth (Kaluzhsky, 2014).

Nevertheless, despite the ability to overcome boundaries, the vast majority of consumers who purchase online lean towards national online stores, although it is true that so-called cross-border e-commerce retailers are increasingly becoming more popular (CENSUS BUREAU, 2016a).

As for the rise of e-commerce in Spain, it is important to note the sustained growth the sector has experienced in the past few years, which has given companies greater confidence to launch new initiatives to increase sales via virtual channels (CENSUS BUREAU, 2016b), and from which new models have emerged, such as *dropshipping* for e-commerce retailers.

This kind of growth is the result of an evolving society which has been adapting, gaining confidence, improving its perception of online transactions and accepting this new way to purchase goods and services, as shown through numerous studies such as IPSOS (2014), ONTSI (2015), Telefónica Foundation (2015), Cetelem (2016) and Uruña (2017).

In fact, these studies conclude that 84% of Spaniards go online several times per day, while only 1% go online less than once per week, resulting in a total of 95% being frequent Internet users.

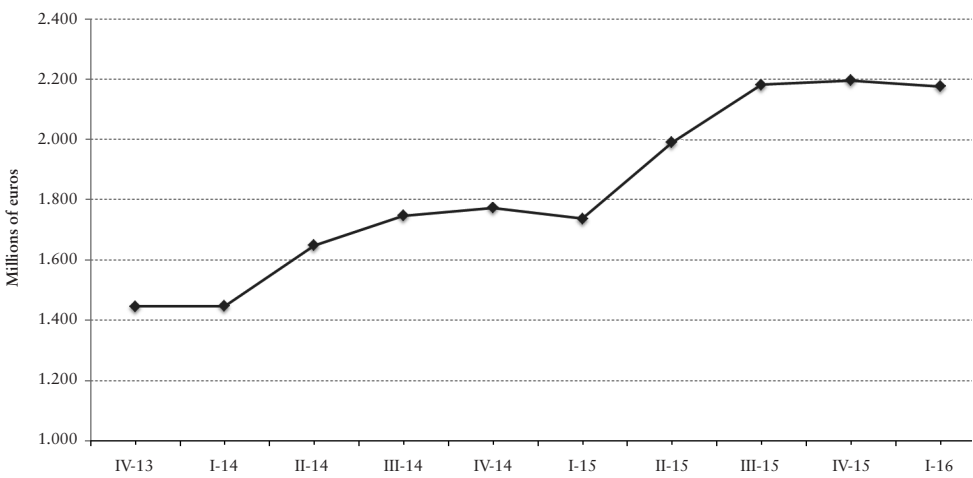
In terms of purchase intensity, we can see a rise in turnover (Chart 1). The National Commission on Markets and Competition (2016, CNMC in Spanish) estimates that e-commerce in Spain surpassed €6.100 million in the third quarter of 2016, a 16,3% increase over the previous year, proving that e-commerce is alive and well and will continue its upward trend.

In regard to purchases and purchasers, slightly over half of the Spanish population buys online. Occasional purchasers, who buy one to three times per month, account for 38% of purchasers, whilst regular customers, who buy four or more times per month, account for 62% of purchasers (CENSUS BUREAU, 2016a).

The vast majority of online purchases are linked to fashion, clothes, shoes, sports equipment, technology, leisure, health, home (electrical appliances, gardening...), toys, tickets, travel, accommodation, electronics, books, restaurants, communication devices, food etc. The products mentioned are closely related to those in highest demand through the *dropshipping* model, which we will later see.

The main drivers for these users to purchase online are low prices, discounts and special offers. They are also attracted by the wide range of products that can be found on specialty sites and the ease of navigation which assists the selection and buying process.

Chart 1. E-commerce turnover in Spain



Source: Quarterly evolution (CNMC DATA).

Similarly, it is worth mentioning the possibility of various payment methods, low shipping costs and fast delivery times; these are some of the factors which can be improved by applying business models as described below. Moreover, customers consider post-purchase service to provide added-value to top up this kind of purchase experience.

Thus, the reason a customer will repeat an online purchase is based on their satisfaction with their first purchase, in which all aspects which originally attract the user are put into play. Indeed, this is one of the most positive aspects of e-commerce operations In Spain - 99% of buyers were satisfied with their purchase experience (IPSOS, 2014) despite the lack of trust and a preference for direct contact still being essential for the customer.

Finally, in terms of e-commerce user profiles we should highlight those who are called millennials (generation Y), born between 1980 and 2000, represent a segment of the population which purchase online more than the population in general, although they are prone to spend less and use the latest generation mobile phones to search for information and make purchases from any place and at any time during the day. Nowadays, these users represent 25% of the population but it is predicted that they will account for 50% in 5 years, and in 2025 they will account for 75% of e-commerce users.

2.2. The concept

Dropshipping, which can be translated into Spanish as “soltar el envío”, is a strategy in which an online seller presents and offers products without having to keep them in stock, so that when a buyer purchases, the orders are sent and delivered directly from the *dropshipper's* facilities.

In other words, it is a management strategy whereby the retailer does not keep goods in stock but rather transfers the orders and delivery details they receive from customers to the manufacturer, or another retailer, or a wholesaler who then delivers the goods straight to the customer.

The distinctive feature is this connection between the *dropshipper* and the customer, since their level of satisfaction with the e-commerce retailer from which they purchased is dependent on the satisfactory completion of the tasks undertaken by the *dropshipper* (delivery service, returns, complaints management etc.).

In addition, this e-commerce strategy might be considered an alternative business model, initiative or venture which requires very limited upfront investment and one that does not require a large sales team, intermediate warehousing, logistics or complex contractual agreements, amongst other things.

