

Politecnico di Milano

Scuola di Ingegneria Industriale e dell'Informazione

Corso di Laurea Magistrale in Ingegneria Gestionale



POLITECNICO
MILANO 1863

“Online export to India: Analysis of Indian B2C e-commerce market,
return management and trade policies focussing on Italian sellers”

Relatore: Riccardo Mangiaracina
Correlatrice: Maria Giuffrida

Laureando: Sushant Tiwari (840991)

Anno accademico: 2016/2017

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Abstract:

Indian B2C e-commerce market has grown enormously in the recent past and has become an attractive platform to do business for many foreign companies. It can be relatively easier for a big company to enter this market due to its potential of capital investments and already established brand image. However, due to information gaps in behavior and environment of Indian e-commerce market, trade policies and return management issues, smaller companies are not very confident with their decision making to enter Indian market even after knowing that it has a huge potential. These remarks are the starting point of the present thesis work, which is meant to explore different dimensions of Indian e-commerce market focusing on apparel products, which is one of the major drivers of Italian export.

The objective of the thesis is to offer an overview of Indian e-commerce market to support those Italian firms willing to exploit the potential of the developing country's fashion market. Moreover, the other aim of the thesis is to diminish the information gap in the behavior and environment of the Indian e-commerce market, especially focusing in return management policies followed by the country's e-commerce companies and the effects of trade policies, shared by India and Italy, on the Italian sellers who want to exploit potential of Indian e-commerce fashion market.

Italian Abstract

Il mercato indiano di e-commerce B2C è cresciuto enormemente negli ultimi anni ed è diventato una piattaforma di business attraente per molte aziende estere. Può essere relativamente più facile per una grande impresa entrare in tali mercati a causa del suo potenziale di investimenti in capitale e dell'immagine del marchio già consolidata. Tuttavia, a causa delle lacune informative nel comportamento e nell'ambiente del mercato dell' e-commerce indiano, delle politiche commerciali e dei problemi di gestione del ritorno, le aziende più piccole non sono molto sicure, nel loro processo decisionale, di entrare nel mercato indiano, anche dopo aver saputo che ha un enorme potenziale. Queste osservazioni sono il punto di partenza del presente lavoro di tesi, che intende esplorare le diverse dimensioni del mercato indiano di e-commerce incentrato sui prodotti di abbigliamento, uno dei principali fattori di esportazione italiana.

L'obiettivo della tesi è quello di offrire una panoramica sul mercato dell'e-commerce indiano per supportare quelle aziende italiane che vogliono sfruttare il potenziale del mercato del paese nel settore della moda. In aggiunta, l'altro obiettivo della tesi è quello di ridurre il divario delle informazioni nel comportamento e nell'ambiente del mercato dell'e-commerce in India, con particolare attenzione alle politiche di gestione del rimpatrio seguite dalle aziende di e-commerce indiano e agli effetti delle politiche commerciali condivise dall'India e dall'Italia, sui venditori italiani che vogliono sfruttare il potenziale del mercato indiano di e-commerce del mercato del fashion.

Executive Summary

Problem Statement:

The trade volume exchanged between both India and Italy is significant for both countries. However, when compared to the trade relations with other countries, Italy and India do not share high trade balance between them. As per Ficci India's (Italy: A Status Report, 2015) report, economic and commercial relations between India and Italy have been growing but steadily. Italy is India's 5th largest trading partner in the EU (25th globally) and the 14th largest investor in India. The percentage share of India in Italy's trade has been increasing steadily, though still hovers around 1% showing the immense potential for development. Where on one hand India's main export items to Italy are textile and ready-made garments, Italy's main export to India, on the other hand, revolves around machinery and capital goods.

According to World bank's (2015) report of imports, India imports 5.8 billion USD worth clothing from around the world Italy's contribution is mere 1.4%. which is worth 78 million USD. Therefore, it is evident that Italian fashion and clothing industry has a potential for development in India.

As far as e-commerce market in India is concerned, Google India's (Google, 2015) report published in 2015 states that by 2020, India is expected to generate \$100 billion online retail revenue out of which \$35 billion will come from fashion e-commerce. In other words, online apparel sales are set to grow four times in the next 5 years to contribute significantly to the burgeoning e-commerce growth. The fuel to this analysis' inference is supported by Indian internet user population data. According to results published on number of internet users per country by CIA (CIA, 2014), India secured third place only after China and the US.

As per a press release by SACE (SACE, 2016), India is ranked third as third and second in the opportunity index rankings for export and investment respectively (Table 1).

Markets with the greatest potential according to the Export and Investment Opportunity Indices

Export Opportunity Index	score	Investment Opportunity Index	score
United Arab Emirates	81	United States	80
United States	76	India	80
India	75	United Kingdom	78
South Korea	75	China	76
Saudi Arabia	75	Poland	73
China	75	Vietnam	70
Spain	74	Philippines	65
Qatar	74	Peru	65
United Kingdom	73	Mexico	64
Poland	73	South Korea	64

Table 1: Opportunity Index Rankings

However, not many researchers have focussed on the potential of Indian e-commerce market for small and medium-size Italian fashion retailers. This is mainly due to the fact that e-commerce has been popularized in the market, hence grown in interest for researchers only recently specifically during the period between 2011 to 2015. Hence, there are many papers explaining the logistics and supply chain part of the market (which are analysed as well during the research), there are not many publications and researches to refer-to for small and mid-sized Italian fashion retailers which want to briefly analyse and get the overview of the Indian e-commerce retail market before entering the same.

The second tackled issue, which is also very closely related subject related to entering a foreign e-commerce market, is also the trade policies imposed by foreign government in the selling market. Indian government also imposes some laws which prove to be favourable and unfavourable for Italian¹ fashion retailers in terms of trade costs and allowed products to be sold in India. However, due to scarcity of researches in this area, Italian producers are unaware of the benefits of entering Indian e-commerce markets. This research done for this master thesis highlights the latent benefits which small Italian producers could benefit from, if they are aware of the same.

¹this paper focuses majorly on Indian trade policies applying to EU as a whole partly on specific Italian trade policies with India. EU being a single trade market shares unique trade policy with India

The third problem addressed in this master thesis is the return policies of the e-commerce players in India. This became a part of this paper's research because Indian e-commerce fashion retail market's return rates are as high as 25%. As reported by Times of India (Sarkari, 2014), Cash on Delivery (CoD) is a very popular choice for Indian consumers to choose while purchasing an online product, and return rates are highest for this payment mode. The published article also states that returns push up the average delivery cost by 50%. Moreover, this cost is re-covered by online retailers through increase in regular delivery charge for customer, and hence customer ends up paying more. Therefore, the final price of the product listed on online platform (including the delivery charges) is always less than what customer is supposed to pay for the product and delivery due to high return rates of the market.

This report addresses all three problems stated above, and the main objectives of this master thesis addressing these issues are stated in the next section.

Objectives:

The main objective of addressing these problems is to create a report with the information which will help Italian exporters to facilitate their decision-making process about selling their products on Indian online e-commerce retail market. In particular, this thesis aims to provide:

- A clear overview of Indian e-commerce fashion retail market (such as identification of major players in the market), and requirements for being a seller as a foreign company on such online platforms
- An analysis of the Indian trade policies, relevant for Italian e-commerce fashion retailers in India, and
- Short analysis of Return Policies in India and the effects of the policies on Italian seller.

In general, the objective of this thesis is to influence and positively encourage Italian fashion retailers' decision to enter Indian e-commerce market through Indian online retail platforms to exploit the potential of the Indian e-commerce market.

Methodology:

The process shown in Figure 1 represents the activities carried on to develop the present thesis work.

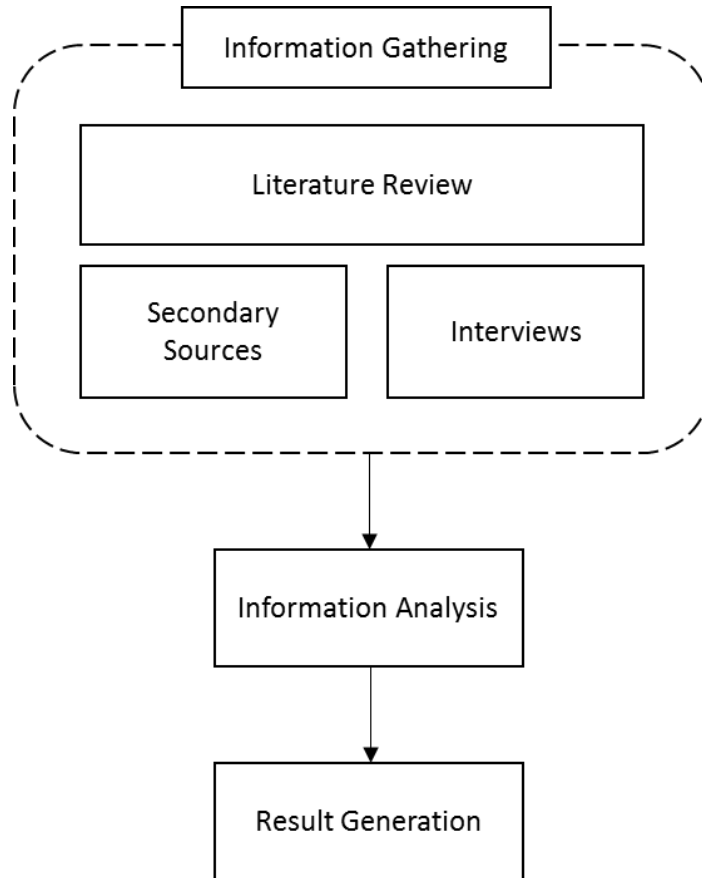


Figure 1 Thesis Methodology- Activity Flow Diagram

The literature review was aimed to identify previous analysis on the three topics of B2C e-commerce, logistics and export in order to offer a basis for the present thesis work. However, as mentioned in the previous sections, the three topics emerged as scarcely treated in combination with one another. Therefore, the literature review provided an overview on these topics to form a basis of the master thesis. The research work is mostly based around this review.

The next step in the process of developing the thesis was to gather information related to the thesis topic, which was required for the analysis but could not be obtained through the published literatures/ research papers. This information was obtained through:

- Interviews: Interacting with e-commerce professionals in India to collect some insights on how the foreign companies (can) sell their products through Indian online platforms (legal requirements, work-arounds, etc.)
- Secondary Sources: Reports, newspapers and magazine articles, articles on the internet, and surveys results.

After the collection of information from all the above-listed sources, the information was analyzed and only relevant information was included in this report. The results generated through analyzing the collected information is discussed in the next section.

Results:

The research on Indian e-commerce market shows that Indian online fashion retail market is dominated by Flipkart. There are five major players in Indian online retail market for fashion namely Flipkart, Jabong, Myntra, Snapdeal and Amazon India. Former three belong to the same parent company which is Flipkart. Flipkart covers 44% of Indian online retail market. Their second and third biggest competitors are Snapdeal (32%) and Amazon (15%) respectively.

The compilation of some interviews and interaction with e-commerce professionals suggests that a foreign seller should prefer Indian online retailer's platform to sell the products, instead of being an individual business and selling through their own websites. The main reasons being the fulfillment of legal requirements of being an individual business and access to a broader customer-base by listing the product on established e-commerce platform like Flipkart or Snapdeal.

The mandatory requirements (Flipkart, Sell on Flipkart, 2017) to be a selling partner on these online platforms are listed below:

- **GSTIN ID:** Goods & Services Tax Identification Number is a mandatory and unique identity to obtain which is provided by Indian government after registering as a business in India. Hence in other words, only registered businesses in India can sell their products online through these platforms.
- **PAN Card:** The primary purpose of the PAN card is to bring a universal identification to all financial transactions. It's also provided to foreign nationals doing a business in India, hence can be obtained by Italian sellers wanting to sell products on Indian online retailer's platforms.
- **Indian Bank Account:** This requirement clearly states that even a foreign company selling products online on these platforms must have an Indian bank account in order to receive the amount of sold products in Indian Rupees.

- Five Unique Products: This requirement states that to sell products online on Indian online platforms like Flipkart or Snapdeal, a business must have 5 unique products in its portfolio.

After fulfilling these requirements, there is no cost of listing the product on the online platform. The seller pays a commission to the online retailer when the product is sold, along with few more deductions.

The following deductions are made from the order item value (Flipkart Seller Pricing, 2017):

- Commission fee: A percentage of the order item value vary based on vertical/sub-category
- Shipping fee (calculated on the basis of the product weight, shipping location)
- Collection fee: This will vary based on order item value and customer payment mode (Prepaid/Cash on Delivery)
- Fixed fee: A slab wise Fixed fee. This vary based on Order item value
- Service tax (applicable on all the above components)

Therefore, sellers should set selling price with enough margins to generate profit off the product post-deductions of all the applied fees listed above.

The study on return management policies followed by Indian e-commerce players are demonstrated by two cases in the report. In the first case the stock is placed in the online retailer's (for example Flipkart) warehouse but still being owned by the Italian seller, hence the Italian seller can recall the products, if not sold, to the central warehouse, and redistribute the same to the high demand market.

