International Journal of New Trends in Social Sciences

www.ij-ss.eu

Volume 5, Issue 2, (2021) 87- 97

E-commerce free returns: Are they really free?

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Suggested Citation:
Tanvi Sharma. (2021). E-Commerce Free Returns: Are they really free? *International Journal of New Trends in Social Sciences*. 5(2), 87- 97 https://doi.org/10.18844/ijntss.v5i2.5493

Received August 12, 2021; revised October 29, 2021; accepted December 11, 2021.
Selection and peer-review under responsibility of Assoc. Prof. Dr. Zehra Ozcinar Ataturk Teacher Training Academy, Lefkosa, Cyprus

Abstract

The expansion of the e-commerce industry is at the speed of thought. However, a big debate arises out of a small question that can the e-commerce industry be ever considered an environmentally clean way of doing business. This research aims to trace how the e-commerce free returns policy adversely affects the environment. The present study is exploratory cum descriptive in nature. The research work is purely doctrinal and is a result of a comprehensive analysis of the existing literature on the said issue. The researcher seeks to add to the existing literature by providing suggestions and a future action plan for the problem so stated above. Based on the findings of this study, it is evident that the e-commerce industry can lead to environmental pollution, especially with fast fashion. The study makes recommendations based on the findings of the study.

Keywords: e-commerce; environment; fast fashion; free returns; online returns.

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1. Introduction

Today, the expansion of the e-commerce industry is at the speed of thought (Tiwari & Singh, 2011). E-commerce involves anything involving an online transaction. However, the scope of this research work is limited to include e-commerce, only the buying, and selling of goods online. The paper restricts itself to the online market of products and not services.

The advent of the e-commerce industry has weeded out the need for physical office space, several commuters on road, reduced the paperwork (Siikavirta et al., 2001), inventory requirements (Prouty, 2000), and reducing overproduction by establishing a pull-controlled manufacturing situation by receiving the orders in advance (GreenBiz Editors, 2001). However, a big debate arises out of a small question can the e-commerce industry be ever considered an environmentally clean way of doing business?

It is indicated that e-commerce is becoming the new driving force for growth (Martyn, 2017). Then what is bad in this economic growth? The difficulty in calculating the social and environmental impacts of e-commerce cannot be denied and to be specific (Sui & Rejeski, 2002), at first, its effects on the environment appear to be positive, for the growth of the economy's efficiency, in terms of causing dematerialization, de-carbonization, and demobilization (Corea & Levy, 2007). However, this positive impact is accompanied by a certain amount, rather may be a substantial amount of negative impact as well. For example, e-commerce may reduce the need for printed stuff, retail space, transportation to the office, etc. However, it has increased the need to produce energy-efficient computers, technology, electricity generation, and more energy costly modes of freight transportation, etc (Aparna, 2018).

The whole concept of e-commerce harms the environment in several ways, for example, by dumping the returned apparel and creating waste as huge as 4 billion pounds of returned clothing every year (Bain et al., 2016). Sellers often resort to dumping as an option because picking up the reverse pickup, opening the boxes, carrying out quality control of the returned goods adds to the cost-plus disturbs the inventory management of the company (Bain et al., 2016). If companies do not find a way to put these returned items back quickly and economically, trash becomes its place. The statistics provided by the World Resources Institute show that for making a single cotton shirt, 2700 liters of water is consumed, and dumping into the trash, as many as 4 billion pounds of cloth every year and creating carbon footprints (Otto & Schleifer, 2020), certainly demands attention.

Textile production in the year 2005 caused the release of 1.5 trillion pounds of greenhouse gases and when after all this, 26 billion pounds of unused clothing ends up in landfills (Matthews, Williams, Tagami, & Hendrickson, 2002) the pollution ordinarily caused, is doubled (Del Valle, 2017). This way, an innocent act of returning an item becomes a factor contributing to environmental degradation. Hence, the buyers need to understand that not everything they return has a second life (Goldberg, 2016).

Another inhibiting factor to environmental protection is the e-commerce industry's obsession with packaging. Packaging is an essential factor when it comes to e-commerce and requires tons and tons of plastic, cardboard packs, bubble wraps, thermocols, papers, etc. so that the good can be delivered to the buyer safely and without any damage. And as per US environmental protection agency, packaging formed a whopping 30% of the total solid waste generated in the USA. However, the packaging is one of the most inalienable pillars of securing a customer base. There is no law specifically dedicated to plastic packaging in India (Nur, 2018).