2.3. The emergence of triangulation for delivery services, or dropshipping

It is difficult to determine the moment when dropshipping emerged as a business model for e-commerce retail;¹ however, there are several recent events that have contributed to an increased presence of such services in the business strategies of many online retailers:

- 1) The global crisis in 2008 causing economic deterioration in multiple countries and which was harmful to consumption, production and the release of new products, making it necessary for businesses and companies to adapt their business strategies to an environment where economic resources lacked for many households. Those households where price is the key factor in decision making.
- 2) The evolution of the Internet in the last decade, becoming a powerful marketing and distribution channel for the sale of goods and services, and which spurred the need to develop omni-channel distribution systems (Hübner, Holzapfel and Kuhn, 2016) and the emergence of new business models which back up web platform development, e-commerce and globalization; changes in consumption habits, where consumers can compare prices more easily and select the most cost-effective option.

(1) Zappos, the EEUU enterprise engaged in shoe sales bought by Amazon in 2009 kicked off dropshipping in 1999. Afterwards, the same Amazon and Alibaba also launched dropshipping and keep on doing so. So, this model became operational 20 years ago.

- 3) Retail margins are reduced as retailers feel obliged to compete on pricing as a consequence of market globalization and the resulting increase in both domestic and international competition.

In this landscape many entrepreneurs and stores operating online find *dropshipping* to be an outstanding alternative for the sale of standardized items without incurring the costs normally associated with a traditional business model (Kaluzhsky, 2014).

With this model retailers no longer perform the tasks of shipping or delivery, nor do they need to control inventory, but rather depend on their *dropshipper* to forecast and maintain inventory of the products to be sold and to carry out both the packaging and transportation necessary to deliver those products, which go from the *dropshipper's* facilities to the final customer's residence.

E-commerce retailers who support this distribution model focus greater efforts in the acquisition and retention of customers through price conveyance and customer support promises.

This business model is booming thanks to the emergence of various *dropshipping* providers worldwide, with China ahead of the game compared to its Western competitors essentially due to its ability to produce at a lower cost per item, making it difficult for *dropshipping* providers in the USA and in Europe to compete under the same conditions as Chinese companies (<https://www.statista.com/>).

Several sources estimate that nowadays around 35% ($\pm 3\%$) of e-commerce uses *dropshipping* as the model for inventory management and distribution (Snyder, 2013), estimating that product sales supported by this model represent 33% and 40% of worldwide turnover in e-commerce (Zhong et al, 2017), which gives an indication of the model's success.

2.4. General scheme of dropshipping operations

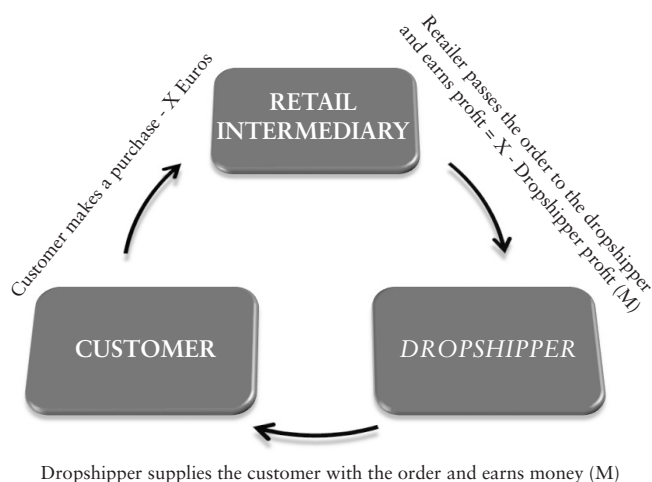
The operations of this e-commerce alternative, in which traditional logistics have been reshaped, is rather simple (Chart 2), even if it requires a higher level of coordination and coherence to achieve a good result on the consumer purchase process, a high level of satisfaction for the retailer, the *dropshipper* and in particular for the customer. The most relevant interactions between participants in purchasing under this business strategy are the following:

- Interaction 1: E-commerce retailer, whose fundamental operations are the sale and promotion of the products - the object of the agreement - negotiates cooperation terms with the *dropshippers*. Within this agreement the following aspects are set: existing guarantees for both parties, products – the service object, processes for communication and updates, agreed margins, customer order processes, shipment methods, delivery conditions, invoicing, refund and return policies...

- Interaction 2: The e-commerce retailer develops and manages their online store which features descriptions and images of the products supplied by the *dropshipper*. The product offering must be kept up-to-date according to stock availability in the warehouse, therefore constant communication with the *dropshippers* is fundamental. Moreover, the retailer oversees the communications strategy, promotion and advertising for their online store.
- Interaction 3: Customers buy goods and services through the retailer's online store. The retailer then transfers the orders to the *dropshipper*. In such a way the retailer benefits from the difference between the revenue generated on the products minus the invoiced amount from the *dropshipper*.
- Interaction 4: The *dropshipper* sends the goods which have already been paid for by the customer in the name of the online store to the customer's address and also deals with issues related to the guarantee of the products being sold. From a commercial point of view, this model reduces delivery times to the final customer (as the product moves from the *dropshipping* supplier to the consumer) and allows suppliers to place their products in any market within a short time-frame without additional costs.

In this model we draw attention to two fundamental actors: the retailer and the *dropshipper*.

Chart 2. *Dropshipping* model



Source: developed by the author/s.

The retailer benefits from important advantages and some drawbacks that may prove critical (table 1). They are in charge of the marketing decisions of their products and waive their decision-making power with regards to inventory locations, delivery of orders, associated transit times and costs incurred in the transportation of their products to the customers, as these decisions are taken by the company's *dropshipper* and/or the delivery companies.