In this case, Italian seller faces a trade-off between two cases:

- The total financial value of the returned product being lower than the subsidy provided to the retailer (eg: Flipkart), therefore Italian firm pays the subsidy and keeps the stock at the retailer's inventory until the last unit sold. In this case, the logistics cost and resources utilized in calling back the product from Indian retailer's warehouse to central warehouse and forwarding it to another market is saved.
- Italian seller recalling the product from the Indian retailer's warehouse to central warehouse and redistributing it to another market. This case should be preferred if (based on forecast) there is a high demand in another market for the same category of the returned product. The cost of paying subsidy is saved for Italian seller in this case.

In the second case, inventory is purchased by the in-house buying arm of an e-commerce retailer (Flipkart) and stored by them in their fulfilment centers. The model used in this case is called inventory-led model.

Inventory-led model

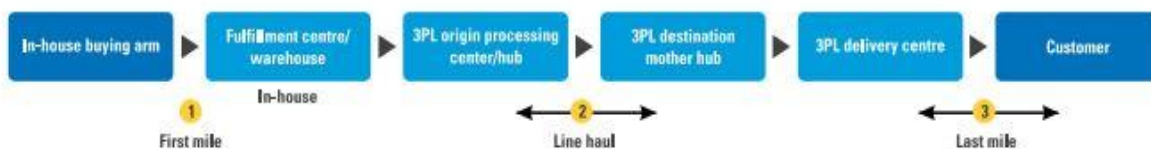


Figure 2 Inventory-Led Model

This model is becoming less prevalent because it is capital intensive and allows less scalability for online retailers like Flipkart. However, it provides additional control on quality checks. Under this model, the inventory is owned and maintained by online retailers. The model helps ensure better quality control and service level for the customers, since the online retailers have control and visibility on almost all the processes, from inventory management order till its fulfilment. While this is a capital-intensive model, with high overheads and substantial inventory risks, it is nonetheless helpful in creating trust and service credibility among users, leading to a better brand value for Italian sellers who do not even own the inventory in this case. This model is more

popular for fast-moving, low-value multi range products, and is popularly used for fashion retail. It is important to highlight that in this case, online retailers such as Flipkart do not invest a lot on suppliers' products, and hence the initial order quantity is low as compared to the first model. The products at e-commerce player's warehouses lose its value if kept there unsold or after their return (in case the e-commerce player is owning the inventory of seller's product), as fashion products change according to the industry/market trend, hence sellers in general prefer to recall the returned and unsold stock back to the central warehouse and re-allocate the stock at whichever market is showing high demand.

The study of Indian trade policies shows that Italian fashion companies (Italy being a part of EU) can benefit from some of the Indian trade policies while entering Indian e-commerce market. For example, for EU members there are few exemptions from obtaining some certificates which are mandatory for non-EU countries, as per the European Commission's website (Overview of Import Procedures, 2017). Certificates such as stating the shipment doesn't contain hazardous dyes prohibited by Indian government, or pre-shipment inspection certification, etc. are not required from sellers from the EU member states. Moreover, if the initial shipment value is less than 1450 Euros and contains less than 50 units, the seller doesn't have to pay custom duty, which could favour small Italian seller who want to get the idea of Indian market behaviour by selling only few product first, before selling the items in bulk.

Apart from the product's characteristics, there are recent Indian market characteristics as well affected by recent governmental policies, which support the Italian seller in a positive way to sell fashion products in India. As per the article published in the newspaper Economic Times (IANS, 2017) dated 12th June, 2017, India's recent roll-out of GST (Goods & Services Tax), e-commerce players like Flipkart, etc. are expecting a surge in export. This implies that the market for an Italian seller has gotten even wider and broader after GST's roll-out, because the e-commerce players can now sell the products to even outside India. Hence, Italian sellers only have to enter Indian e-commerce market to reach across to the whole sub-continent of Asia. This also strongly supports the point made earlier in this master thesis regarding the huge potential of Indian e-commerce market.

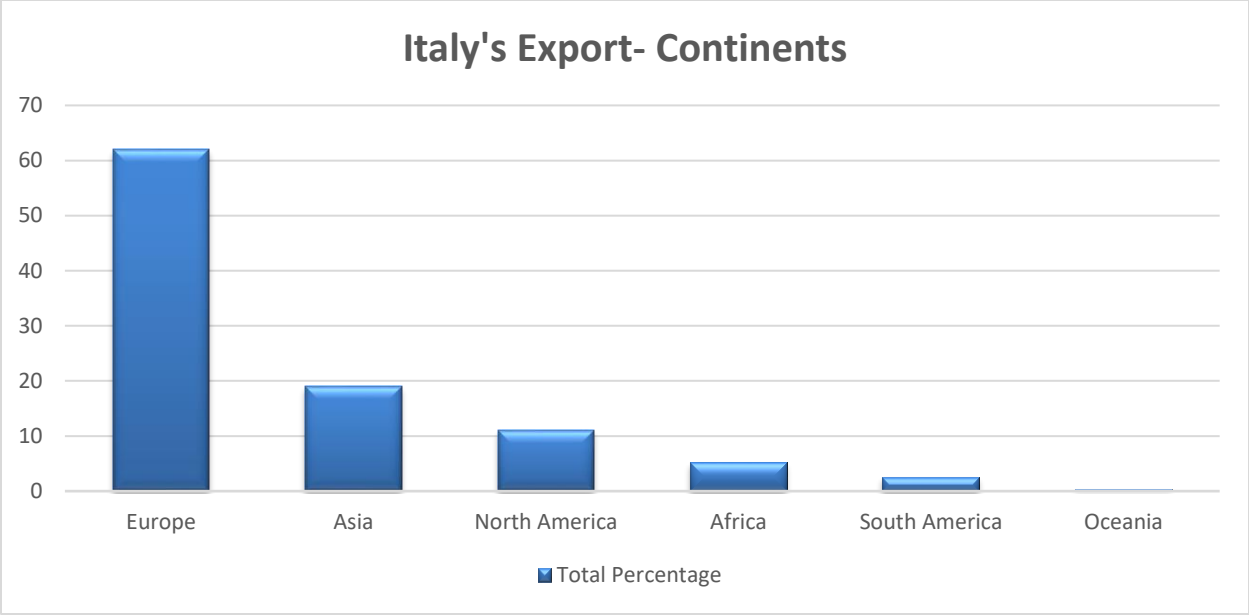
1 Introduction

Italian products are popular all around the world, especially for being luxurious and high-quality. Ranging from cars (e.g. Ferrari, Maserati, etc), to clothes (e.g. Gucci), to chocolates (e.g. Ferrero), Italian products provide competition to almost every global market space. Being the world's fastest growing 'developing-economy', India is one of the top destinations for Italian products. India has been one of the preferred countries for Italy for purchasing raw materials as well as destination for outsourcing. In an overall trade perspective, India's import from Italy has been stagnant or declining for the past 20 years. Whereas in the recent past in B2C market, India has been Italy's one of the fastest growing customer base.

The objectives of this master thesis are: Firstly, to analyse the existing Indian e-commerce market for Italian small-medium size fashion retail companies which aspire to reach Indian e-commerce customer base. Secondly, this thesis focuses on the return policies of Indian e-commerce players and its effect on Italian sellers. Lastly, this thesis focuses on existing governmental trade policies applying to Italian fashion products for e-commerce distribution in India.

To begin with the thesis, firstly the trends of export of Italy need to be highlighted. Asia has been Italy's largest importer after Europe, where Italy is exporting its 19% of total goods. Graph 1 Italy's Export shows the distribution of Italy's export to different continents.

Italy's total export has been \$ 458.9 billion in 2015 (MIT, 2017). Out of which, \$ 12 billion (2.6%) has been clothing and 4.6 billion (1%) has been footwear. Jewellery and wine both account for 6.2 billion each (1.3% each). Fashion industry has been always a strength for Italy in terms of export, as it contributes to approximately 5% of its total export.



Graph 1 Italy's Export

Second, the discussion about European trade-relation with India is also important, as Italy belongs to an FTA zone (EU). India is the EU's 9th trading partner in 2016 (2.2% of EU's overall trade with the world), after South Korea (2.5%) and ahead of Canada (1.9%) (India G. o., 2016). The value of EU exports to India grew from €24.2 billion in 2006 to €37.8 billion in 2016, with engineering goods, gems and jewellery, other manufactured goods and chemicals ranking at the

EU-India: Trade in goods

Trade in goods 2014-2016, € billions

Year	EU imports	EU exports	Balance
2014	37.1	35.6	-1.5
2015	39.5	38.1	-1.3
2016	39.3	37.8	-1.5

Table 2: EU-India Trade

top.

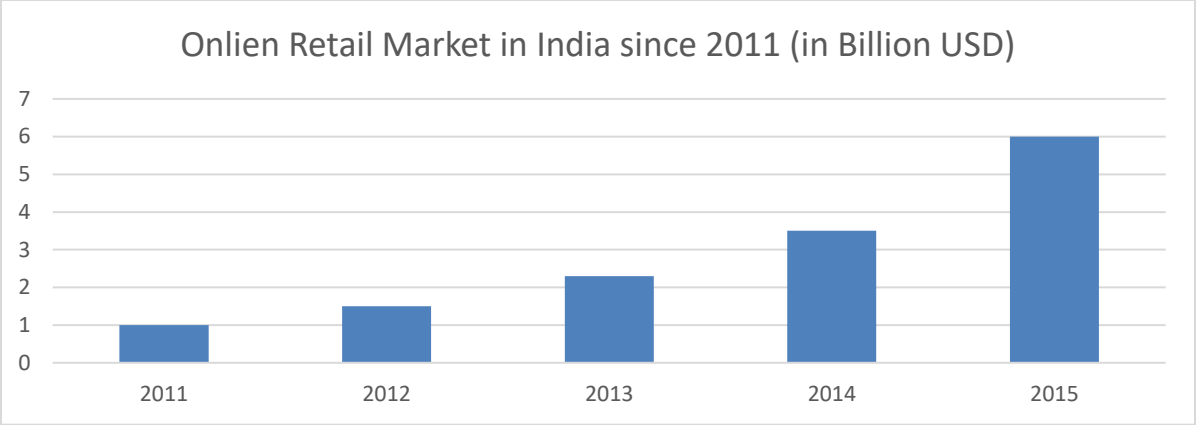
Thirdly, Indian trade relations with Italy need to be highlighted. Currently, Italy accounts for 1.07% of total imports for India. The most imported products for India from Italy are Machineries (44%) and Chemical Products (13%) (packaged medications, etc). Table below shows the trade relations between India and Italy in past 5 years.

	2011-12	2012-13	2013-14	2014-15	2015-16
Import from Italy	5,121.69	4,711.27	4,156.61	4,231.81	4,072.22
Growth (%)		-8.01	-11.77	1.81	-3.77
India's Total Import	489,319.49	490,736.65	450,199.79	448,033.41	381,006.63
% of India's Import	1.05	0.96	0.92	0.94	1.07

Table 3: India's Trade Relations with Italy in last 5 years

Customers of this era are changing the traditional way of shopping. The sales of retail shops are being substituted by e-commerce platforms. According to eMarketer Retail ecommerce sales (EMarketer, 2016)—which includes products and services ordered via the internet over any device—reached \$1.915 trillion in 2016, accounting for 8.7% of total retail spending worldwide. While the pace of growth for overall retail sales is subdued, the digital portion of sales continues to expand rapidly, with a 23.7% growth rate for 2016.