The e-commerce business also has increased the need for an improved transportation structure in the nation. Hence, seeing all these problems and future kindling, the research work is an addition to the existing literature and the debate will continue. Therefore, this research work tries to figure out a balance between the two contradicting needs to find alternatives to the pollution-causing frameworks. The research work analyses the pros and cons of e-commerce vis-a-vis environmental concerns and tries to bring to light the environmental issues seldom addressed by authorities.

1.1. Purpose of study

The objective behind this research is to trace how the e-commerce free returns policy adversely affects the environment. The present study is exploratory cum descriptive in nature. The research work is purely doctrinal and is a result of a comprehensive analysis of the existing literature on the said issue. The researcher seeks to add to the existing literature by providing suggestions and a future action plan for the problem so stated above. The research has used a uniform method of citation for this research work.

2. Results

Many researchers have studied the impacts that the e-commerce industry has on the environment and have effectively managed to list out various positive and negative effects. Stein and Sweat (1998) talked about the positive feature of e-commerce i.e., pull-controlled manufacturing, and how can it be used to reduce wasteful production. Romm, Rosenfeld, and Herrmann (1999) talk about the energy consumption needs of e-commerce giants along with their transportation structure and need for fuel. Walker (1999) finds out about the packaging cost for e-commerce businesses with regards to environmental pollution.

Matthews, Williams, Tagami, and Hendrickson (2002) talk about how the online retail business has a carbon footprint that is bigger than the offline retailers due to the added and inalienable need with regards to the packaging of the deliverables. Macauley (2003) studied the impact of waste generated due to e-commerce. Berkhout and Hertin (2004) mainly talk about the three effects of shifting to the e-commerce era namely, *"de-materialisation, substitution of information goods for material goods, and substitution of communication at a distance for travel."*

Peng, Li, and Zhang (2005) explained the primary, secondary, and tertiary impacts of e-commerce, but these impacts were positive. Ladou (2008) talks about the increasingly growing e-commerce waste dumps and their impact on human health. Edwards, McKinnon, Cherrett, McLeod, and Song (2010) examine how the cost of delivery increases when customers are not available at the time of delivery thereby causing multiple attempts to deliver, and how does this cost has a detrimental effect on the environment.

2.1. The Math Behind Online Returns

The growth in the potential e-commerce consumers increases the need to understand customer psychology to elevate online purchases. This has to be done with caution because unlike the traditional physical market structure, the two decisions one being to order and the other being, upon receiving the item to keep or to return the purchased item are separated by a time gap. Here, the return policy of the seller plays a crucial role. The return policy leniency is a double-edged sword where on one hand it reduces the consumer's risk of having bought a product that does not fit his description and on the other hand, it increases the return rates thereby affecting the profits of the seller (Wood, 2001).

The apparel and products that we buy online through websites like Flipkart, Amazon, Jabong, Myntra, etc. not so often fit our descriptions. The result of this is 'we are returning the product to the source.' Such returns may be made to either the manufacturer or the retailer. The whole process of the returns impacts the profits that accrue to these two entities (An, Du, & Tong, 2016).

Customers tend to return the merchandise and products so purchased owing to issues of size and fit, delivery of a wrong product, customer changing their mind after ordering the product, the customer finding a better product or a better price deal elsewhere, delayed delivery, customer fraud i.e. buying products from stolen credit/ debit cards and returning them for money, for 'wardrobing' i.e. buying a product that customer needed for a short period and then returning it to source, etc (Cannon, 2021).

As per popular theories of management, if a product is easy to return due to liberal return policies, it is more likely to be returned. The paradox of product returns born here is that the lenient return policies are a boon for the consumers, however, are not in favor of the seller's interest due to increased cost and for another reason that such policies easily fall prey to customer abuse (Davis, Hagerty & Gerstner, 1998). The return policies of remote retailers show variance where some allow free returns and some do not allow returns at all (Preddy, 1998). Both situations are extreme and are not desirable from any point of view.

Around 49% of the retailers offer free return shipping now. And around 30% of all the products that are ordered online through e-commerce websites are returned to the source for varied reasons listed above (Saleh, 2018). There are statistics to show that 30% of the shoppers deliberately over-purchase with the thought of returning the unwanted items later (Charlton, 2020).