It is certain that, with this model, e-commerce is able to address some major expectations that customers have when buying online, such as getting their orders as soon as possible, which is especially relevant in countries with a high level of impulse buying, that the shipping costs are transparent and complete (required by 91% of online buyers) and that a detailed product description is attached (required by 90% of buyers); at the same time, it may be difficult to address others, such as free returns (94%) (DPD Group, 2017).

In addition, it may help to mitigate some common causes of online shopper dissatisfaction, such as returns (26% of online shoppers are dissatisfied), shipping prices (21% of online shoppers are dissatisfied) or delivery speed (16% of online shoppers are dissatisfied) (Economics C., 2013).

Table 1. Main advantages and disadvantages for e-commerce retailers

Advantages	Disadvantages
<ul style="list-style-type: none">• Single task: (marketing) to promote product online in a convenient way.• Online advertising costs less than advertising campaigns across other media.• Higher audiences reach through online platforms.• You can control market demand in real time, look for market opportunities and set conditions to make the products more attractive.• No warehousing space required, only need a personal computer with access to the Internet and an agreement with <i>dropshippers</i>.• Focus efforts on product marketing, sending <i>dropshippers</i> the customer's address, payment and necessary information about the product.• Create and promote your brand which is featured on the product.	<ul style="list-style-type: none">• Dependent on <i>dropshippers</i>, because they are responsible for ensuring a good delivery service to the customer. Depending on the performance of this service, it may have a positive or negative impact on the retailer's relationship with their customer.• Limited profit margins depending on the agreements signed with the <i>dropshipper</i>.• Increased guarantees or additional aspects to promote the product are at your own cost and risk.• Lack of effective storage control and inventory levels.• Compete for a price close to cost, giving rise to low margins that oblige higher sales volumes to generate relevant profits.• Fragmented order delivery when a single customer order involves products from different <i>dropshippers</i>, giving rise to longer delivery times and higher shipping costs.

Source: developed by the author/s.

The *dropshipper* has important advantages too: this model allows them to expanding their distribution capacity since it brings together a large number of online retail stores selling their products, which in turn allows them to achieve

economies of scale in the distribution channel, which subsequently could result in the savings being transferred either to the final price of the product or contributed to the profit margins.

On the other hand, the main drawbacks are the lack of direct contact with the customer and possible disagreements between the online retailers and the *dropshipping* provider, as the latter is integrated into the retailer's distribution strategy (Table 2). This can especially be a disadvantage when the *dropshipper* is not a manufacturer or a consolidated wholesaler but another intermediary within the distribution chain.

Table 2. Major advantages and disadvantages for the *Dropshipper*

Advantages	Disadvantages
<ul style="list-style-type: none"> • Potential to increase distribution channels, providing retailers with all kind of logistics and distribution. • Potential to cover to a greater extent production capacity surplus if it exists. • Cost savings (maintenance, taxes, insurance, material handling, capital, storage, obsolescence etc.) • Offers the specific products demanded by buyers, at the right time and place. • Gains great opportunities to enter new markets. • Improved control of margins and potential to influence sales price to the public. 	<ul style="list-style-type: none"> • No direct contact with the final customer. • Cannot control and avoid breach of contractual obligations resulting from a retailer's abandonment of the business. • Its marketing opportunities are limited because it is responsible for receiving unified logistics and the order processing. • Potential conflicts with the retailer when integrating into its distribution strategy. • Responsible for covering costs due to excess production or failure to correctly forecast customer demand.

Source: developed by the author/s.

From this, we can conclude that this type of business is likely to be very suitable and successful if you pay special attention and consider in detail the following critical factors:

- Setting policies in terms of returns, packaging and payment.
- A return policy that describes who is responsible for the associated costs and how the returned products will be handled.
- Well-designed information systems with an uninterrupted online connection between dropshipper and online store to report stock availability for each product.
- A close link between the dropshipping manufacturer/supplier and retailer to ensure good service rendered to the customer through an intuitive, clear, transparent and omnichannel website.
- A well-developed product distribution and delivery infrastructure, where fast, fluid and flexible deliveries are provided, adapted to the final customer's lifestyle and obligations.

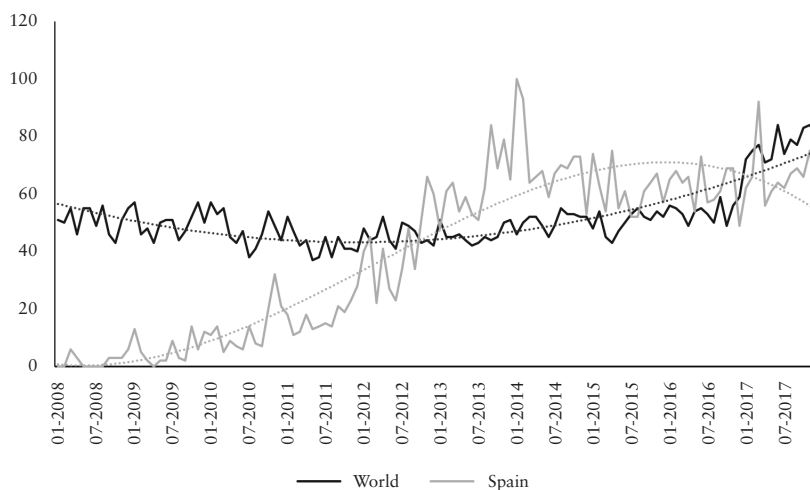
2.5. Dropshipping in Spain

The advantages that come with shipment triangulation for e-commerce retail have turned interest towards entrepreneurship of new online establishments for this alternative in many countries; and Spain is no exception.