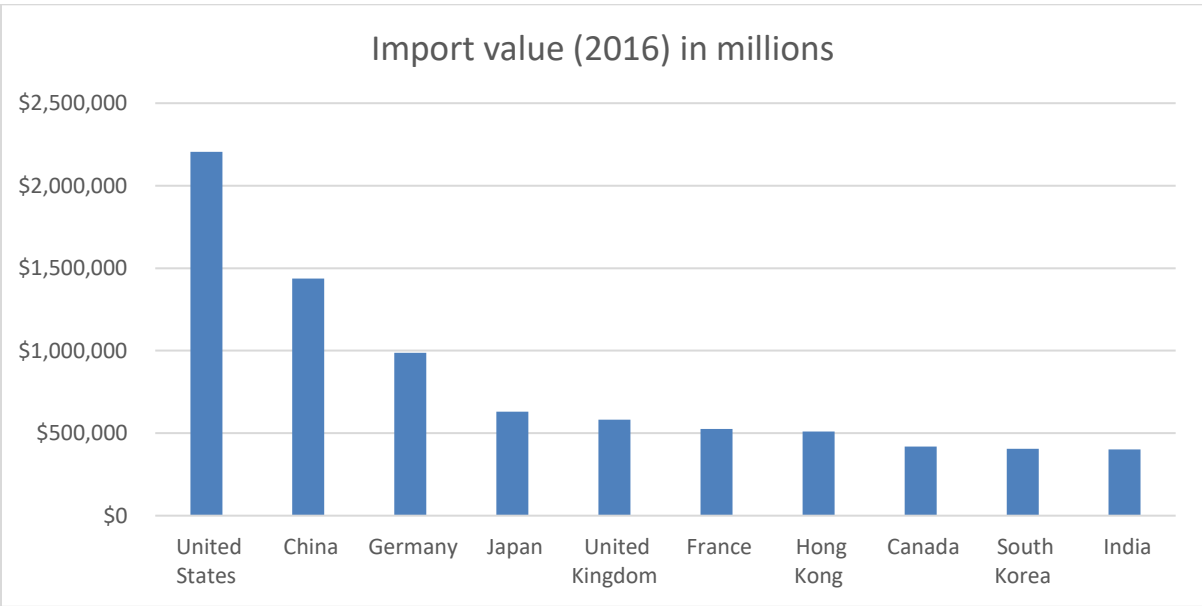
Asia-Pacific remained the world's largest retail ecommerce market throughout the period, with sales reached to top \$1 trillion in 2016 and more than double to \$2.725 trillion forecasted by 2020 (EMarketer, 2016). The region will also see the fastest rise in retail ecommerce sales, climbing 31.5% this year. Expanding middle classes, greater mobile and internet penetration, growing competition of ecommerce players and improving logistics and infrastructure will all fuel ecommerce growth in the region. Focussing on India, according to a report from PwC (Ladda, 2015) about online retail, states that online retailing has become the fastest-growing segment in the larger market having grown at a CAGR (Compound Annual Growth Rate) of around 56% over 2009-2014. The size of the online retail market is pegged at 6 billion USD in 2015. Apparel is one of the largest selling products through online retailing.



Graph 2 Online Retail Market Growth in India since 2011

The fuel to this analysis' inference is supported by Indian internet user population data. According to results published on number of internet users per country by CIA (CIA, 2014), India secured third place only after China and the US.

Moreover, as import is also a part of online retail business, the growth of online retail is directly affecting Indian imports. In 2016, according to the report published by eMarketer (EMarketer, 2016), India stands 10th on the list of largest importers of the world with net import worth \$ 402.4 bn.



Graph 3: Countries' Import Values as of 2016

The ranking of the countries supporting the above graph are listed in the table below:

#	Country	Import value (2016) in millions
1	United States	\$2,205,000
2	China	\$1,437,000
3	Germany	\$987,600
4	Japan	\$629,800
5	United Kingdom	\$581,600
6	France	\$525,400
7	Hong Kong	\$509,500
8	Canada	\$419,000
9	South Korea	\$405,100
10	India	\$402,400

Table 4: Countries' import value as of 2016

Experts have stated time and again that India must improve the logistics infrastructure in order to efficiently grow the online retail market, and the LPI index from the report of Deloitte's publication (Deshpande, 2014) proves that India still has a lot of potential to improve in online retail market, if the country improves logistics infrastructure.

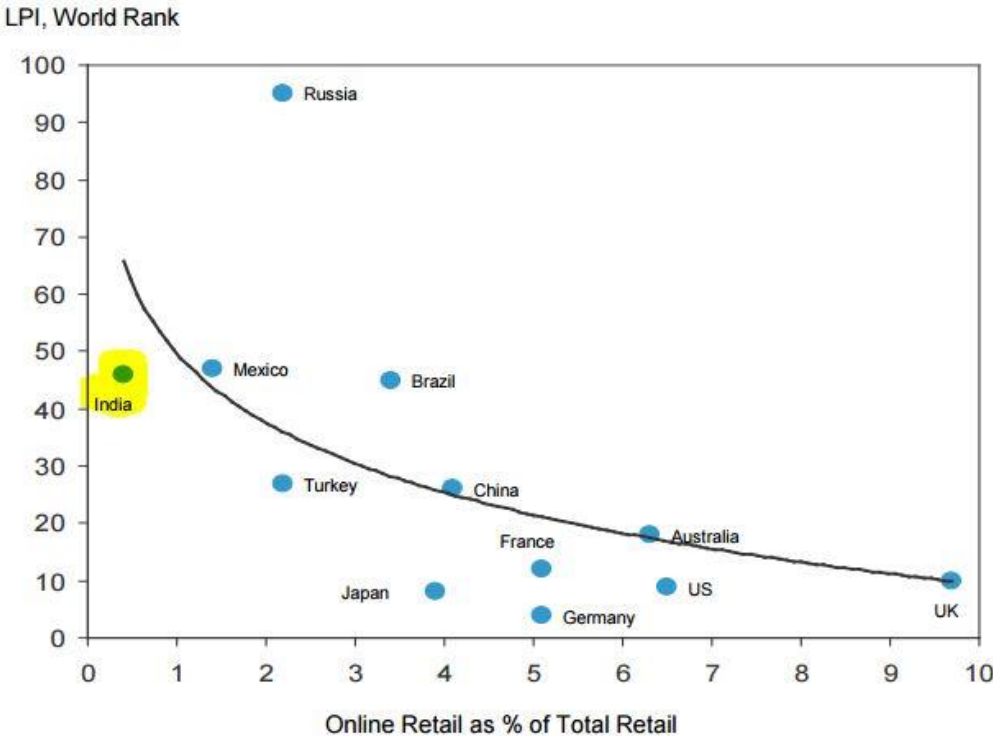
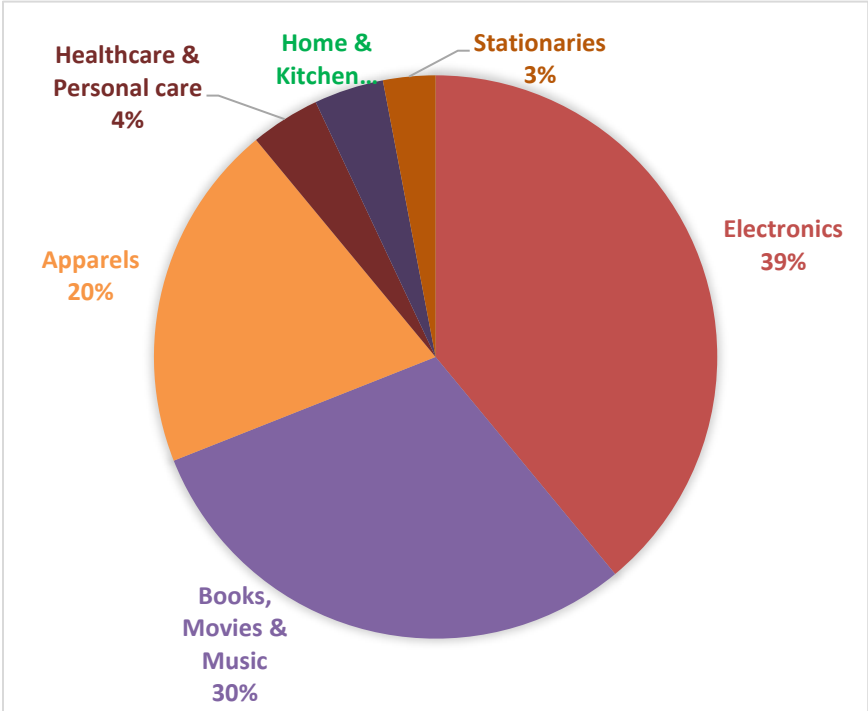


Figure 3: LPI World Rank

As far as Flipkart's (India's leading online retailer) sales based on product categories is concerned, the below chart is plotted after a survey on customers of Flipkart.com and the result shows that apparels are the third most famous category for an online shopper in India.



Graph 4: Survey-Flipkart Purchase as per Product Categories

The above information justifies on why we focus on Indian e-commerce market. Moreover, how it still has a lot of potential to improve through improving factors like logistics infrastructure to grow more itself in online retail market. Hence, the above listed data justifies on why Italian fashion companies should enter Indian online retail market. Below explained is the structure of the master thesis:

Present master thesis has been organized as follows:

- Section 2 presents a review of the relevant literature and the theoretical framework used for analysis, along with the gaps in existing literatures
- Section 3 provides the objectives of this report and states the research questions
- Section 4 discusses the methodology of making this report
- Section 5 discusses the identified research questions
- Finally, Section 6 discusses the conclusions and results generated through the research of this master thesis

2 Literature Review

2.0 Methodology

The three main themes that characterize the present literature are B2C e-commerce, logistics and Italy-India trade.

The aim of the following literature review is to present the state of the art concerning the intersection of these three main topics. Moreover, the Indian e-commerce trend, and relation between Italy and India in fashion trade is considered.

In order to find literatures, a keyword research both on the title and on the abstract, has been carried on.

Keywords related to the thesis themes have been used during the research. The mainly employed ones are “e-commerce”, “logistics” and “trade channels” in all their possible combinations. Furthermore, related words such as “Italian International trade” or “India-Italy import”, Italy-India export”, “Indian distribution networks” and the combination “e-commerce - India” were considered.

At first, personal interviews were taken with few e-commerce professionals of India, whose companies sell Italian products in B2C e-commerce. Secondly, the literatures were searched for on the online research-based databases (Web of Science, Scopus, Oxford Journals Emerald, Science Direct, Science Online). This allowed to have access to the main management journals (i.e. Electronic commerce research, Industrial Management and Data System, International Journal of Business Performance and Supply Chain Modelling, International Journal of Logistics, International Journal of Organizational Analysis, International Journal of Physical Distribution and Logistics Management, International Journal of Retail & Distribution Management, Journal of Operation Management, Management Research News, etc.). Literatures were firstly selected by reading their abstract (an important selection regarded the type of e-commerce: literatures concerning B2B e-commerce were discarded). This research brought to 42 literatures that were accurately read and further sorted.

2.1 Data from Literature Review

The table below (Table 5) reports the distribution of number of papers/ literature work according to the keywords. It is prominent that majority of the work has been focussed on a broad topic of E-commerce, Supply Chain and Logistics. The intersection between ‘Italian Export’ and ‘E-commerce in India’ is still missing.

Keyword	# of literature work
E-Commerce, SC and Logistics	26
Logistics and export	5
E-Commerce Export and Emerging Economies	5
E-commerce and India	6

Table 5: Number of Literature Work

Further, the list of all the above literature work according to their content is shown in

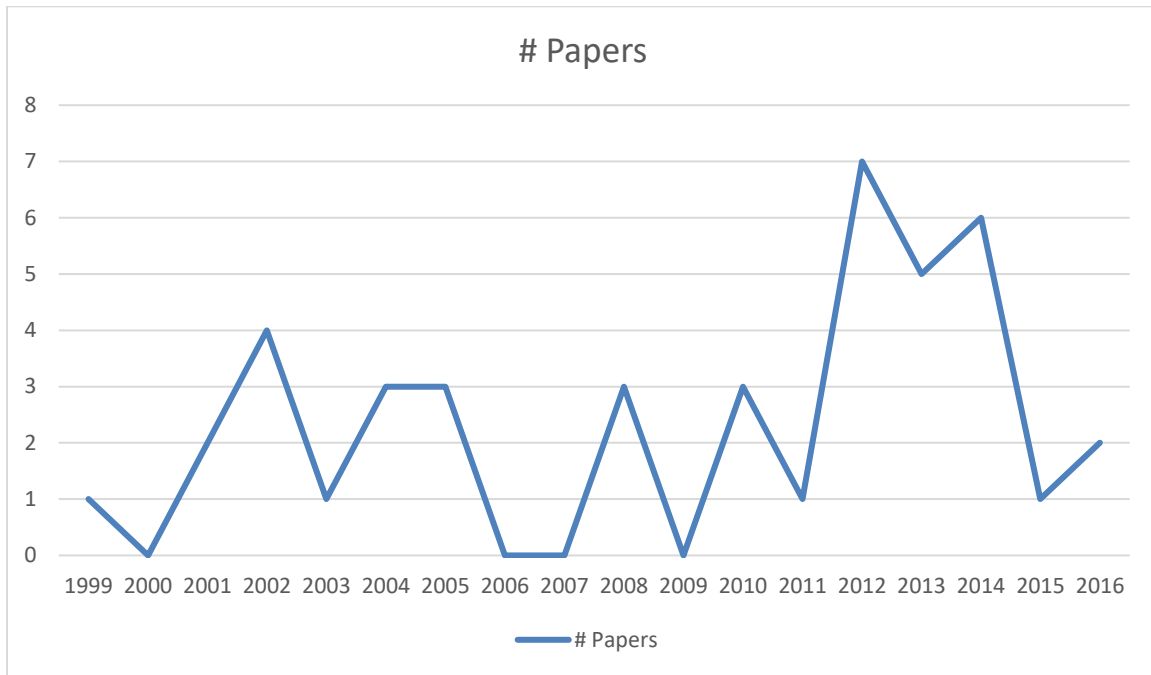
Table 6

Topic	Literatures
E-Commerce, SC and Logistics	Vanelslander et al (2013); Masmoudi et al (2014); Morganti et al (2014); Visser, Nemoto (2003); Xiao et al (2012); XioYan et al (2012); Lau et al (2010); Hesse (2002); Rao et al (2002); Mokhtarian (2004); Wakabayashi et al (2012); Marinus, de Kostner (2002); Weltevreden (2008); Gurau et al (2001); Cho et al (2008); Delfmann et al (2002); Jiao (2014); Li et al (2012); Economic Bullettin (2001); Liu (2013); Chen et al (2014); Xu et al (2011); Rao et al (2014); Mindali, Weltevredden (2013); Visser, Lazendorf (2004); Jun Zhang, Wang (2016)
Logistics and Export	Gomez-Herrera et al (2013); J.M.J Ng et al (2008); Fariselli et al (1999); Warf (2012); Lendle et al (2013);
E-commerce, Export and Emerging Economies	Hawk (2004); Datta (2010); Molla, Licker (2005); Kshetri (2007); Kornum, Bjerre (2005); Khanna T(2005)
E-Commerce and India	Reddy, N. Anubhav; Divekar, Rajiv (2014); Mathew, Priya Mary (2016); Vaithianathan, Sridhar (2010); Wei Qi (2012); Srivastava (2015)

Table 6: Literatures and Topics

2.2 Publication dates

Graph 5 reports the distribution of the articles' publication date



Graph 5: Number of Relevant Research Work Published since 1999

As it can be argued, most of the work analysed (68%) have been published from 2008 onwards. This is mainly due to the rise of e-commerce after early 2000s.