The returns can be linked to customer behavior. Since there is a gap between the two stages of ordering the product and in deciding whether to keep it or return it, the lenient return policy makes it convenient for the customer to reverse a bad decision. The chances of returns in online purchasing are high because the customer gets the opportunity to try and to examine the product only at the 2nd stage i.e. when the product is delivered to him (Simonson, 1992).

However, the policy cannot completely be done away with because this will reduce the flexibility thereby affecting sales (Janis & Mann, 1977). And lenient policies will increase sales, however, profits will rise only if the returns are minimized. There is a deliberation conflict. In case of a lenient policy, the customers do not ponder upon their choice carefully because even if they end up buying the misfit product, they have nothing to lose (Wood, 2001). Hence, the vicious paradoxical circle continues.

2.2. Lackadaisical View on Returns!

The items most commonly returned are clothes and apparel, followed by electronic products, beauty and grooming products, and sports gear (Phillips, 2018). And we, as buyers think that the products we return online go back to the source. However, we are mistaken in our view because not all of these return to their source. They are often sent to third parties, depending on their condition and the company's policy.

They may also find themselves amidst a heap of trash in a dump yard. Thus, this way not only 2-3 times more energy is unnecessarily wasted in transporting the products from one place to another (Lee, 2020), the energy and resources that were vented in manufacturing the product become a wasteful expenditure, the product's value falls low and also the dump yard bonanza renders the environment polluted.

Also, even if the package reaches its source and is again displayed for purchase by another customer, the packaging cost doubles because the product is to be packed again in plastic wraps, cardboard boxes, etc. Thereby implying that the more the returns, the more packaging material will be used, and not to mention, the biggest polluting trait the e-commerce industry is home to is the "packaging" (Phipps, 2019).

The items returned may not always be in a perfectly resalable condition (Segran, 2018). Hence, dumping the returned apparel and creating waste as huge as 4 billion pounds of returned clothing every year is the way out for the sellers (Aparna, 2018). Sellers often resort to dumping as an option because picking up the reverse pickup, opening the boxes, carrying out quality control of the returned goods adds to the cost-plus disturbs the inventory management of the company (Bain et al., 2016).

If the e-commerce companies do not find a place for this item to be returned with a quick and economic effect, trash becomes its place for life till it decomposes, if at all that is the case. The statistics provided by the World Resources Institute show that for making a single cotton shirt, 2700 liters of water is consumed (Otto & Schleifer, 2020), and dumping into the trash, as many as 4 billion pounds of cloth every year and creating carbon footprints (Matthews et al.,2002), certainly demands attention.

There are unacceptable examples of fashion giants destroying their perfect conditioned stock to trash for the reason that they do not want their unsold stock to land into someone's hands for free. The top brands like NIKE slashed their unworn shoes with cutters so that no one could wear them for free (Dwyer, 2017b). Victoria's secret (Goldwert, 2011), H&M (Dwyer, 2017[a]), Zara, and Topshop (Wicker, 2016), are some other brands to add to the list.

However, it is quite difficult to measure the exact amount or percentage of damage that the whole returning process staggers due to small units involved (William, 2018), and due to a complex and detailed supply chain (Edwards et al., 2010). The statistics provided by the World Resources Institute show that for making a single cotton shirt, 2700 liters of water is consumed (Otto & Schleifer, 2020), and dumping into the trash, as many as 4 billion pounds of cloth every year and creating carbon footprints (Matthews et al.,2002) certainly demands attention.

Textile production in the year 2005 caused the release of 1.5 trillion pounds of greenhouse gases and when after all this, 26 billion pounds of unused clothing ends up in landfills (Del Valle, 2017), the pollution ordinarily caused, is doubled (Goldberg, 2016). This way, an innocent act of returning an item becomes a factor contributing to environmental degradation. Hence, the buyers need to understand that not everything they return has a second life (Bain et al., 2016).

Currently, the US alone employs one lakh workers and creates $1 billion worth in wages with the help of industries that are involved in recycling secondhand clothing, thereby fulfilling the dual objective of economic development as well as environmental protection (Goldberg, 2016). Hence, the task should not be any difficult or unimaginable for the rest of us around the globe.