As there is no official information available to analyse the extent to which interest in these new models of commercial distribution for e-commerce has spread, Google Trends² has been considered as a proxy for it. This is considered a good indicator in relative terms of interest in this business model.

Interest in this form of product distribution registers a considerable increase in relative terms from 2011 (chart 3), matching the time when the impact of the crisis on employment was most intense.³

Chart 3. Interest through time in *dropshipping* in Spain and across the world. Google Trends index 2008-2017



Source: Developed by the author/s from Google Trends.

This is an indicator of the strong rise of e-commerce in Spain and that the *dropshipping* system is a new approach for entrepreneurship, where a strong commitment and high coordination between the various participants is crucial. As we see in the

(2) The index reflects search interest on the Google search engine in relation to the highest value in a graph, within a determined moment and time. Therefore, the index reflects a variation range between 0 and 100; were 100 shows maximum popularity of a term, while 50 and 0 indicate a popularity which is half or less than 1%, respectively, to the biggest value.

(3) The correlation coefficient between the Google Trends index and the annual unemployment rate in Spain (Eurostat) stands at 0.56 for data between years 2008-2017.

following sections, it is an emerging model, which will improve together with e-commerce growth.

3. Literature review

The literature which studies shipment triangulation as a business model is very scarce; and in no case could we find any studies applied to the Spanish market. As a result of the review of existing literature on this distribution model, we find empirical research on *dropshipping* for retail e-commerce from three different points of view:

- 1) Those which focus on the coordination between different actors within the *dropshipping* system.
- 2) Those focused on improving logistics (order management and processing, inventory control, transport selection, document processing, insurance, warehousing...) to satisfy customer orders.
- 3) Those which analyze the more commercial aspects (marketing, driving demand, increasing sales, various payments methods, ease of use, convenience for the client...).

Khouja (2001) considers the *dropshipping* system as a feasible option in cases of stock shortages for the retailer while the orders are completed. He concludes that the shipment is efficient when delivery times are long and the order cost in relation to the maintenance cost is low. He also considers that products with a lower value per unit are most suited to the use of *dropshipping*.

In this way, by focusing on the logistics side of the *dropshipping* system, he proposes a strategy of optimal mix and pushes forwards two inventory models to take advantage of the benefits of *dropshipping* and avoid many of its drawbacks. This means using *dropshipping* for low-ticket items and applying another model for more expensive items, giving way to a mixed model which might increase sales opportunities (Khouja, 2001). In the same field of study, Chopra and Van Mieghem (2000) conclude that only products with a high rotation should be kept in the warehouse, while slower-moving goods should be delivered using *dropshipping*. This analysis is complemented by Ma et al. (2017) who showed that through the mixed model, the optimal inventory of the store can be reduced by just over 30% which results in a greater benefit than expected.

In line with the previous study, Ayanso et al. (2006) investigates the use of *dropshipping* as an option to fulfil orders. For that purpose, he developed a Monte Carlo simulation which determined that e-commerce retailers have greater opportunities for profit when they fulfil high-value orders through a traditional channel and low-value orders through *dropshipping*.

However, one of the biggest dangers is found where high demand from retail clients affects *dropshippers* in their logistics duties (Hovelaque et al., 2007); he latter

contrasts this with the fact that the supply chain under *dropshipping* agreements benefits from grouping risks due to multiple retailers' inventory being stored in the same place, as found by Netessine y Rudi (2004).

Indeed, more relevant to our study are those which analyse the socio-economic impact of this new commercial sales model, such as the one undertaken in the Russian market by Kaluzhsky (2014), or those which emphasise profits for retailers, which conclude inferior (Li et al, 2011), or with an inversely proportional behaviour (Rabinovich et al., 2008), to the *dropshipper's* profits, which we understand, given the existence of commitment-penalty contracts to solve inefficiencies caused by the asymmetric information of the *dropshipping* supply chain (Gan, Sethi and Zhou, 2010), are some of the key factors for the success of the business model, and whose margins we are interested to understand in the case of the Spanish market.

4. Methodology

As we already mentioned in the previous section, we scarcely have empirical studies on *dropshipping* for online retailer in Spain. There are two fundamental reasons for this: firstly, the difficulty in identifying the type of e-commerce retailer who rely on *dropshipping* as a critical element of their business strategy; secondly, that most of them are small businesses with very few employees and resources, as well as a lack of interest in participating in such studies.

Therefore, to better understand the workings of this system and the upcoming prospects we prepared a structured questionnaire targeted to Spanish *dropshippers* which allowed us to detect the key issues and contextual factors of retail distribution backed up by this model.

The Spanish *dropshipper* population that supports e-commerce retailers is not very large. Within this model we find those suppliers who have a temporary presence and others with a clear intention to remain in the market, which makes it difficult to locate and contact them. However, 78 companies have been identified, all of which were invited to participate in the study.

Of the total Spanish *dropshipper* population, many opted not to provide information due to an aversion to share since they consider it to be of a highly sensitive nature; nevertheless, 23 of them agreed to take part in the study, which provides a reasonably representative sample. The Maximum Permissible Error for a confidence level up to 90%, for the estimated proportions $p = q = 0.5$ is 14.5%. In addition, it provides highly relevant qualitative information on the performance of this business model.

These *dropshipping* suppliers service different sectors (footwear, toys, electronics, household products, phones and IT, farming stores or *growshops*, office supplies, childcare, clothing and accessories, sex-shops, cars, the hotel industry and food, outlets, cosmetics, sunglasses, perfumes, products for animal and other generalist retailers) and provide their services to online stores.