2.3 Literatures classification

The classification of the reviewed literatures are reported hereafter in Table 7 and Table 8. The method used to classify them is a two-dimensional matrix, whose axes are the following:

- *Methodology*. It regards the methodology employed in the literature, as described in the “Descriptive Review” section.
- *Argument*. The arguments are divided into the three main combinations of the thesis themes (e-commerce and logistics, e-commerce and export, export and logistics) and into the category e-commerce and developing countries, as described in “Paper contents” section.

General					
	Literature review	Conceptual Analysis	Descriptive Analysis	Survey	Mathematical model
E-Commerce, SC and Logistics	Mindali, Weltevreten (2013); Visser, Lazendorf (2004); Xu et al (2011); Weltevreten (2008)	Delfmann et al (2002); Hesse (2002); Mokhtarian (2004); Visser, Nemoto (2003); Van Eslander(2013); de Kostnerm Marinus (2002)	Morganti et al (2014); Xiao (2012); Jiao (2014)	Gurau et al (2001); Cho et al (2008); Rao et al (2014)	XiaoYan et al (2012); Lau et al (2010); Economic Bulletin (2001); Liu et al (2013); Chuen et al (2014); Masmoudi et al (2014); Wakabayashi (2012); Li et al(2012); Jun Zhang, Wang (2016)
Logistics and export	Lendle et al (2013)	J.M.J Ng et al (2008)	Fariselli et al (1998), Warf (2012)	Gomez-Herrera et al (2013)	
E-Commerce Export and Emerging Economies		Datta (2010); Molla, Licker (2005); Kshetri (2007)	Kornum, Bjerre (2005)	Hawk (2004)	
E-commerce and India	Mathew, Priya Mary (2016);	Reddy, N. Anubhav; Divekar, Rajiv (2014); Srivastava(2015)	Vaithianathan, Sridhar (2010); Wei Qi (2012); Khanna T(2005)		

Table 7: Classification matrix: general part

Case Specific					
	Multi-methods	Case study	Descriptive Analysis	Survey	Mathematical model
E-Commerce, SC and Logistics	Vaneslander et al (2013)	Waltevreden (2008); Liu et al (2014);	Marinus, de Kostner (2002); Wakabayashi et al (2014); Xiao et al (2012)	Rao (2014)	Li et al (2012); Jun Zhang, Wang (2016)
Logistics and export		Lendle et al (2012)		Gomez-Herrera et al (2013)	
E-Commerce Export and Emerging Economies	Datta (2010)	Molla, Licker (2005); Kshetri (2007)	Kornum, Bjerre (2005)		
E-commerce and India	Reddy, N. Anubhav; Divekar, Rajiv (2014);		Vaithianathan, Sridhar (2010); Wei Qi (2012); Srivastava(2015); Khanna T(2005)		

Table 8: Classification matrix case specific part

2.4 Summary of the review

In the following part, a brief review of the contents and the main topics covered by the literatures is reported. In particular, the literatures are analysed according to the topic clusterization exposed in the previous chapter. Being particularly dense, the topic “E-commerce, Supply chain and Logistics” is treated in two separate paragraphs. The first paragraph focuses on those literatures dealing with logistics and e-commerce in general terms, while the other one deals with the ones that tackle more specific issues. It is to be noted that the difference between general and case specific resembles the one presented in the tree classification of the previous chapter.

2.4.1 E-commerce, SC and Logistics: General Part

Supply chain and Logistics plays a relevant role in every firm since it has a direct impact on service level. Many leading firms in modern era are competing on Supply Chains instead of sales and revenues, to improve their service level. As far as most significant contributor of logistics cost is concerned, transportation cost leads the chart, also being the most integral part of Supply Chain (Xiao, 2012). Its importance is further increased by the growing stiffness of service level requirements.

Logistics performance should be assessed from the point of view of users and society (Xiao, 2012). The micro view focuses on the level of satisfaction of individual users, including manufacturers, traders, and other commercial enterprises. The macro view focuses on the contribution to a country’s economic and social development, and the satisfaction of public needs. Individual logistics users are concerned about cost, efficiency, and service quality (including safety, transit time, and reliability), and demand that logistics enterprises reduce cost and improve speed and service quality. From the macroeconomic and social perspectives, however, logistics is concerned with more than just achieving economic efficiency. It should also reduce external costs (e.g., safety hazards and pollution), conserve energy, and optimally utilize the country’s resources.

Importance of logistics and transport in e-commerce sector is further increased in comparison with traditional firms (Gurau, 2001). Indeed, logistics is a competitive factor and the success of firms in the e-commerce market depends on the efficiency of their distribution networks (Cho, 2008). To understand logistics relevance, the declarations of the CEO and founder of one of the biggest e-tailers companies, Amazon.com, comes in hand. Jeff Bezos described his company by saying: "Amazon.com is most of all a logistics company" (see, for example, (Gurau, 2001)). He furthermore noted: "The logistics and the customer service – the non-glamorous parts of the business – are the biggest problem with e-commerce. A lot of these companies that are coming online spend all their money and effort building a beautiful Web site and then they can't get the stuff to the customer".

"The failure of so many companies in e-commerce can be in part accounted for by the neglect of logistics as a key factor of success" (Delfmann, 2002). An evident example of the damages bursting from the neglect of logistics aspects is given by 1999 Christmas in USA. 1999 Christmas was the second Christmas in which US citizens could buy presents online through e-commerce. However, it was marked as a great failure: the number of delays in deliveries was huge. Great number of complaints sent by customers to the US Federal Trade Commission led to the fine of some top e-retailers (among these macys.com and toys-rus.com). It is interesting to note how the response of Toys-rus.com to such a huge failure was in fact a stipulation of an agreement with Amazon.com.

Another significant reason why many e-commerce companies fail is due to their incompetency in one of the most important sector of logistics, which is order fulfilment process. With the big boom of B2C e-commerce, small lot-size, high frequency, and dynamic arrival of customer orders make order picking and delivery difficult to implement. To accelerate the whole order fulfilment process, orders should be picked and delivered to customers in a very short lead time. It is therefore critical to integrate these two operations.

Moreover, "Since the e-commerce's disruption in global market, it has forced to change whole supply chain concept of companies" (Robinson, 2014). In fact, Robinson highlighted the basic

differences that e-commerce forced upon Supply Chains of many organizations, which are listed below:

Mid 90s	2016
➤ Brick and Mortar	➤ Inventory arrives in bulk
➤ Products arrived inbound in bulk	➤ Picking into SKUs
➤ Moved around in pallets;	➤ Retailers must standardize business processes through technology
➤ Shipped to retail stores	➤ Many Suppliers, multi warehouses, multi sales channels

Table 9: Differences between new and old supply chains

In the following part of the review, the impact of e-commerce on logistics and reverse logistics will be analysed to understand the reasons why logistics is core for the success of an e-commerce company. Also, one of the most important factor addressed in this abstract is return rates and policies, is discussed below:

Return Rates and Policies. Products return rates in e-commerce are nearly three times higher than products return rates in traditional retailing (Rao, 2014) report the following rates: 22% in e-commerce against 8,1%-8,7% in traditional retailing). Moreover, return rates of e-commerce fashion retail are reported as big as 25-50% by 48% e-commerce firms (study by University of Regensburg, 2013)

The consumer's relationship with a retailer in an online setting is a series of transactions where the consumer evaluates the risks in terms of all the perceived transactions, and this series of transactions all boils down to a decision to purchase or not (Lantz, 2016)). This concept implies that transaction cost economy theory can explain consumer-retailer transactions. (Alina Circu, 2006) define a retail transaction as “an exchange between a consumer and a retailer in which the two parties obtain something from each other at a cost to each” (p. 899). Reducing risks or lowering transaction costs, such as by providing post-sale services and returns, can increase customer value. (Lantz, 2016) show that the customer's confidence in a retailer grows through a series of successful transactions, which includes returns processing. Therefore, the authors established a connection (Figure 4) between return policies of a company, which influences customer behaviour, with generated profitability.

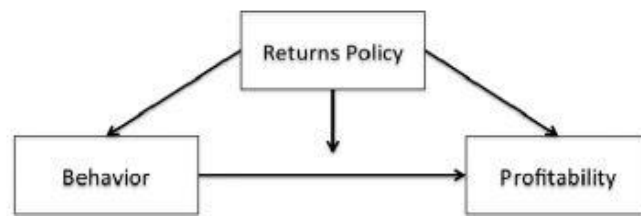


Figure 4: Return Policy effects on customer behaviour and its moderating effects on profitability

Return policies are one of the factors which e-commerce companies compete on. Studies show that companies with more lenient return policies are likely to attract larger customer base (Narayan Janakiraman, 2016). Return policy leniency are classified as varying along five dimensions:

1. *Time leniency*: Retailers commonly specify deadlines in their return policies (a 30-day policy, a 90-day policy, etc.). Return policies that provide a longer length of time in which to return products are regarded as more lenient

2. *Monetary leniency*: Lenient return policies allow for a refund of the full monetary amount paid for the product, while strict policies allow for only a portion of the purchase price to be refunded, usually by imposing a “restocking fee” or a non-refundable “shipping and handling fee.” Policies that do not impose monetary restrictions are regarded as more lenient

3. *Effort leniency*. Consumer effort required to execute returns varies, with some retailers creating “hassles” for customers returning products (e.g., requiring the original receipt, tags, or product packaging be retained). Return policies requiring less effort on the part of the consumer are considered more lenient

4. *Scope leniency*: Stores limit items they consider “return-worthy.” For example, products purchased on sale may not be eligible for return. Return policies with greater scope of “return-worthy” items are considered more lenient

5. *Exchange leniency*: While some retailers offer cash refunds, others offer store credit or product exchange for the returned item. Return policies that allow cash refunds are considered more lenient (Narayan Janakiraman, 2016)

As far as the reasons for return are concerned, various researches have been carried on. These mostly focused on the specific product characteristics and on market policies leading to such a relevant return flow. Conversely the research carried on by (Rao, 2014) gives some information about those physical distribution variables affecting the return process. In particular, it underlines how service aspects are not only relevant to increase customer satisfaction but also influence product returns.

“The likelihood of orders being returned depends on the consistency between retailer promises of timeliness in the delivery of these orders and their actual delivery performance. Moreover, the effect that consistency in the delivery has on the likelihood of returns is stronger for orders that involve promises of fast delivery than for orders with promises of less speedy delivery.” (Rao, 2014)

(Xiao, 2012) considered the implication of reverse logistics on network design from a mathematical point of view. (Liu, 2014) assumed that returned products should be brought to a

collecting/recycling point and then delivered to factories where they are re-manufactured. Under these assumptions, a mixed linear programming model was built with the aim to determine the optimal allocation of products to the different collecting points and of collecting points to factories. Instead, (Xiao, 2012) took a more general perspective. Namely, they considered a firm that distributes its products through online stores. The returned products are transported by a third-party logistics and are either sent to online stores or to factories, depending on the need for remanufacture. Under these assumptions, they built a mixed linear programming model that determines the location of factories, online stores and third parties' collecting points, minimizing the sum of fixed costs of activation and the variable transportation costs.

Outsourcing. As previously reported, logistics is a key success factor for e-commerce companies, and many companies are failing to adopt to the high order fulfilment rates and frequency. The relevance of logistics leads to a prominent role for companies specializing in the logistics segment (Delfmann, 2002) In fact, the high complexity of logistics often pushes firms to outsource logistics activities to third party logistics (3PL).

