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How can different stakeholders influence the freight transport companies to offer increased intermodal transportation to their Fast Consumer Moving Goods customers

Author: Marina Eleftheria Leftherioti, 5927552

Thesis Supervisor: Dr. Agni Kalfagianni

Internship position at: Kraft Heinz Co.

Supervisor at the company: Marcelo luki

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Abstract

Product transportation is getting escalating attention by the EU-27, as it represents one quarter of all the GHG emissions, with 70,9% emissions coming only from the road transport. Even though there are many policies in place to tackle this issue, the GHG emissions were 20.1% higher in 2014 compared to 1990. In order to be able to keep the temperature rise of this century below 1.5 Celsius degrees, immediate action has to be taken to tackle the emissions from the freight transportation. Intermodal has been identified as a solution to this issue by several actors in the European union and also is supported by several scientific articles. The benefit of intermodal is that it combines efficiently all of the benefits of each one of the modes of transportation used to transport freight. However, the offer of intermodal services in the market are not as high as to satisfy the first big adaptors of intermodal, the big international companies. A research to evaluate how can different stakeholders influence the transport companies to offer increased intermodal solutions to their customers was conducted by collecting data of interviewing in depth, seven different transport companies and also all of the logistics managers of the fifth biggest food and beverage company worldwide. The results showed that the transport companies recognize as their most important stakeholders their customers, competitors, employees and governmental actors and when pressured enough from them, then they do change their strategies. In addition, strategies such as exiting the business contracts with suppliers, conducting alliances with other companies with the same goal and offering long term contracts with the suppliers to pressure them to offer more intermodal solutions are used regularly.

Key Words: intermodal, Unimodal, FMCG

Executive Summary

This thesis focuses on the important issue of the environmental degradation caused by the freight transport industry. Even though the importance of addressing the issue and controlling the carbon emissions from the transportation industry has been brought to the attention of the policy makers in European Union and several organizations such as the Intergovernmental Panel on Climate Change several times in the last twenty years, still the Green House Gas emissions have remained 20.1% higher in 2014 than in 1990. In December 2015, a document signed by 195 United Nations members in Paris stated that in order to be able to tackle climate change, the global temperature rise must be kept, if possible, below 1.5 Celsius degrees. However, in order to achieve this number all of the industries must work together and act on controlling the carbon emissions that they contribute to the atmosphere from their global business transactions. Special attention from the industries must be paid to the freight transportation which in 2014 contributed one quarter of total EU-28 GHG emissions. In order to reduce the impact of freight transportation to the atmosphere, the solution of intermodal transportation has been suggested during this thesis. Intermodal transportation is the efficient combination of using two or more modes of transportation such as rail, trucks, ships etc. in order to achieve the most efficient route possible. This way of transporting products not only has reduced transportation costs when compared to truck transportation, it can also tackle the issue of congestion on the highways and more importantly it emits reduced carbon emissions.

Regardless of the benefits of intermodal transportation and the policies already in place which are promoting it in the European Union, still the adoption of intermodal is not popular enough amongst the companies. In addition, the transport companies are facing complaints from their customers when they are using it in regards to the increased transit time when compared to trucks and the liability of an accurate arrival time. However, the last years, there has been a rise of the use of intermodal by mostly big international companies which daily must transport big volumes of products and thus have the biggest cost benefits when switching from truck to intermodal transportation. The issue is that these companies, are not satisfied with the amount of intermodal available in the market and therefore have started to pressure for more. Especially in Kraft Heinz, the company where I conducted my internship and my data collection, there was a constant concern from the logistics managers how to pressure effectively the transport companies to offer more intermodal services to the company. Therefore, my research question was shaped accordingly in order to help Kraft Heinz tackle the issue that they were facing:

“How can different stakeholders influence the transport companies to offer increased intermodal solution to their Fast Movement Consumer Goods customers”.

In order to answer to this question, first two contrasting theories were put into investigation in order to find out which one was true in the case of the transport companies. The first theory was the shareholder theory from Milton Freedman which supported that there no other stakeholder that should be taken into consideration except the owners and the people who have invested their money to the company. The other theory was from Edward Freeman which stated that in order for a company to be successful it must create value for all of their stakeholders such as employees, customers, suppliers, society etc. Then derived from the theory of Freeman, this thesis also investigated the exchange and creation of value between the stakeholders of the transport companies.