The strategy for the design of the structured questionnaire has an inductive character, because we have observed a set of factors and then classified them and proceeded to include them in the questionnaire to be able to contrast them with the results of the interviews conducted with the industry experts.

We understand that these are an appropriate instrument to gain first-hand experience from the drivers of this model in Spain, the expectations they have, and the possible drawbacks of this system and those who will have to devise future solutions so that this distribution model stands the test of time.

5. Analysis of dropshipping in the retail ecommerce in Spain

The obtained results reveal how to categorize the business model and are relevant in qualitative terms, because, although we received responses from persons occupying different roles in the organizational chart of companies providing *dropshipping* (employees, coordinators, managers and supervisors), the vast majority of the interviewees were company managers (almost 50%). This illustrates a more complete strategic vision of the workings of this model and for some of fundamental importance, which might not be so well-known by persons in other positions in the organization.

With regards to the characteristics of *dropshipping* providers in Spain, it should be noted that in almost half of the cases they were small businesses. The vast majority are limited companies and are dedicated to providing the *dropshipping* service for products from other suppliers (chart 4).

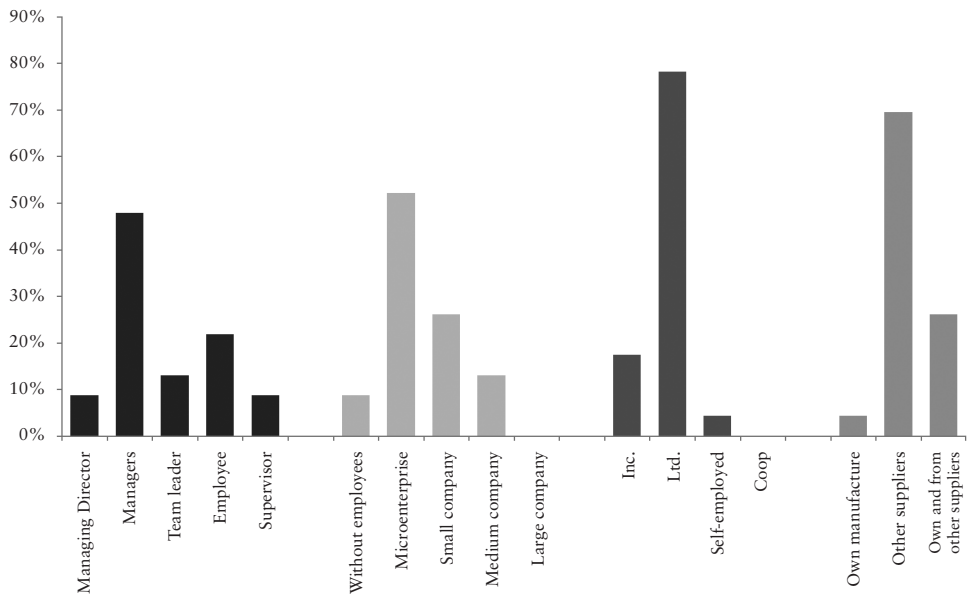
This characterises a national system in which practically no big operators exist, as just 13% of *dropshipping* companies have more than 50 employees. Therefore, it is a collective of small companies who act as intermediaries, as 70% exclusively sell products which are not self-manufactured.

Consequently, based on this data, we conclude that the *dropshipping* business model in Spain is still emerging and big national providers have not yet been incorporated; as such, the wide range of advantages mentioned in the previous section are yet to be realised; and, whilst the potential to provide cross-border *dropshipping* which could compete with global operators is really scarce, the risk of failure for many of these *dropshippers* is still high. A risk which is transferred to e-commerce retailers in the form of a high risk of suspension of service for its customers.

These impressions are confirmed if we consider the age of these businesses (chart 5), since most of them arose when the economic crisis started, which means they do not exceed 8 years of operations.

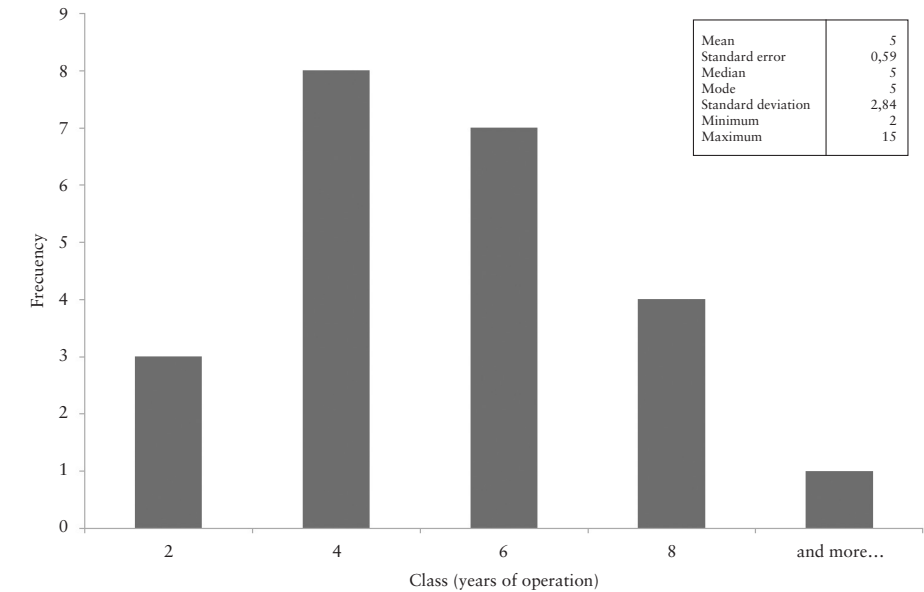
The sectors in which we find a greater presence of *dropshipping* services are fashion and accessories, toys, phones and IT, shoes and perfumes (chart 6), which match those consumer items that register a higher number of e-commerce transactions in Spain and those that have a higher average online purchase (DPD Group, 2017); they also have a greater presence of online retailers.