2.3. Who Pays The Real Cost Of "Free Returns?": The Planet Earth!

The clothing and apparels that end up in the landfills mainly consist of clothing and apparel. Decomposing clothing releases methane, which is a greenhouse gas, needless to say, harmful and contributes a good deal to the global warming phenomenon (EPA, 2019). The fabrics are made up of dyes and in the process of making the clothing, various chemicals are used which are also contained in the final product. These harmful substances are absorbed by the soil thereby contaminating the soil, the groundwater, and the

surface water, rendering it unfit for cultivation, water for drinking, bathing, and other plants, animal, and human uses (Wallander, 2012).

The discarded products also do not disappear in the blink of an eye. They take millions of years to decompose. Hence, till the expiry of their shelf life, they occupy a large amount of space as much as 126 million cubic yards of land space for 11 million tons of textile trash (Wallander, 2012). The space is unnecessarily occupied for storing trash in the open and hence, could no more be put to any productive use now or in the future because the chemicals in the trash completely degrade the soil there and the groundwater.

Dumping the trash to the landfill site requires transportation. Transporting material that can be reused a recycled to leave it to decompose in a dump yard adds to unnecessary transportation costs and money consumption. Unnecessary transport adds up to pollution caused by vehicles and the money paid for such transportation only amounts to wasteful expenditure in the economy thereby adding no value to the economic growth.

The other material like electronic items, batteries, etc. contain mercury, arsenic, cadmium, PVC, Solvents, and lead. These ultimately leach into the ground to pollute the soil, the groundwater, the surface water, and the air above that land. Also, 'Leachate,' a contaminant that is formed when the liquid waste breaks down to mix with water, thereby creating a highly toxic run-off that pollutes whatever is imaginable (Bagby, 2022).

In case this trash is burnt, the plastics contained in it will release toxins like dioxins that cause air pollution and contribute to acid rain. Plastics' molecules are stable, hence, do not break down easily. This causes them to lie dormant in the environment for a long period and cause problems like marine pollution, micro-pollution, seabed pollution, river pollution, white pollution (litter caused by notorious bags), etc (Le Guem, 2018). Such dumping in landfills may be aesthetically unappealing. It may be a horrible eyesore in an otherwise beautiful space. This also poses a threat to animals and birds who might swallow the trash thereby resulting in their death.

A study by *Ellen McArthur* Foundation found that every second, around one truck of clothing trash is thrown off. And the *Copenhagen Fashion Summit* reported that every year, Ninety-two million tons of solid waste is dumped in the form of clothing, into the landfills (Kaya, 2018). This is indeed an alarming situation that needs to be taken care of as early as possible. Also, not forgetting the fact that most of the clothing and fabrics are made up of polyester, volatile monomers, and solvents which need petroleum for manufacturing and is also a highly energy-intensive process of production (Claudio, 2007). Hence, these apparel lying in landfills without being used for any considerable time, renders the production process useless rather harmful for the environment in the ways stated above.

Therefore, the unnecessary transportation cost, the trash dumping in landfills, the rendering of the production expenditure wasteful, the unnecessarily increased cost (monetary as well as environmental) of repacking the product are all factors that make this whole activity of returning the online purchased goods to source futile and harmful for the Earth and the Environment.

3. Discussion

The dumping of slightly damaged or returned products is an example of sheer Capitalism because this simply means dumping into pits something that might mean "life" to someone who cannot afford it. It is

an undeniable fact that the "free returns" policy of the e-commerce giants is one of the strongest levers in their businesses' growth as it fetches increased customers to them. However, the fact that the free returns policy cannot be done away with does not imply that there is absolutely no way out to solve the allied 'big problem' it is causing. The apparel so returned that are slightly cut up or unsellable hence cannot be sold as firsthand items can be easily donated to a homeless shelter or a second-hand store.

Also, the e-commerce giants can themselves produce a store concept of an ancillary branch to their business that shall hold out all these products for sale, clearly indicating the damage that existed and the minor repair works done. Not to mention, the cost of such products has to be kept low, depending on the condition of the product. This model will result in a two-way benefit structure. Firstly, this will fetch some money to the e-commerce websites which otherwise would have never made way to their pockets by virtue of the products lying in the trash dump yards. Secondly, the environmental pollution that these unsellable products would otherwise be causing will be reduced to the extent the products are mended and sold.