Significant roles of 3PL in modern day logistics are mentioned as follows (Adam Robinson, Amazon.com conference 2015):

- Technology Solutions Provider with off the shelf technology which is easily deployable
- Have both shippers' and carriers' interest at hearts as an intermediary
- Consistency to the overall onboarding of many customers

Example: Cerasis Magento Extension with WebShopApps Real time rates from over 25 different carriers or those they currently do business with

- Integration into the Cerasis TMS with EDI connection to carriers
- Automatic documentation, notifications, visibility, tracking & tracing

E-commerce firms appear to refer to 3PL to focus on core competence, to reduce costs or to enhance their flexibility. A further specific improvement guaranteed by 3PL is the one coming

from transport optimization by bundling and consolidation. Turning to outsourcing can reduce indeed the previously described increase in freight transport (in particular in vehicle kilometres. (Visser, Lazendorf, 2004)

The research carried on by (Cho, 2008) reveals no association between a firms' logistical strength and its demand for LSP services. The results of this research seem to indicate that even those companies having strong logistics capabilities might need the assistance of 3PL.

In fact, many scholars believe that in 90% of the cases picking along with last-mile delivery is outsourced (Thierry Vanellander, 2013). Moreover, outsourcing makes the supply chain cost analysis less complex.

Considering the important outsourcing tendency, it is relevant to understand how e-commerce impacts on logistics service providers (LSP). A quest for a strategic repositioning is indeed dictated by e-commerce.

The B2C e-commerce-induced phenomenon that is influencing LSP is the disintermediation.

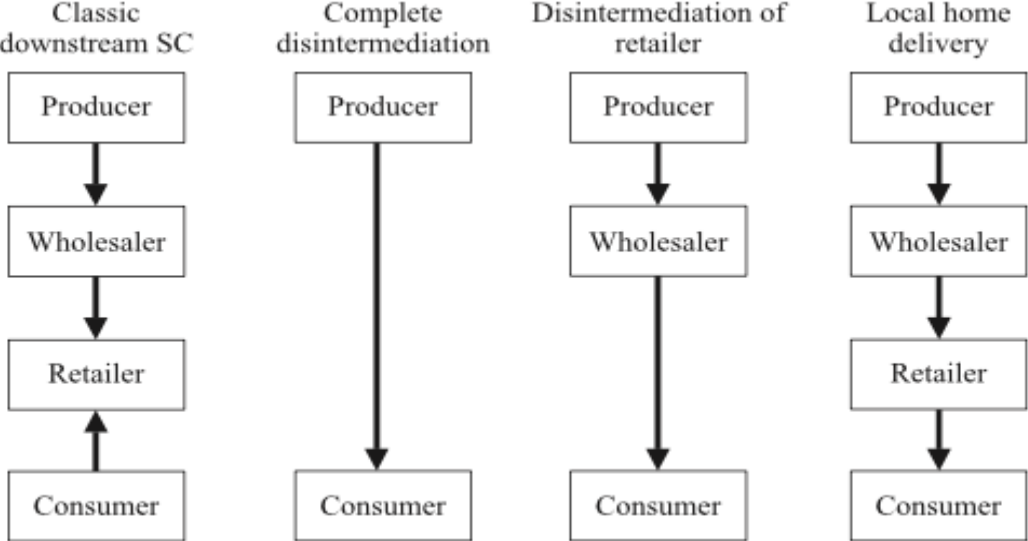


Figure 5: Image adapted from Delfmann et al (2002)

As previously reported, in e-commerce the consumer does not perform anymore the last mile logistics leaving the fulfilment handling to the e-commerce provider. Depending on the level of disintermediation, the following situations can be found:

- The decentralized and uncoordinated logistics activities (previously carried on by customers) potentially become bundled good flows. Since some control is possible from the supplier side, effective logistics systems can be designed;
- If the producer directly ships its products to the consumer, highly bundled shipments are substituted with less bundled ones.

The described changes require a reconfiguration of the logistics systems (Delfmann, 2002). Because of the outlined changes, there are two main impacts on LSPs.

A first e-commerce impact is to be found by analysing those LSPs carrying on activities that go beyond the mere operational ones. Considering the categories identified by Niebuer (1996), these are identified in customising LSPs. Customising LSPs design logistics services and systems in coherence with their customers' requests and take full responsibility over the efficiency and effectiveness of the customer's logistic system. They also take over coordinative and administrative responsibilities and offer services not attributable to the logistics function.

These LSPs will benefit from the shift dictated by e-commerce since their know-how plays an important role in designing new logistics system. Logistics know-how becomes indispensable to compete against other e-commerce firms, leading to an increase in logistics consulting services.

A second impact is on the operational side: it is increasingly relevant to let specialized LSPs take care of warehouses and transportation activities since they can exploit economies of density

Control Over E-Retailing: There are two factors over which an online retailer has only partial control. The first is a very general determinant and consists of the properties of the goods sold. Many types of items are being sold online nowadays, but some goods present a bigger challenge than others because of their specific properties (Niels Kornum, 2005)

A good example is items that require cooling. First, the retailer will need to provide a temperature-controlled warehouse. Second, chilled or frozen items complicate the last-mile delivery. Many parcel carriers do not employ temperature-controlled vehicles or depots, meaning that the retailer is forced to take care of the last-mile delivery himself or find a way of keeping the items chilled or frozen long enough to be distributed by a parcel carrier (e.g. with insulated boxes and dry ice). It may seem counterintuitive to state that a retailer has some amount of control over the properties of the goods sold. The control can mainly be found in the selection of items that the retailer offers online. A good example is Amazon UK which chose not to offer frozen or fresh items because of the incompatibility with their last-mile distribution system (i.e. parcel delivery).

The second factor over which an online retailer has limited control is the wage level. Again, this may seem counterintuitive as one may argue that a company sets the wage level for its employees freely. However, for some low-skilled workers, the wage can be depending on the minimum wage in that particular country, which limits the freedom of the retailer in setting the wage of its labor force.

One determinant finally lies completely beyond the retailer's control: legislation. Legislation encompasses mainly the measures that are commonly used by municipalities to regulate the (freight) traffic within urban areas and generally result in making the last-mile delivery more difficult or expensive.

2.4.2 Logistics and e-commerce: Case specific part

The studies on e-commerce logistics can be divided into three categories: sector specific, country specific and logistics process specific.

By screening the available literature on sector specific examples, it is evident that the most analysed sector is grocery sector. The underlying reason is that online grocery retailing envisages the biggest logistics challenges. As mentioned in previous section, the properties of the transporting goods play a pivotal role when it comes to selecting LSPs. Indeed, food is perishable, it must go through severe quality tests, it must be cheaply and quickly delivered and customers ask for a wide range of choices (Koster, 2006). Yet, great business opportunities exist for those who can effectively tackle those problems.

However, as this master thesis is focused also on fashion industry, analysis has also been done on fashion e-retail sector. In fast growing fashion industry, the concept of perishability could be applied, because in modern fashion world, as soon as the season passes, the stock for that season passes along. Trending fashion becomes obsolete when new styles are introduced in the market (Heuer, 2015). To clear excess stock of poorly selling products and to boost sales, retailers apply discounts by season end. These price reductions influence the sales of competing products in the same shop thereby possibly shifting demand between high- and low-margin items. This grows pressure not only on logistics service providers and transporters, but also on the whole supply chain of the company.

As far as the country specificity is concerned, it must be highlighted that not many scholars have focused on Italy-India trade, focusing in e-commerce market and fashion industry. However, some interesting researches on India have been carried out. Researchers suggest advantages and problems of the e-commerce logistics and supply chain in the most appealing e-commerce market in the world. Indian e-commerce companies are dealing with multiple products moving across states and simultaneously are also managing a large number of merchants, delivery personnel and customers. The large volume of transactions, multiple moving parts makes the e-

commerce supply chain operations significantly complex keeping the Infrastructure and regulatory constraints in perspective.

Country specific studies: India e-commerce logistics: Logistics emerges as one of the potential sources of risks as a few significant risks arise due to damages caused by third-party carriers, when food and fashion industry is concerned (Srivastava, 2015). Though Indian e-commerce is one of the most attractive e-commerce markets in the modern world, some existing issues make these opportunities difficult to realize. As Indian e-commerce's demand has grown extremely rapidly, the logistics industry has acknowledged an equal growth in demand. However, logistics industry has not been able to follow the growth in demand because of the time needed to develop the necessary infrastructure. The consequences of the too-slow growth in infrastructure led to high complaints on logistics services. The main ones regarded late deliveries, order cancellation by merchant, goods being lost during the shipping and incorrect order fulfilment. Therefore, many developing country's most successful e-commerce companies are adopting a self-built logistics division. As mentioned earlier in this section, managing a large number of merchants, delivery personnel and customers. The large volume of transactions, multiple moving parts makes the e-commerce supply chain operations significantly complex keeping the Infrastructure and regulatory constraints in perspective. Due to these reasons, Indian e-commerce's logistics and supply chain differs from that of other parts of the world such as the United States or Europe, where the infrastructure is already adequate as required, and the volume of transactions are not as large. The researchers propose that to drive cost optimal efficiency in the Supply Chain, e-commerce companies need to leverage supply chain analytics to facilitate decision making across all levels of supply chain and use visualization and optimization tools to control, measure, and respond to supply chain events in real-time. These can result in improvements in both, the Profit & Loss and the Balance Sheet performance for an e-commerce company. Key features of a supply chain analytics framework:

- Supports live visibility of day-to-day operations through exception management and triggers actions to respond to supply chain events

- Enables performance tracking through KPIs (Key Performance Indicators) and helps in understanding performance trend
- Supports root cause analysis and facilitates a deep dive into the key drivers of a problem
- Enables scenario planning to understand the impact of any improvement across supply chain

For an example, Flipkart.com, one of world's top unicorn companies, has built their own e-kart logistics system. E-kart assures customer the quality and service level same as stated on the website. However, due to India's large geographical range, it is not possible for E-kart to supply everywhere in India being a single logistics provider for Flipkart. Therefore, Flipkart has outsourced most of its logistics services based on product type and geographical presence of customer.

The persistent expansion of logistics industry, together with government policies aimed at accelerating such growth, is expected to lower these problems consistently. Once again, the relevance of logistics for e-commerce firm success is underlined.

Logistics specificity studies: cloud computing based warehouse management system: (Wakabayashi, 2014) studied the potential advantages of implementing a cloud-based warehouse management system for those firms whose exporting rate is very high. This context is characterized by the need to process massive amounts of data and by the complexity of the warehouse activities planning. However logistics sometimes rely too heavily on human resources to achieve collaboration in supply chain. Therefore, (Wakabayashi, 2014) suggested the employment of a cloud-based warehouse management system. They argued that the optimization tools included in the software could result in more careful information management, better information sharing along the entire supply chain, enforcement of inventory management, reduced operational costs and improvement of customer service.

2.4.3 E-commerce, Export and Emerging economies

International trade has developed long before e-commerce has risen. However, e-commerce has proved to be a potential booster for the international trade growth (Qin, 2009). For instance, e-commerce requires the automation in the compilation of the plethora of documents that needs to be handled when trading goods. This allows overcoming the traditional difficulties of the offline process of documents exchange, thus improving trade quality and trade efficiency (Qin, 2009). Moreover, (Qin, 2009) argues that e-commerce reduces international transaction costs by reducing trade negotiation and information exchange costs, since these are activities are entirely carried out through Internet. Furthermore, as (Lendle, 2012) and (Herrera, 2014) showed, online trading implies significantly lower distance-related trade costs (i.e. transport costs, trade costs related to poor institutional quality and weak contract enforcement across borders), as compared to offline trading. By applying a gravity model on Ebay trading data, (Lendle, 2012) showed that distance-related costs are reduced the most in those countries that are highly corrupted and relatively unknown to customers, thus confirming the fact that e-commerce helps in providing useful and trustful information.

(Qin, 2009) point out two other important advantages generated by e-commerce. Specifically, new trade opportunities and new marketing information. As far as the new trade opportunities are concerned, the authors focus their attention on the local resellers and importers' disintermediation possibility guaranteed by the Internet. Concerning the new marketing opportunities, instead, the main theme is the possibility of acquiring accurate data about customers. These data could be consequently used to implement successful marketing campaign.

However, it must be highlighted that e-commerce boosting effect on international trade has some limits. As (Lendle, 2012) and (Herrera, 2014) pointed out, trade costs associated to linguistic barriers strongly increases in the case of online trading. A country-specific study must be carried out to understand how each country limits the diffusion of e-commerce and the development of international trade because of its limits in infrastructure and credit card acceptance.

Lastly, serious attention must be paid to the existing relation between e-commerce and small/medium enterprises in a global market. Indeed, they hardly compete against big transnational companies, which have higher bargaining power with local logistic providers and higher skills in exporting.

2.4.4 Logistics and Export

The last few decades have acknowledged a steady growth of international trade (Tavasszy, 2003). In the scenario of global competition, logistics has emerged as one of the key enabler factors of this trend. Once again, the increasing level of service required by customers, makes it also as one of the main drivers of success (Bohn, 2008). For these reasons, over the years, the specialist literature has been enriched by many researches aimed at describing the relation occurring between logistics and exports. Namely, such relation has been analysed under two main perspectives:

- Macroeconomic perspective
- Firm perspective

(i) *Macroeconomic perspective*. The main objectives of researches belonging to this category are to analyse the trade flows between different countries and to understand how logistics and transportation contribute to the observed equilibrium.