Chart 4. Dropshipping provider characteristics

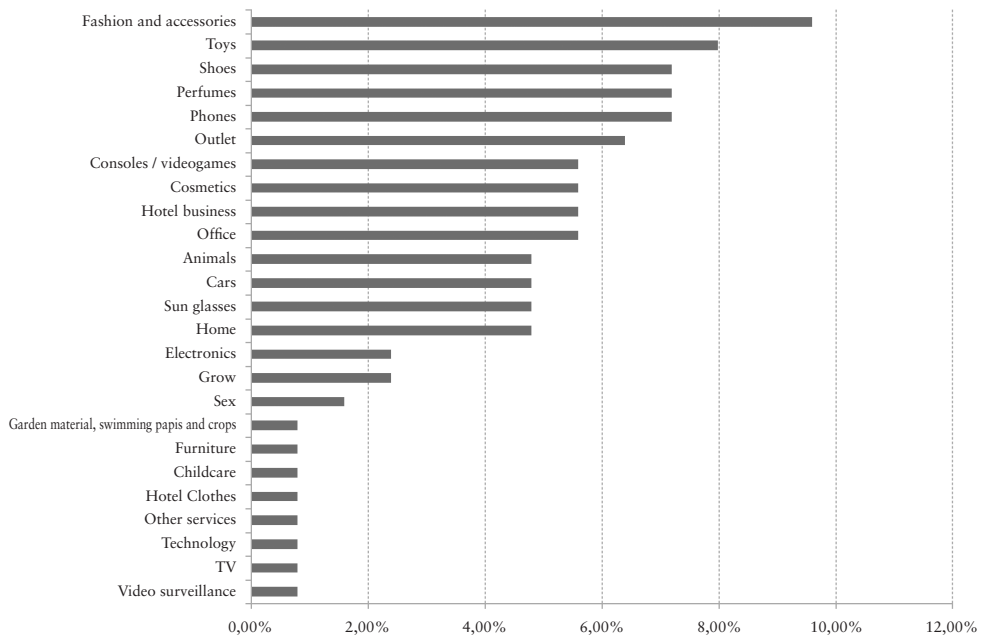


Source: developed by the author/s.

Chart 5. Dropshipping suppliers by age. Frequency histogram



Source: developed by the author/s.

Chart 6. *Dropshipping* supplier distribution by consumer sectors

Source: developed by the author/s.

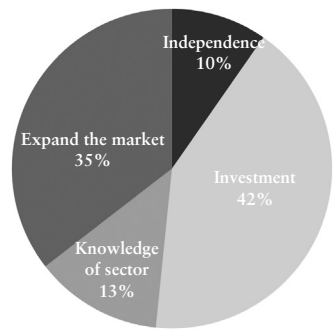
This shows that the incorporation of *dropshipping* services to e-commerce follows the market trends in terms of both the type of products where purchases are concentrated and online spending by consumers.

However, there are some exceptions, as, for example, books are the second product category with the highest average share of online purchases (DPD Group, 2017), but they do not appear among the products *dropshippers* work with, which corresponds with the concentration of online sales of these products from stores with own logistics and distribution capabilities (Amazon, Casa del Libro, ...) with which retailers cannot compete, although they can be added to their affiliate programs, enjoying a similar service to shipment triangulation.

The main reasons for *dropshipping* providers to provide this service is to make an investment and increase the market they can service, above any other reason, such as knowledge of the sector in which they operate (chart 7).

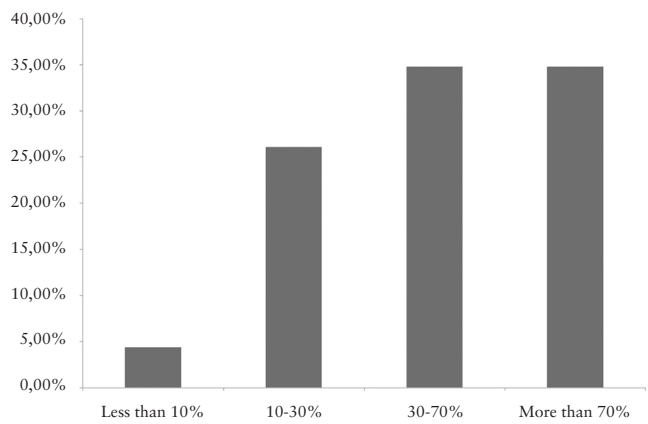
In a nutshell, considering the impressions transmitted by the *dropshipping* companies themselves, the importance of services for virtual stores in the activities of these companies is very high, in addition to having a growing presence. In fact, one out of three *dropshipping* providers attributes more than 70% of their invoicing to their triangulation shipping services (chart 8) and the annual growth of this type of services registers a very important trend, as can be seen in that 1 of every 2 suppliers consider that the average annual growth is between 30% and 50% (chart 9).

Chart 7. Reason for *dropshippers* to provide this service to e-commerce retailers



Source: developed by the author/s.