For concluding to the research question, data from interviews from seven different transport companies and also from the logistics managers of Kraft Heinz were derived. After the collection and the analysis of the interviews, the results were evaluated also by a literature review. From the analysis of the interviews and the literature review, the conclusion was that the stakeholder theory of Edward Freeman was true. All of the transport companies recognized as their most important stakeholders their customers, competitors, employees and governmental actors. In addition, all of the transport companies either had changed strategies or they were willing to change strategies when pressured from their main stakeholders. From the side of Kraft Heinz, several strategies in order to pressure the transport companies to offer more intermodal solutions were recognized. One of the most important and efficient strategy used, was the exit strategy where the customer exits the contract with the supplier and chooses to start dealing with another supplier. In addition, when the customer does not represent an important customer of the supplier, then alliances with other companies reaching for the same goal are formed. In this way, the pressure increases towards the suppliers and the supplier recognizes the potential value lost in the case of not changing their strategy. Furthermore, incentives given to the supplier of gaining long term value and decreasing the risk of investing in intermodal can also have a positive result for more intermodal.

The governmental stakeholder was recognized more as a barrier for the adoption of intermodal rather than an incentive and a pressure. Despite the several policies in place which should promote intermodal, they have been proved so far to not be as effective as though to be. In addition, the fact that there is not a unified legislation or policy in Europe but rather multiple is a barrier for adopting intermodal.

NGOs were not considered to be a source of pressure for the adoption of intermodal, probably because the transportation part within the supply chain of products are not until now a popular topic of attention.

Taking into consideration the results from the interviews, several recommendations which will help to facilitate an easier and more fast transition towards intermodal were given to three different groups of pressure, namely the policy makers, Kraft Heinz and other FMCG companies and the NGOs.

Acknowledgements

When I took the decision to come to Utrecht for my Master, I was another person. I was a person with a lot of insecurities telling me that I was not good enough, a person with taboos telling me that you must be a person of certain ways in order to succeed and there is only one way to success, a person with the determination after the master to go back to Greece, to find an easy job and just live a regular life like others. Of course, deep down I had a lot of dreams that back then I thought there were too big to accomplish and I constantly was finding ways of adding issues to those dreams so that they remained just dreams and not actions. I moved to Utrecht and my first fear was that I would not fit with the other students, I would not make friends which can support me and love me, I could not compete with other international students.

More than two years have passed and I can definitely admit that I am a different person. I am different because of all the knowledge that I acquired throughout the Master, I am different because of all the difficulties and the let downs and the hard job I had to overcome, I am different because I proved myself that I can accomplish everything and I have me to rely on myself but most importantly I am different because of the friendships that I made and the people that I met. I am so proud and feel such luck that I met my friends Laura, Ligia, Giulia and Suzanna. They made me stronger each day, they supported me when I needed them, they helped when I was in trouble. They believed in me and made me see my potential and my value. Endless conversations about ideas, about dreams, about world issues with them shaped me and made me a better person with dreams that can touch the sky.

Of course, nothing would be possible if I did not have the support of my family. My family who made it possible for me to come here and have this great experience, a family that taught me to be open minded, respect people and help them when in need. A family which always encouraged me to follow my dreams and not worry for the rest. I have nothing but gratitude that they were always supporting me in every step I took and in every decision I made.

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This beautiful and difficult journey has come to an end, and has left me a better person with a lot of great memories, great knowledge and new big dreams. I just wish I could go back to the start..

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Introduction

Freight transportation has many negative impacts on the environment but also on human health. In 2014, the transport sector contributed 25.5% of total EU-28 greenhouse gas emissions (GHG) ("NEC Directive reporting status 2017 - The need to reduce air pollution in Europe", 2017) and constituted as the main cause of *air pollution* in cities (Climate change, impacts and vulnerability in Europe 2016, 2017).

Where other sectors experienced a decline in emissions through the years, the transport sector did not meet the same decline: GHG emissions only started to decrease in 2007 (European Commission, 2017a) while they remained 20.1% higher in 2014 than in 1990 (European Environment Agency, 2016a). Within this sector, road transport is by far the biggest emitter accounting for more than 70% of all GHG emissions from transport in 2014 (Climate change, impacts and vulnerability in Europe 2016, 2017).