Through a quite sophisticated gravity model, (Venebles, 2011) have shown that transport costs and international trade are strongly interrelated. Namely, country specific variables such as infrastructure, technology, fuel costs and geography, which obviously have a direct impact on transport costs, also impact international trade. For instance, “*being landlocked increases transport costs of 50% and reduces trade volumes by 30%-60%*” (Venebles, 2011), while 1\$ increase in fuel costs reduces the trades of a country by 20%. (Behar, 2013) extended these findings by considering how logistics generally impacts on bilateral trade flows. Specifically, they

developed a gravity model depending on the variable of elasticity of bilateral trades of a country. This variable explains the relation between volume and the two factors of intensive and extensive margin. The intensive margin captures the value of the export per firm while the extensive margin captures the number of exporting firms. (Behar, 2013) found out that the elasticity of trades on logistics depend on the size of the country; the bigger the country, the higher the elasticity. This means that an improvement in logistics has a bigger impact on bigger countries; that is to say, bigger developing countries are more attractive than smaller ones.

(Puertas, 2013) confirmed the importance of logistics performance on export competitiveness, focusing their analysis on Europe. Specifically, they pointed out that the most important factors impacting on export are the quality of logistic services, the extent to which shipments are tracked and the efficiency of customs (in order of importance).

All the variables reported as relevant in the analysed articles must be taken into consideration by a firm that is seeking for new markets to export its products to. Indeed they contribute to define the attractiveness of the potential market.

(ii) Firm perspective. The increasingly strategic role played by logistics in the internationalization process pushed many researchers to study the organizational challenges posed by global logistics. According to (Laureano Paiva, 2009), cross-functional orientation is a crucial key success factor of the internationalisation process. Namely, the proactive role of logistics should start from the development of the internationalisation strategy. Indeed, the involvement of logistic managers since the very beginning of this process simplifies the development of efficient and effective distribution networks (Bohn, 2008). Moreover, having a cross functional mind-set encourages communication among managers, which in turn encourages flexible responses to changes when needed (Theodore Stanc, 1998). The pressure of customers' requirements towards flexibility in logistics makes the achievement of flexibility even more important (Tavasszy, 2003).

Actually globalization is posing several challenges to the logistic function itself. As (Bohn, 2008) pointed out, the total logistic cost is increasing. Indeed, inventory costs are increasing due to the extended transport distances; for the same reason, transportation costs are increasing as well,

though many firms are using routing optimization techniques to keep them as low as possible (Bohn, 2008) Moreover, the higher number of partners a firm should deal with, because of the increased internationalisation level, raises logistics complexity. These factors enhance the importance of designing an efficient and effective logistic network: a badly designed network would lead to poor performances and high costs, thus putting the internationalising firm out of competition. Despite the relevance of global logistics, however, very few specific researches have been carried out on logistic network in an international context.

(Tavasszy, 2003) classified the different logistic solution used by European firms according to their degree of customization and of responsiveness:

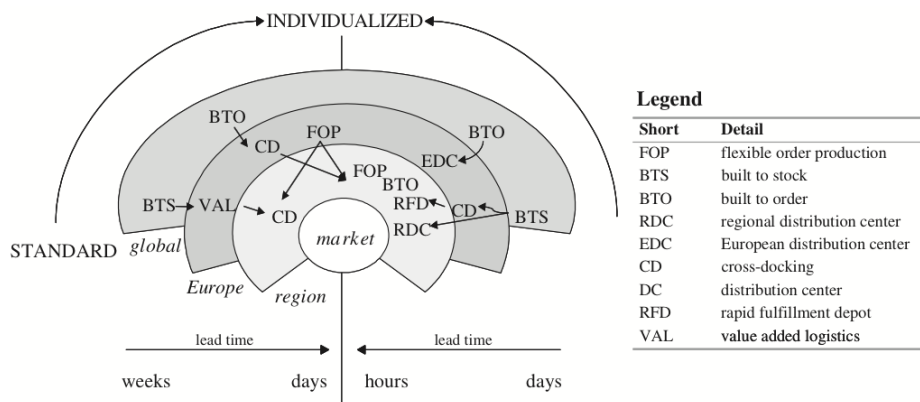


Figure 6: Image from Tavasszy et al (2003)

Their research shows how, despite the process of internationalisation, firms are more and more frequently turning to regional and customized solutions. Global logistic chains are reserved for standardized products (Tavasszy, 2003). However, their work is merely aimed at describing the as-is situation of logistics solutions without suggesting any driver of choice to design an optimal logistic network. Therefore, their work does not contribute at filling the gap in literature caused by the lack of normative empirical rules that could guide firms to discriminate among different logistic networks.

As Mazzarino and Torbianelli (2010) have pointed out, it is impossible to identify a unique logistic network that suits every possible situation. Variables such as the logistic drivers underpinning the network change, the level of service the firm aims to reach, the distribution of customers,

and the type of product the firm needs to transport (Bohn, 2008); (Torbianelli, 2009) contribute to the determination of the importance of designing a case specific optimal solution. Thus, a case study approach is the most appropriate to carry on research on this topic. In this fashion, (Torbianelli, 2009) study on the optimal logistic network for exporting products from Italy to Russia represents a stand-alone work in the body of specialist literature. Starting from a deep analysis of the as-is problems of Italian firms exporting to Russia, the authors found out that the highest inefficiencies derive from transport. Therefore, they suggest the use of maritime transportation from Padova port to either St Petersburg or Novorossiysk one. This choice would increase the efficiency of the solution, while keeping the same level of service. If the destination are far from the coast, a full railway solution is suggested to improve efficiency.

(Torbianelli, 2009) work aside, all the other researches following a case study approach have focussed on a smaller part of the entire logistic network. Namely, (Leung, 2002) tackled the problem of defining a long-term strategy for the transportation fleet of a firm in a cross border environment, given the location of warehouses. They came out with a very complete robust optimization model, capable of envisaging inventory costs, different travels' trip costs, possible hiring costs for third party logistics and other costs. Thanks to the combination of robustness and completeness, the model has proved to be valuable also in real cases.

Instead, (Lam, 2011) focused on the problems that a cross-border environment creates to picking management, unanimously considered as the most expensive warehouse process. Among these, the biggest one is surely the uncertainty about the inspection of goods: it is difficult to know whether a good will be inspected and how many hours the inspection will take. Therefore, it is difficult to choose the right picking policy and to accurately plan the entire picking process. However, the authors showed that, by implementing a decision support system based on case reasoning, the choice of the picking policy could be automatized, thus increasing efficiency of more than 50%.

2.4.5 E-commerce and India

Existing literatures show that the Indian economy has been consistently showing good signs of growth, specifically with the average GDP growth rate at 7.5% in 2015-16. The retail sector is showing a promising trend of 11% CAGR, growing from an estimated size of USD 600 Billion now to USD 1 Trillion in 2020. Although, currently the total e-Commerce spend in India accounts for less than 2% of the total retail spending, e-Commerce has become a key driver to create new markets in erstwhile unreachable geographies. The Indian consumers are rapidly advancing towards adopting technology.

Internet penetration is also significantly rising with the number of internet users at 354 Million as of September, 2015. In addition, there is a shift in mobile usage from voice to data. Mobile internet spend has risen from 54% to 64% from 2014 to 2015. This is due to an availability of high-speed 3G & 4G internet connectivity at affordable prices which has led to an increase in transactions done via mobile.

Although some e-commerce enthusiasts have come out with phrases such as “Internet as the great equalizer” or “the world is flat” (Datta, 2011) e-commerce diffusion still faces huge obstacles in developing countries. In Kofi Annan’s words “E-commerce is one of the most visible examples of the way in which information and communication technologies can contribute to economic growth. Yet despite commendable efforts and various initiatives, we are still very far from ensuring that the benefits of ICT are available to all. The digital divide is as wide as ever, with billions left unconnected” (UNCTAD, 2002). Researchers have been trying to identify the main obstacles and the main factors underpinning e-commerce adoption in developing countries.

The e-Commerce industry is expected to form the largest part of the Indian Internet market with a value of approximately USD 100 Billion by 2020. Advent of technology enabled innovations such as Digital Payments, Hyper-local Logistics, Analytics driven Customer Engagement and Digital Advertisements have enabled the e-Commerce industry to grow at a much faster rate. Within the e-Commerce industry, the Gross Merchandise Value (GMV) is an important metric for valuations especially during the early stages of growth.

However, existing literatures also show that companies which aim to start product selling in India must go through a particular environmental change that can affect their success, such as dysfunctional marketing institutions and the absence of sales intermediaries (Khanna, 2005). Understanding post-entry dynamics and, in particular, the process of establishing a distribution network can yield a more comprehensive understanding of how business networks are created and evolve in such market contexts.

At present, still few researches have been conducted on the main drivers explaining e-commerce adoption in developing countries, though some models have been developed and validated. For instance, (Molla & Licker, 2005) showed that the main affecting factors are organizational and external ones. Among the organizational factors, the most important ones are the firm awareness of the e-commerce importance, the experience of human resources and the top management commitment. Among the external ones, instead, the following are to be pinpointed: the extent to which customers and suppliers are in favour of businesses being carried on online and the presence of a financial and IT industry supporting the initiative of e-commerce adoption (Molla & Licker, 2005). Instead, (Datta, 2011) described the following as the three main factors affecting the e-commerce diffusion: perceived usefulness, social influence and technology opportunism. These three factors are mediated by external facilitating conditions, which are equivalent to (Molla & Licker, 2005) external factors. Perceived usefulness deals with the expectancy on the development potential of e-commerce. The higher the perception, the higher the likelihood of e-commerce adoption. Social influence envisages how people consider other people's opinion about their choice of using e-commerce; the higher the social influence, the higher IT acceptance is part of social beliefs and natural behaviour. Thus, social influence has a positive impact on e-commerce adoption. Technological opportunism deals with people's propensity to experiment with technology, and thus it is also positively correlated with e-commerce adoption (Datta, 2011).

2.5 Conclusions

To conclude the literature review, some observations are drawn.

During the research stage, it was possible to notice how most of the literature is focused on marketing and front-end aspects. Somehow the virtual nature of e-commerce seems to lead to frequent disregard of logistics aspects. This hypothesis seems to be confirmed by the high number of literatures that stress the relevance of logistics: the role of logistics as a key success factors seems not be self-evident and is therefore underlined in studies.

Another interesting fact emerged during the research stage: to the best of our knowledge, there have been no studies on all the three themes of our thesis. Indeed, literature work was not found in the intersection between the three main themes (e-commerce, logistics and export).

3 Objectives and Research Questions

The ideas, methodologies and aspects missing from the aforementioned literatures are highlighted in this section. As mentioned in earlier sections, the trade between Italy and India still isn't based on a few predominant trade policies. Moreover, these particular trade relations between two countries are still being researched and analysed by experts in supply chain, logistics and e-commerce fields. Furthermore, the rapid evolution of technology in the above-mentioned fields is increasing the efficiency and effectiveness of the whole transportation and trade process along with customer service.

To summarize, the gaps and missing information in the discussed literatures led to a series of research questions, which are listed below:

1. What are the main online channels Italian companies can use to export to India?
2. How do Indian e-commerce websites manage returns in the fashion industry?
3. How do Indian trade policies affect Italian companies willing to sell their products through online channels in India?

The process of finding the information in order to answer these research questions is listed below in Methodology section.

4 Methodology

As explained briefly in the executive summary and literature review sections, the process shown in **Error! Reference source not found.** represents the activities carried on to develop the present thesis work.

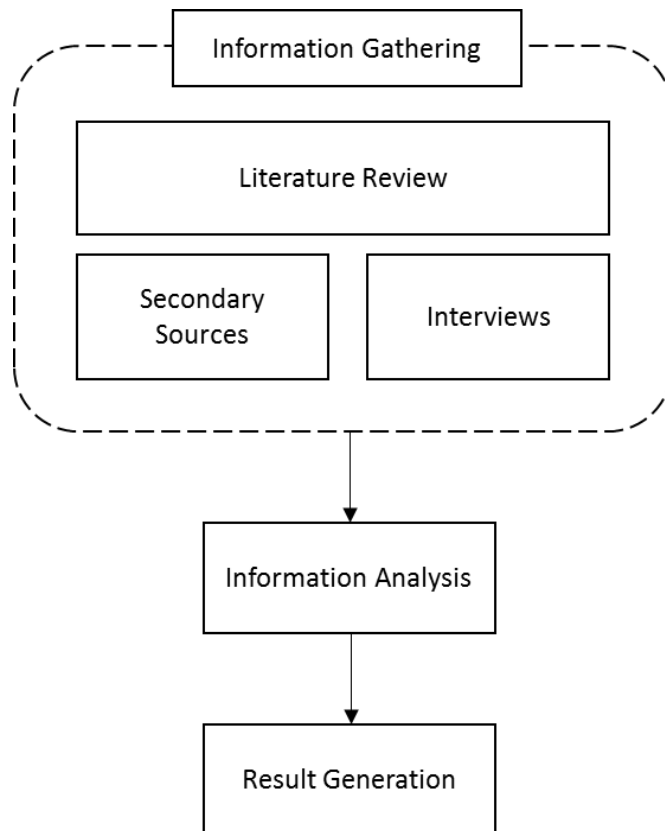


Figure 7: Thesis Methodology- Activity Flow

The literature review was aimed to identify previous analysis on the three topics of B2C e-commerce, logistics and export in order to offer a basis for the present thesis work. However, as mentioned in the previous sections, the three topics emerged as scarcely treated in combination with one another. Therefore, the literature review provided an overview on these topics to form a basis of the master thesis. The research work is mostly based around this review, which will be discussed in the following section.