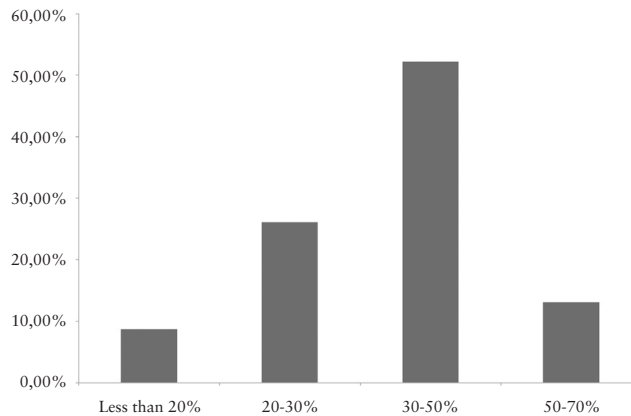
Chart 8. *Dropshipping* service as a percentage of company invoicing



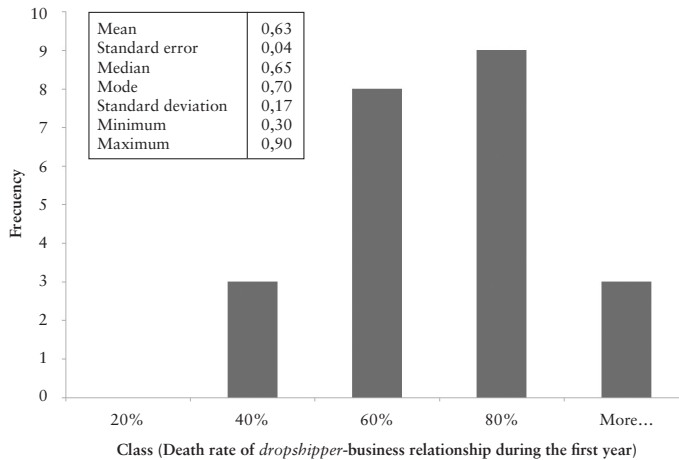
Source: developed by the author/s.

However, the success rate of e-commerce retailers who depend on *dropshipping* for the launch of their business is estimated to be low, if we consider the termination rate of relationships between the *dropshipper* and the retailer in their first year of life is as high as 63.04% (chart 10); which in many cases leads to the selection of a new *dropshipping* provider, to a change in the business model or to the planned closure of the business.

This percentage of closures is very high if we compare it with the death rate of businesses within their first year, which, according to Census Bureau statistics “Harmonized companies demographics” stands at 26% for e-commerce retail (year 2014, latest available) and 22% for all companies “born” during the previous year.

Chart 9. Year-on-year growth of *Dropshipping* services

Source: developed by the author/s.

Chart 10. Death rate of *dropshipper*-business relationship during the first year. Frequency histogram

Source: developed by the author/s.

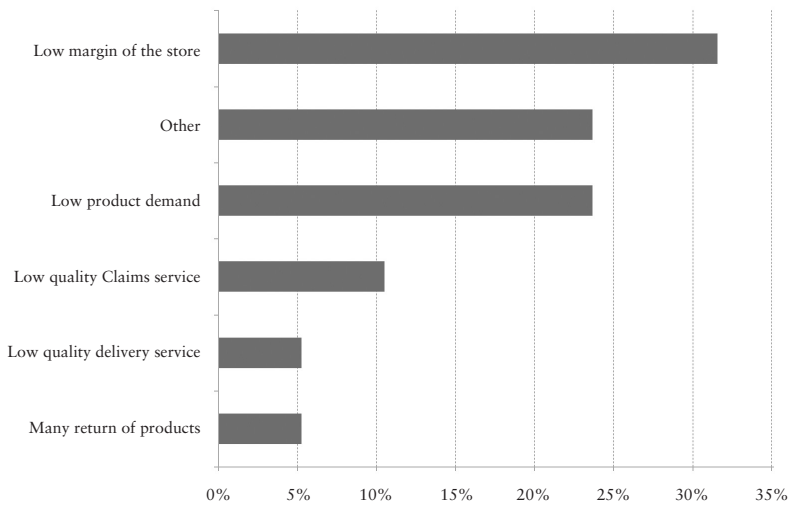
The main reasons for the severance of these relationships are principally the low margins of the store, low product demand and problems with after sales service (chart 11).

To this we add other primary reasons related to the previous ones, such as inefficient SEO positioning, as a result of search engines algorithms, like Google, which penalise duplicated product profiles, little patience or experience of online

shop owners, lack of knowledge of the sector in which the virtual store operates, inadequate business plan and problems with the conversion rate of the online store.

Of all the factors mentioned above, those directly affected by the business model of triangulation of shipments are the margins obtained by the e-commerce retailer and those related to delivery and returns, in which the *dropshipper's* professionalism is a must-have to avoid damaging the ongoing relationship between the business and its clients.

Chart 11. Reasons for the trade-*dropshipper* business “death rate”



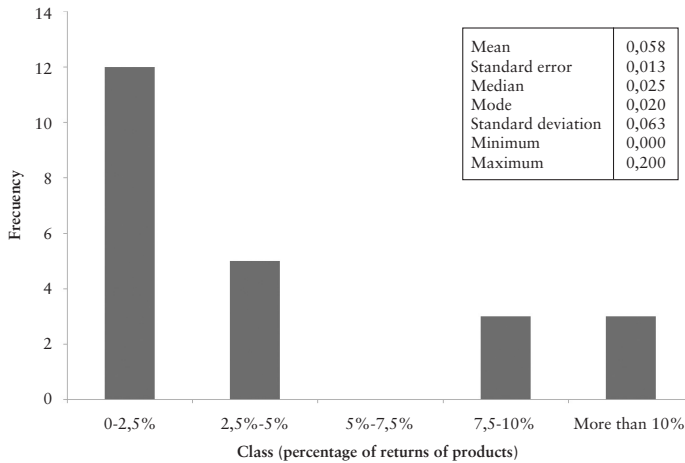
Source: own work.

On the other hand, the percentage of returns of products subject to triangulation is very high, since it sits at 5.8% on average (its standard deviation being very high, 6.3%). 50% of stores are below 2.5%, but 25% of stores register estimated returns of more than 10% (chart 12).