Global warming is directly and mainly caused by human activities which emit gases into the atmosphere which blocks heat radiating from Earth towards space. One of the main gases with this specification is Carbon dioxide (CO₂). Carbon dioxide is released into the atmosphere through natural processes and human activities such as transport. Worrying enough is the fact that the CO₂ concentration has been increased through human activities by more than a third since the Industrial Revolution (Climate change causes: A blanket around the Earth, 2018).

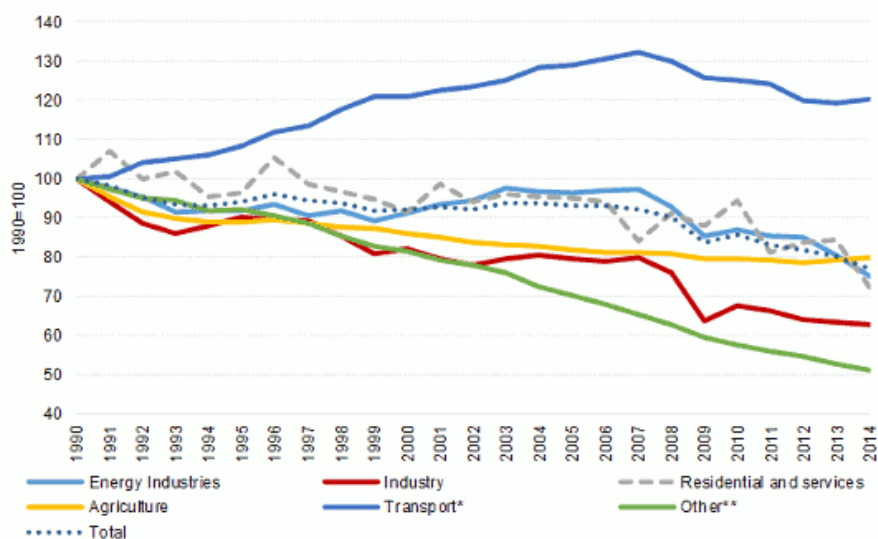


Figure 1: Greenhouse Gas Emissions from Transport 2014 Note: * Transport includes international aviation but excludes international maritime; ** Other include fugitive emissions from fuels, waste

management and indirect CO2 emissions (Climate change, impacts and vulnerability in Europe 2016, 2017).

The greenhouse effect, which causes global warming, is one of the issues that has been discussed through the years and has gathered the attention and concern of many organizations, one of them being the Intergovernmental Panel on Climate Change (IPCC). Included in the fourth assessment report of IPCC (IPCC, 2007) is underlined that if no immediate measures are taken to decrease the emissions, the average temperature of the planet will keep increasing. Eventually, it will lead to detrimental consequences such as reduced access to survival basic elements like water, food and land. To prove the ugly consequences of the increasing temperature on December the 5th, 2017 [Paul Nicklen](#), a photographer and filmmaker from the conservation group [Sea Legacy](#) released a video of a starving polar bear wondering around Somerset Island—trying to find food to survive. The video went viral and created a public outrage caused by the realization of one of the many consequences that Climate change has on earth.

Through the years there has been a constant attempt by nations to address the problem of climate change through a unified agreement and a strategic plan. In December 2015, the Paris agreement within United Nations Framework Convention on Climate Change was signed by 195 members. The goal of this Agreement is to tackle global climate change threat “by keeping a global temperature rise this century under 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.” This agreement recognizes the immediate need for optimizing the supply chains of operations for re-evaluating the sustainability of transport modes from a climate perspective. It is also argued, that during the last years, road and airfreight transport have increased radically leaving rail and (inland) water transport underdeveloped. Although recently a new trend is emerging where the interest of rail transport has been intensified, especially in case of emerging economies. By increasing the use of rail and inland water transport through using intermodal freight solutions - transport products from point A to B by using a combination of modes of transport e.g. Rail, truck, ship, airfreight - the freight-related GHG emissions can be significantly reduced. This positive impact can be intensified especially with the combination of renewable energy-operated railways and low-carbon shipping. Moreover, this fact is supported by the research of Ekki Kreutzberger et al., 2003 “Is intermodal freight transport more environmentally friendly than all-road freight transport? A review” where the authors review and critic thirteen papers advocating either the intermodal side or unimodal - the use of only one

mean/mode of freight transport. The paper concludes that “The overview clearly shows that intermodal transport has substantially better environmental performances than unimodal road transport”. Another study which supports the use of intermodal is the the IRU/BGL study (IFEU and SGKV, 2002) which compares the primary energy need of CO2 emissions from unimodal truck transport and the ones of intermodal freight transport such as road/rail. The study examined nineteen routes, to come to the conclusion that only 3 of 19 routes required higher primary energy need by combined road/rail transport, while in the other cases the primary energy need of combined transport was either from 20% lower until more than 40% lower than truck unimodal transport (IFEU and SGKV, 2002).