The next step in the process of developing the thesis was to gather information related to the thesis topic, which was required for the analysis but could not be obtained through the published literatures/ research papers. This information was obtained through:

- Reading the relevant articles in newspapers and magazines on the internet,
- Interviews: Interacting with e-commerce professionals in India to collect some insights on how the foreign companies (can) sell their products through Indian online platforms (legal requirements, work-arounds, etc.)
- Secondary Sources: Results of a small surveys taken by Flipkart was referred to, to have an idea of which category of products is more popular among Indian customers on the online website. The information gathered was then converted to a graph as shown in the Graph 4 of this report.

For the research question discussion, after the collection of information from all the above-listed sources, the information was analyzed and only relevant information was included in this report. On the basis of this information and research the questions were discussed in detail and also a result or a conclusion was reached and is reported at the end of executive summary section as well as end of this report.

5 Research Question Discussion:

5.1 What are the main online channels Italian companies can use to export to India?

For an Italian (or any foreign company) to enter Indian e-commerce market and sell its products, there are 3 primary options.

- Enter Indian market as a business and hence create own proprietary website to sell the products
- Choose a vendor in India which can legally buy products from Italian seller and sell it on their own or any other e-commerce retail websites.
- The combination of above two options

Assuming an Italian company decides to enter the Indian e-commerce market through choosing a vendor in India, still a question could arise which is: Why a foreign company would prefer to sell its products through Indian online retailer's platform instead of having their own website and logistics channels?

According to interviews with some Indian companies/service providers, the solution through e-commerce platforms is generally more frequently adopted. A short telephonic interaction with the founder of BookMyWish e-commerce private limited, with Assistant Supply Chain Manager of HomeShop18.com and a short interaction with several professionals working in Homeshop18 were extremely insightful and very useful in process of making this report. When asked the same above question to the professionals about why a foreign company would prefer to sell its products through Indian online retailer's platform instead of having their own website and logistics channels, their combined response was that through listing the products on established e-commerce platform such as Flipkart or Snapdeal, they already get the larger customer base, which they can't get through proprietary website in initial phase. Moreover, the foreign companies must have their brand awareness already communicated to their customers in the

market where they prefer to enter next and sell their products through their own website. The small foreign companies prefer to contact the Indian e-commerce players because they know that having a cost-based business model, they cannot invest a lot in advertising. They already pay the custom-duty and export charges. To compete on basis of cost, especially in Indian market, they really don't have high margins.

On some legal sides of why companies choose Indian e-commerce platforms, the professionals concluded that for a foreign firm to register in India as a company or a business, the initial cost is very high. Moreover, they must take permissions from each state² in India to sell the products if you're an outsider (foreign company), which again adds up to the legal costs. Instead, smaller foreign companies prefer to go to any Indian e-commerce company and supply them orders in bulk, irrespective of the states' boundaries.

In relation to non-Indian companies using the platforms, the professionals implied that even the big players of their respective markets such as Ferrari (perfumes), Swarovski (artificial jewellery) prefer to sell the products in bulk to the e-commerce giants like Flipkart and Snapdeal. This saves them from the logistics costs to deliver individual products until the customer. Instead, they only must bear the cost of bulk delivery until the warehouse of the e-commerce player (in case the stock is owned by the e-retailer). If there is a real-time inventory system integrated with the e-retailer and the seller (stock owned by seller or an intermediate vendor), the logistics cost starting from pick up from seller's or it's vendor's warehouse until customer's destination is usually borne by e-retailer.

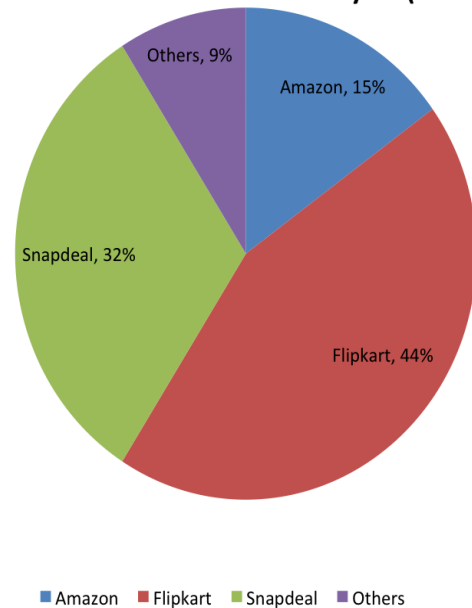
This above-complied information clearly proves that Indian online fashion retail market is growing faster than ever, and will prove fruitful for any small or medium-sized efficient and effective Italian manufacturer which desires to sell the fashion products in India. How the smaller companies can benefit from the trade policies between the two nations is discussed in RQ3.

² There are 29 states and 7 union territories in India

Indian E-commerce Fashion Market:

As discussed in earlier sections, India is a growing online retail market. According to Google's research (Google, 2015), fashion retail on e-commerce portals is expected to constitute 35% of the total online retail revenue generated in India by 2020. India is expected to generate \$100 billion online retail revenue out of which \$35 billion will be through fashion e-commerce. Online apparel sales are set to grow four times in coming years. Hence, for Italian producers, it's a certainty to step not in stagnant market like automobile but in a growing market of online fashion retail.

Market Share of e-Commerce Players (2015)



Graph 6: Indian E-commerce Market Share

Indian online fashion retail market is dominated by Flipkart. There are five major players in Indian online retail market for fashion namely Flipkart, Jabong, Myntra, Snapdeal and Amazon India. Former three belong to the same parent company which is Flipkart. As shown in the chart (Graph 6) from the publication of Business Standard, Flipkart (including Myntra and Jabong) covers 44% of Indian online retail market combined. Their second and third biggest competitors are Snapdeal and Amazon respectively.

To have an overview of the market leader Flipkart's and other top player Snapdeal customer-centric operations, information about their payment methods is reported. According to a consolidated report by Money Connexion, These platforms offers six payment options for customers, which are listed below:

- Credit and Debit Cards in India and other 21 countries – 3D secure password
- Internet Banking
- E Gift Voucher
- COD (Cash On Delivery) – Maximum order value is Rs 50,000/- (Approx. 70 Euros)
- Phone Banking – By using 256-bit encryption
- EMI (Easy Monthly Instalments) Option for American express, Citi, HDFC, ICICI bank

According to the same report, the most used payment option is paying through net banking, debit card or credit card (50-60%). Cash on Delivery is the second most preferred option with 24% of the customers choosing this payment option. It should be noted that Cash on Delivery option was an innovative concept implemented by Flipkart for the first time in Indian e-commerce market.

Moreover, related to last-mile deliveries, Flipkart has their own logistics partner called Ekart logistics, hence it could be stated easily that Flipkart delivers their own orders, without using a third-party logistics service. According to Ekart's website's data, it delivers more than 10 million shipments per month.

Snapdeal on the other hand has been investing in its logistics partner GoJavas. A published report on techinasia.com reports that Snapdeal has invested 20 Million USD in GoJavas in the year 2015 which was their second major investment in the logistics service provider. This clearly shows that Snapdeal also wants to get more control over their LSP (Logistics Service Provider), and hence last-mile delivery operations.

Overall, this information suggests that Indian e-commerce market is gaining and improving in required logistics infrastructure, as mentioned in the introduction of this report. Hence, it could prove to be high in potential market for foreign companies to choose as their platform to sell in Indian online retail market.

However, in order to choose any platform as a selling platform for their products, foreign companies have to go through formalities. There are some mandatory requirements (Flipkart, Sell on Flipkart, 2017) to be a selling partner on these online platforms, which are listed below:

- GSTIN ID: Goods & Services Tax Identification Number is a mandatory and unique identity to obtain which is provided by Indian government after registering as a business in India. Hence in other words, only registered businesses in India can sell their products online through these platforms.
- PAN Card: The primary purpose of the PAN card is to bring a universal identification to all financial transactions. It's also provided to foreign nationals doing a business in India, hence can be obtained by Italian sellers wanting to sell products on Indian online retailer's platforms.
- Indian Bank Account: This requirement clearly states that even a foreign company selling products online on these platforms must have an Indian bank account in order to receive the amount of sold products in Indian Rupees.
- Five Unique Products: This requirement states that to sell products online on Indian online platforms like Flipkart or Snapdeal, a business must have 5 unique products in its portfolio.

After fulfilling these requirements, there is no cost of listing the product on the online platform. The seller pays a commission (Flipkart, Flipkart Seller Pricing, 2017) to the online retailer when the product is sold, along with few more deductions.

The following deductions are made from the order item value:

- Commission fee: A percentage of the order item value vary based on vertical/sub-category
- Shipping fee (calculated on the basis of the product weight, shipping location)
- Collection fee: This will vary based on order item value and customer payment mode (Prepaid/Cash on Delivery)
- Fixed fee: A slab wise Fixed fee. This vary based on Order item value
- Service tax (applicable on all the above components)

An example of these deductions is given below in the table:

ITEM	AMOUNT (INR)
Selling Price (decided by seller)	1500
Commission Fee (varies across sub-categories/verticals)	150(assuming 10%)
Shipping Fee (Local shipping , weight 500 grams)	35
Collection Fee (2 % on the Order item value)	30
Fixed Fee	40
Total Marketplace Fee	255
Service Tax (15% of Marketplace Fee)	38.25
Total deductions	293.25
Settlement Value (Amount credited to the seller)	1206.75

Table 10: Commission Fee Deduction on Online Platform

Therefore, sellers should set selling price with enough margins to generate profit off the product post-deductions of all the applied fees listed above.

5.2 How do Indian e-commerce websites manage returns in the fashion industry?

According to the study done by Dr. Preeti Nigam for worldwidejournals.com on Flipkart, the return rates of Flipkart's fashion retail products are ranging between 20-30%. The returns are an additional entity of a supply chain, which starts at customer and ends at the seller. E-commerce player, being the logistics service provider as well (in this case, Ekart), holds responsible for return management as well. The supply chain strategies seller and e-commerce players follow to reduce the impacts of returns (additional cost, resources, etc), are explained below by two cases.

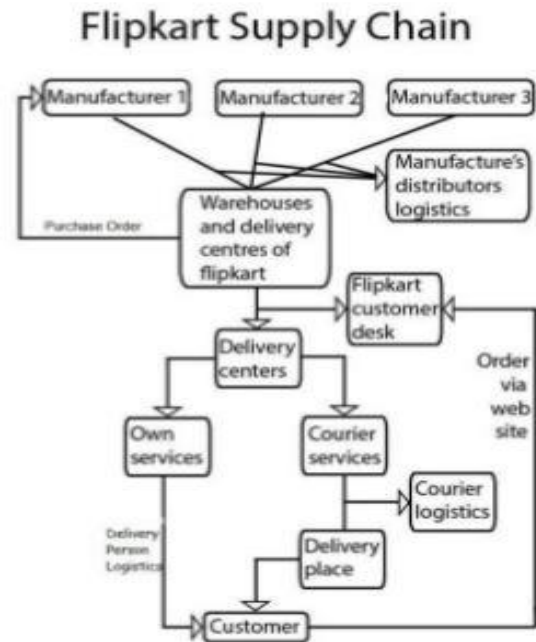


Figure 8: Flipkart Supply Chain

Model 1: In fashion supply chains, the supplier as a brand owner may outsource retailing to the Indian retailer, who is responsible for selling products to end consumers. The inventory would still be owned by Italian seller. For example, Italian company outsourcing the retailing to Flipkart, with products present in Flipkart's warehouse still being a property of Italian seller, hence can be returned to the Italian seller if not sold.