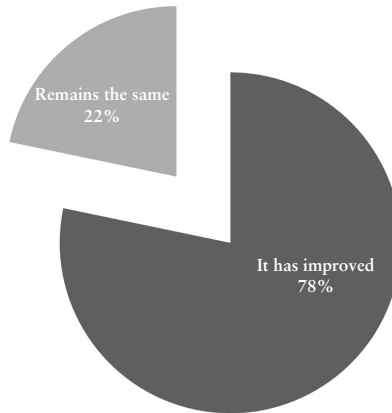
It is hard to pinpoint what percentage of returns can be considered as normal, although the percentage of return in both the Spanish and European markets are 3% (DPD Group, 2017). So, we could conclude that more than a 3% return rate would show a high risk of failure for the business model.

If we consider this reference as valid, and also take into account that the average margin on sales is 9.13%, we come to understand that, from an economic feasibility point of view, the high rates of failure for retailers in this business is easily explained.

Conscious of the situation surrounding this type of business, Spanish *dropshippers* state they are achieving improvements in customer delivery service quality (78.3%) (chart 13). Indeed, this is the weakest link of the business model studied in this article.

Chart 12. Return percentages of *dropshipping* deliveries in Spain. Frequency histogram

Source: developed by the author/s.

Chart 13. *Dropshippers'* perception of customer delivery service

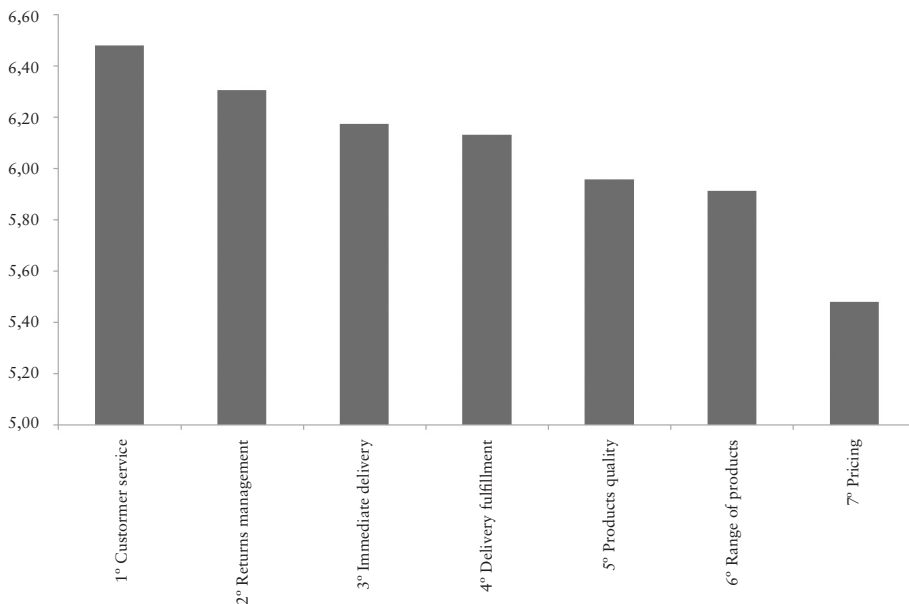
Source: developed by the author/s.

In brief, *dropshippers* do not show much interest in improving pricing which they push to e-commerce stores, despite the low margin they might have; however, they do focus their efforts on offering the best customer service, accomplish immediate deliveries and properly handle returns; as well as expanding their product catalogue and its quality, leaving pricing strategy in the last position within their improvement plans (chart 14).

In any case, since e-commerce is expanding, it offers more opportunities to *dropshippers*, which, when asked about their future perspectives, overwhelmingly

consider their sales will increase in the next 3 years (87% say this will be the case). So, as we have witnessed, it is necessary to continue improving the management and commitment of all those involved in this type of business.

Chart 14. Improvements which *dropshippers* focus on



Source: developed by the author/s.

Conclusions

The main conclusion obtained from the research is that the *dropshipping* business model for e-commerce retailers in Spain could be defined as emerging. The reason for this is that to date there have not been any large national suppliers providing the service, which instead is a system made up principally of small business that operate as limited companies.

On one hand, the age of the existing suppliers with this business model allows us to deduce that it arose from the economic crisis worldwide in 2008. On the other hand, *dropshipping* has the largest presence in the sectors in which it has a perfect match with those consumer products where purchase and expenditures are concentrated online in Spain, so that the growth of the *dropshipping* model is synchronous with the development and evolution of e-commerce.

That is reason that, in spite of the high risk of going out of business for *dropshippers* which would impact on the relationship between retailers and their

customers, to the high level of returns, and the lack of coherence and coordination that may clearly lead to failure, *dropshippers* demonstrate high expectations for the development of this business model which seeks to perfect the less-controlled aspects.

Characteristics of the dropshipping business model in Spain

- Emerging business model and lack of professionalism.
 - Lack of major providers nationwide.
 - High level of returns made by customers.
 - Low margin for retail ecommerce.
 - High dropout rates of ecommerce retailers.
-

Improvements in all the before-mentioned aspects will boost the incentive for retail stores to maintain the relationship with their *dropshipping* providers without risking their image nor the relationship that they have with their clients. Additionally, *dropshippers* are leaning towards expanding activity within this model, and even across borders.

Ultimately, this system structure is viable although the set of elements that make it up are not yet highly professionalized, which corresponds to a high level of returns made by final purchasers that puts the business model of e-commerce retail stores at risk and oftentimes leads to higher rates of business closures than those registered in the retail sector as a whole in Spain.

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