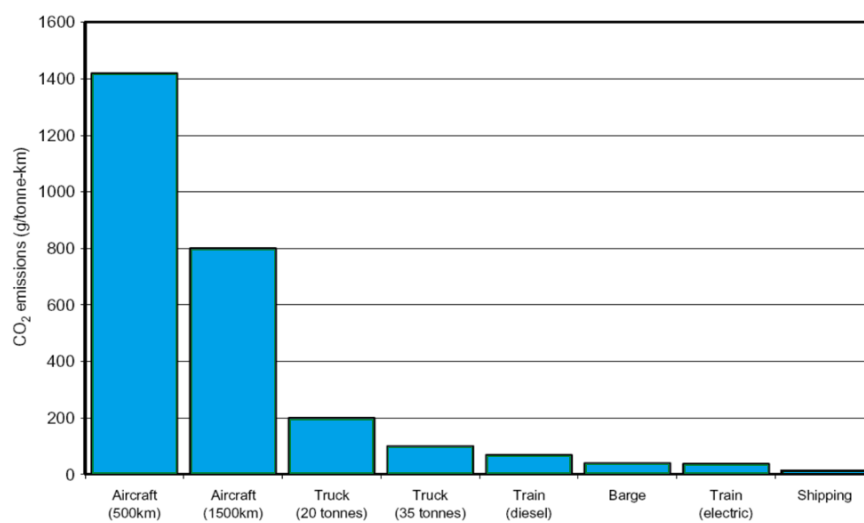


Figure 2: CO2 Emissions per Transport Mode (Zuidwijk, 2017)

However, the swift from truck to rail freight transport is filled with great barriers and ports contribute significantly to these difficulties. For most ports road transport is the most important *transport mode to the hinterland* (Van den Berg, 2015), even though trucking is relatively environmentally unfriendly compared to train and barge transport. This dominance of road transport can also be observed in one of the biggest ports in Europe, the port of Rotterdam. This particular trend of using trucks is explained as it is considered highly flexible while all destinations can be reached and the majority of containers is destined within 200 km from the port (Van den Berg, 2015), making the rail choice less attractive.

The Company

The company which I conducted my internship and research for the thesis, is Kraft Heinz. Kraft Heinz is the fifth biggest food and beverage company worldwide with yearly net sales over twenty-nine billion American dollars and has operations in forty-five countries (Heinz, 2018). Kraft Heinz is considered to be a Fast Movement Consumer Goods Company (FMCG), which means that the products which they produce and sell are sold quickly and in relatively low prices. Such products include packaged food, toiletries, beverages and other consumed goods which can be found in the retail industry and food service (restaurants, fast food companies, cafeterias etc.). Due to the fact that is an FMCG company, logistics is an important part in the whole supply chain of the company which is conducted daily and it entails movement of goods in big quantities. Such movements include transportation of goods from the factories to the main warehouse (in national or international locations) of each central distribution area, from the main warehouse to smaller ones in each smaller distribution area and then finally from the small warehouses to the retail customers (grocery stores, food service etc.). Only for the international transportation of products from the factories to the main warehouses in Europe yearly, there are used approximately fifteen thousand trucks, which means approximately forty to forty-five trucks per day. Each truck is considered to drive approximately 100.000 per year due to the fact that they conduct long distance transportation while they omit around 34,5 liters/100km of CO₂ (Ambel, 2015). Therefore, only for the international transportation of goods from the factories to the main warehouse, Kraft Heinz contributes annually around 517.5 billion liters of CO₂.

The Kraft Heinz company was created in 2015 when Kraft Foods and Heinz Company were bought and merged by the Brazilian company 3G Capital. 3G Capital is a global investment firm which aims on long-term value, and particularly emphasizes on boosting the potential of brands and businesses ("3G Capital - About", 2018). Due to the strategy of 3G Capital, the initial and most important goal for Kraft Heinz is to maximize the profit by reducing costs and eliminating the inefficiencies. Sustainability, is not yet at the core of the company's strategy and thus they do not take immediate actions to deal with the carbon emissions that they produce. However, because of the strategy to reduce costs of operations, since 2015 the logistics department of the company has started to swift its attention from only using trucks for shipping the goods to using intermodal transportation which is costing less than truck transportation. Therefore, due to that change and also the volume of

shipment that Kraft Heinz has, it has started to pressure the market of freight transportation in order to offer increased intermodal solutions.