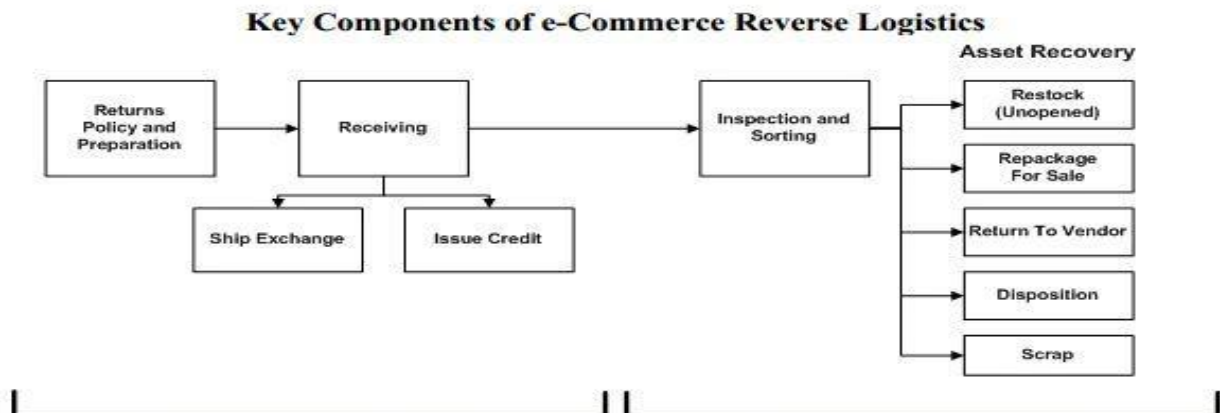


Figure 9: Components of e-commerce reverse logistics

Due to quickly changing consumer taste, Flipkart may hold large amounts of unsold products (25%–40%) at the end of selling season. The unsold trendy fashion products may be as high as 74% compared to the initial start-up inventory. This potentially large number of unsold products definitely hurts the fashion retailers (in our case, Flipkart) and worsens their profit. To help retailers and to sustain the fashion business, it is no secret that fashion retailers may receive some support money from the Italian suppliers for subsidizing the loss and returning the unsold products at the end of the selling season. Therefore, it adds on as an extra cost to the Italian seller's balance sheet. However, in this case Italian seller faces a trade-off between two cases:

- The total financial value of the returned product being lower than the subsidy provided to the retailer (eg: Flipkart), therefore Italian firm pays the subsidy and keeps the stock at the retailer's inventory until the last unit sold. In this case, the logistics cost and resources utilized in calling back the product from Indian retailer's warehouse to central warehouse and forwarding it to another market is saved.
- Italian seller recalling the product from the Indian retailer's warehouse to central warehouse and redistributing it to another market. This case should be preferred if (based on forecast) there is a high demand in another market for the same category of the returned product. The cost of paying subsidy is saved for Italian seller in this case.

The return policy is an efficient strategy in reverse supply chains. Under the return policy, it is voluntary for the retailer to return the unsold products. The supplier then can re-sell these returned products to another market or recycle them in a sustainable manner. As such, the residual value of unsold products is increased. Reverse supply chains are an important part of sustainable fashion supply chains. The return policy is able to significantly affect the efficiency of reverse supply chains.

Model 2: The inventory stock for apparels is owned by the online retailers (for example Flipkart). The logistics model they follow is called Inventory-led model (KPMG, 2016), as explained in Figure 10.

Inventory is purchased by the in-house buying arm of an e-commerce retailer (Flipkart) and stored by them in their fulfilment centers. This model is becoming less prevalent because it is capital intensive and allows less scalability for online retailers like Flipkart. However, it provides additional control on quality checks. Under this model, the inventory is owned and maintained

Inventory-led model

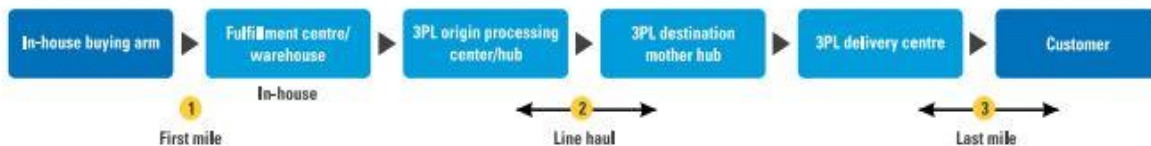


Figure 10: Inventory Led Model

by online retailers. The model helps ensure better quality control and service level for the customers, since the online retailers have control and visibility on almost all the processes, from inventory management order till its fulfilment. While this is a capital-intensive model, with high overheads and substantial inventory risks, it is nonetheless helpful in creating trust and service credibility among users, leading to a better brand value for Italian sellers who do not even own the inventory in this case. This model is more popular for fast-moving, low-value multi range products, and is popularly used for fashion retail. It is important to highlight that in this case, online retailers such as Flipkart do not invest a lot on suppliers' products, and hence the initial order quantity is low as compared to the first model.

Consumer to E-retailer return rates for fashion products are as high as 30% in Indian e-commerce industry. Therefore, by going through the two models followed in Indian e-commerce players, Italian producers (if given a choice) should always opt for solution suggested in case 1 above to avoid the high overheads, large capital investments in new market and substantial inventory risks for online retailers. The solution for the high returns could be to recall the returned and/or unsold orders back to central warehouse (in Italy if in case there is only one), and re-allocate them in the market where the demand is growing. This step requires a fairly accurate forecast and analysis of the market where the re-allocation has to be done, which in this era of technology is easy to obtain.

5.3 How do Indian trade policies affect Italian companies willing to sell their products through online channels in India?

International Agreements & Trade Policies:

Both India and Italy are members of World Customs Organization (WCO) & World Trade Organization (WTO). Therefore, both nations follow and respect the trade laws defined by these organizations to make the trade flow smoother and easier. As far as the documentation to be done by Italian seller to export goods to India is concerned, the general requirements of Indian trade policy require the seller to produce below certificates:

- Import General Manifest
- Bill of Entry
- Commercial Invoice
- Pro Forma Invoice
- Packing List
- Certificate of Non-Preferential Origin (especially for woollen articles)
- Proof of Preferential Origin (non-mandatory)
- Air Waybill/ Bill of Lading
- Importer/Exporter Code (IEC)

Producing these certificates consumes a lot of time and cost of the seller, however there are some exceptions made by Indian government especially for EU member states and fashion products' import, which falls in favour for Italian producer to step into Indian market. Although, there are some trade barriers as well which makes it difficult for an Italian seller to align the product specifications with the requirements of Indian trade rules. Both the positive and negative aspects of Indian trade policy affecting Italian companies' supply to India are discussed as following:

5.3.1 Positives:

Exemption from Certificates:

- Under Indian-EU (Commission, 2017) trade policy, it is explicitly mentioned that the importation of textiles and textile articles into India is permitted on the condition that they do not contain any hazardous dyes prohibited by the Government of India. For this requirement, the producer must obtain a certificate issued by the accredited textile laboratory in the country of export. However, this requirement does not apply to EU member states including Italy. Therefore, Italian producers supplying fashion articles to India do not have to invest extra time and cost on obtaining above mentioned certificate.
- **Pre-Shipment Inspection Exemption:** To export to India, the exporter must provide a certificate of pre-shipment inspection stating that no arms, ammunition or any other explosive material is present in the shipment (Commission, 2017). However, this certificate is not mandatory to be provided by fashion-industry exporters. This again saves time and cost for the producer supplying products to India.

For small Italian producers trying to initiate the business in India: India is a signatory to the International Convention to Facilitate the Importation of Commercial Samples (*Commission, 2017*), enabling the duty-free import of said goods into the country for a smooth flow of trade. In India, a number of goods, namely:

- samples
- price lists
- commercial samples

are exempt from customs and additional duties leviable thereon on certain conditions. In the case of commercial samples, the value of said goods must not exceed 1450 Euros (100,000 INR) in value or 50 units in number within a period of twelve months. Due to this exemption, small companies which are trying to establish new business in India can estimate the demand and make advertisement of their

products by first supplying few samples through online channels in India, without paying the customs and additional duty fee.

Fur-skins Sellers to India: India has no local production of raw furskins. On 3 January 2017, India published Notification No 33/2015-2020 banning imports of reptile leather, raw mink, fox and chincilla furskins and tanned mink skins without prior consultation. These imports are subject to the Wild Life Protection Act 1972 and CITES. EU exporters, though, comply with CITES requirements and 100% of the furskins derive from farmed animals enjoying the highest animal welfare conditions.

Apart from the product's characteristics, there are recent Indian market characteristics as well affected by recent governmental policies, which support the Italian seller in a positive way to sell fashion products in India. As per the article published in the newspaper Economic Times (IANS, 2017), India's recent roll-out of GST (Goods & Services Tax), e-commerce players like Flipkart, etc. are expecting a surge in export. This implies that the market for an Italian seller has gotten even wider and broader after GST's roll-out, because the e-commerce players can now sell the products to even outside India. Hence, Italian sellers only have to enter Indian e-commerce market to reach across to the whole sub-continent of Asia. This also strongly supports the point made earlier in this master thesis regarding the huge potential of Indian e-commerce market.

5.3.2 Limitations:

Trade barriers: In particular, there are two explicit trade barriers for producers selling fashion products to India (Commission, 2017):

India's taxation of EU textile and clothing imports: Since April 2016, CVD (Anti Subsidy duties) on the Maximum Retail Price of textile articles has been increased from 30% to 60%. Furthermore, landing charges are applied, which increase invoice value by 1%.

Export duties on raw and semi-finished leather : In October 2000 India lifted its export restrictions (de facto export ban) in the leather sector, but simultaneously, the export duty on raw hides and skins and certain semi-finished leather was raised from 25 % to 60 %, which is the highest rate in the world.

To summarize the above analysis, the Italian producers are exempted of producing few certificates (as a part of EU-India trade deal), exempted of inspection of the shipment, therefore save a lot of cost and time as compared to sellers of other countries. The main advantage for small Italian producer, as stated above, is that if they want to test the e-commerce platform's effectiveness and test the market behaviour before making the final decision, they can do so without paying custom and additional duties (if the value of shipment is max 1450 Euros and max units are 50).

Therefore, after analysing the Indian trade policies imposed on Italian fashion product sellers to India, this report clearly suggest that the policies are more on the favourable side for small Italian producers.

6 Concluding Remarks

Indian e-commerce market has grown exponentially in the last few years. In 2009 it was worth 2.9 billion USD, and within 4 years, in 2013 it became worth 12.6 billion USD. According to a study done by Indian Institute of eCommerce and Google India, as stated previously in the report, by 2020 India is expected to generate \$100 billion online retail revenue out of which \$35 billion will be through fashion e-commerce. Online apparel sales are set to grow four times in coming years.

Italy's one of the primary drivers of export is textile and fashion industry. And if Italian companies can exploit the potential of Indian e-commerce market using one of Indian online retail platforms, the benefits Italian companies could get might be unprecedented. However there lies an information gap for Italian sellers regarding the Indian e-commerce market. The main objective of this master thesis is to diminish this information gap through analysing the Indian e-commerce market, trade policies between Italy and India and return management processes done by Indian e-commerce companies, in order to facilitate Italian companies' decision-making on whether to enter Indian e-commerce market or not.

The research on Indian e-commerce market shows that it is mainly dominated by 3 major players, Flipkart, Snapdeal and Amazon.in, with combined 91% market share. The compilation of some interviews and intercation with e-commerce professionals suggests that an foreign seller should prefer Indian online retailer's platform to sell the products, instead of being an individual business and selling through their own websites. The main reasons being the fulfillment of legal requirements of being an individual business and access to a broader customer-base by listing the product on established e-commerce platform like Flipkart or Snapdeal.

The study on return management policies followed by Indian e-commerce players are demonstrated by two cases in the report. The products at e-commerce player's warehouses lose its value if kept there unsold or after their return (in case the e-commerce player is owning the inventory of seller's product), as fashion products change according to the industry/market trend, hence sellers in general prefer to recall the returned and unsold stock back to the central warehouse and re-allocate the stock at whichever market is showing high demand. Consumer to

E-retailer return rates for fashion products are as high as 30% in Indian e-commerce industry. Therefore, by going through the two models followed in Indian e-commerce players, Italian producers (if given a choice) should always opt for solution suggested in model 1 (refer section 5.2) to avoid the high overheads, large capital investments in new market and substantial inventory risks for online retailers. The solution for the high returns could be to recall the returned and/or unsold orders back to central warehouse (in Italy if in case there is only one), and re-allocate them in the market where the demand is growing. This step requires a fairly accurate forecast and analysis of the market where the re-allocation has to be done, which in this era of technology is easy to obtain.

The study of Indian trade policies shows that Italian fashion companies (Italy being a part of EU) can benefit from some of the Indian trade policies while entering Indian e-commerce market. For example, for EU members there are few exemptions from obtaining some certificates which are mandatory for non-EU countries. Certificates such as stating the shipment doesn't contain hazardous dyes prohibited by Indian government, or pre-shipment inspection certification, etc. are not required from sellers from the EU member states. Moreover, if the initial shipment value is less than 1450 Euros and contains less than 50 units, the seller doesn't have to pay custom duty, which could favour small Italian seller who want to get the idea of Indian market behaviour by selling only few product first, before selling the items in bulk. The recent GST law implementation is also predicted to benefit the e-commerce platforms, as it is supposed to open the export boundaries for these players beyond India. Hence this will provide Italian sellers a broader market reach with only listing the products on Indian e-commerce platforms.

Overall, the study shows that there is a great scope of growth for Italian fashion companies by entering in a high potential Indian e-commerce fashion retail market.

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