These two models have a high potential to succeed because firstly, minting some money instead of no money at all is always better. Secondly, let's not forget the fact that even today, there are thousands of people who die on the streets on a cold winter night not because they have nothing to feed themselves, but because they have no clothes to protect themselves from the hugging breeze of winter(Anshu, 2017). There are examples like that of a little daughter of a man who picks up unclaimed dead bodies from the roads, is comforted by dead bodies against the cold wintery night in the capital of India (Anshu, 2017). Channelizing these unsellable but usable clothes to such people can never be the wrong way of doing things.

Also, talking about the model of putting these products in the commercial chain again or donating them is a workable idea because when we have examples like some 50.8 million households in America that cannot afford a basic monthly budget to meet ends for a living let alone clothing (Quentin, 2018), the idea is certainly practicable. Not everyone in the world falls under high-income groups. There are people in the low-income groups who want to buy things that they cannot afford, hence, putting these products into the selling line again with some mending will give these low-income groups be able to afford things that they always wanted but could not buy due to sky-high prices. Since the prices of these mended products are reduced, people may certainly turn up to buy them.

Another way of reducing the misuse of the 'free returns policy' by the consumers is that the retailers may impose some percentage of the product value as a charge to return the product (Hess et al., 1996). There is a deliberation conflict in case of a lenient policy that the customers do not ponder upon their choice carefully because even if they end up buying the misfit product, they have nothing to lose. Hence, we can see the dire need for consumer education about the fact that if some policy is meant to benefit them, they can enjoy the benefits sure thing, however, not at the cost of posing harm to the seller or the environment more importantly.

Websites like Jet.com (Returns and refunds, n.d.) have produced creative solutions like giving customers a choice to waive off their free returns in lieu of some discount on their cart price. Policies like these may be formed to induce customers to themselves waive their free return option which might induce them to think twice before choosing the product and this way customers themselves will ensure that they do not have to return the product hence, the chances of return are minimized. The retailers may also identify the 'Serial Returners' i.e., shoppers responsible for an excessive number of returns (Vozza, 2019), and ban them permanently.

4. Conclusion

The industry needs to be made more humane and sustainable towards the environment and also the economy with regards to reducing the environmental footprints of the returns. The innocent act of returning the purchased item not only harms the retailer but also our planet. What if instead of a return we could do a "*Green Turn*" i.e., a customer who wants to buy that item can give it to another purchaser who wants to buy that product. Consumers could take the picture of the item on an App and shall be first verifying the condition of the product while returning it. Artificial Intelligence systems could then sort these clothes by the condition- mint condition or slightly used, etc. and direct them to the next appropriate person.

Clothes that are in perfect mint condition, may straightaway go to the next buyer for that product. The company may choose to mark down the clothes that are slightly used and may offer them for sale again, online. The retailer shall prescribe the rules and procedures for such transaction, the maximum number of times a particular product can be put to resale, etc. The customers so transacting shall have to get a mobile verification code or a one-time password, drop it to the nearest shipping point so fixed by the retailer near their place so that it can be packaged properly and shipped to the next buyer. This way the products so put in the chain of resale from a buyer-to-buyer business model will be prevented from landing up in the landfills.

However, the big question is that why will the buyers go through the trouble of dropping it at the shipping station and so on? The answer is that they would, provided we give them incentives to do that like loyalty points or cashback calling it "*Green Cash."* These customers will have an opportunity to mint some money from this process, hence, motivated to venture for a change. And, to already exist landfills, just like Sweden does, can be either recycled or converted into fuel for powering both electricity and heating through processes like drying, shedding and compressing.

However, it takes time to put a whole new logistical system in place. So, during this gestation period of such an idea, we, the buyers can take immediate steps to contribute to this problem by making certain required changes in our shopping behavior. We shall think, before buying any product, "*Do I really need/want this product?*." Even if every online shopper in the world manages to return five fewer items purchased online in a year, we shall be saving the Earth of the horror of 240 million pounds of clothes so bought from landing up in the trash.

This problem is not a million years old. It has been lately created by us and needs to be stopped here and now itself. We need to leave a planet, for our generations to come, that shall be cleaner from what we inherited and one effective step towards the same will be to stop over-ordering and recycling religiously. And it is not too much to ask for when we say, pause and think before you overload your shopping carts and the landfills with products you do not need because this is one step to building *A Beautiful Earth Call Home.*

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