The problem

Product transportation is getting escalating attention by the EU-27, as it represents one quarter of all the GHG emissions, with 70,9% emissions coming only from the road transport. In EU-27 road transport is dominant as it counts for almost half (45.9%) shipments. It should be noted that the corresponding percentage for rail transport counts only for 10.8% (Lammgård, 2012). Shipping goods is placed at the crossroads of economic and environmental interests. Transport is considered vital for all the economies with product and labor intensities but simultaneously it also represents one of the greatest enemies of the environment. According to Rodrigue et al. (2001) there are four main paradoxes regarding logistics and sustainability. (1) costs: the cost-saving strategies created by logistic companies are usually lacking environmental considerations while environmental costs are externalized; (2) time/flexibility : the use of hyper-production translates into more required space for distribution and retailing which consume more energy and thus emissions; (3) network: there is a dominance of environmental impacts around major hubs and along corridors ; (4) reliability: usually the most dominant transport used is the least environmentally efficient: trucking and air transport; and (5) warehousing: inventory has shifted, in part, to roads and thus contributes to congestion and space consumption. A solution to the fourth paradox according to Rodrigue et al. is to shift from freight to more sustainable modes of transport e.g., electrified railway. While in this case the use of Intermodal road-rail transport is currently the most sustainable one, as intermodal freight transport is environmentally less harming than road transport, which, is also a conclusion of Kreutzberger, Macharis, Vereecken, and Woxenius (2003).

The solution

The pressure for more sustainable operations is intense for the actors in the transport sector, therefore the option of using intermodal road-rail transport is considered favorable as it consists one measure to reduce CO2 emissions. Intermodal transportation consists of a combination of transport modes eg. Rail, truck, ship etc. and the most important and beneficial attribute is the modal shift, the capability to change the mode or mean of transport. This means that in a single shipment a

variety of modals or means can be shifted in order to result to the most efficient route in terms of transit time which translates into decreased financial expenditures and emissions (Bauer et al., 2010). Offering intermodal transport services may be an opportunity for transport providers to reduce the environmental impact, especially CO₂ emissions, for their customers and themselves. McKinnon (2008) states that carbon decrease measures which focus on modal choice and fuel efficiency have greater results than policy measures (e.g., economic measures) in order to contain the increase of CO₂ emissions from freight transport. This is due to the fact that the companies nowadays have started to realize that sustainability in the transport sector eg. decrease of CO₂ emissions also translates to financial benefits, such as those of cutting costs from the shipment itself. In addition, it increases their competitiveness and their reputation towards their customers and the public. Moreover, intermodal is getting adopted by an increasing number of companies the last few years and is mainly used to ship freight. In addition, contrary to unimodal transportation, which is transferring the goods to their final destination by using only one mode, it can offer high flexibility, efficiency and increase the liability of the transport (Bauer et al., 2010).

It is a challenge how logistics service providers will overcome a probable increase in demand for more sustainable freight transport (such as intermodal road-rail transport) in European countries, but in the outspread of intermodal transport as the main mode of transport in Europe, ports play a significant role. Due to port's capability to shape and grow the intermodal use as a tool to explore the hinterlands. Furthermore, nowadays that the focus on the environmental impacts of transport has increased, the need for a coherent plan to increase the intermodal adoption is dominant. However, despite the adoption of intermodal transport, the opportunity for potential future growth still remains and especially in the case of European ports where the road transport remains as the dominant mode of transport (Van den Berg, 2015).

While there are also other solutions for freight transport to decrease CO₂ emissions, such as replacing the fuel engine trucks to electric trucks, the solution of shifting to intermodal consists the easiest solution at the moment, since the technology and the infrastructure are already in place. But the issue is, that even though some transport companies already have started to use and offer intermodal solutions to their customers, the majority of them prefer to only offer unimodal transportation and are hesitant to offer intermodal even though the benefits are well known by them and by their customers. A survey conducted by Kraft Heinz Company in February 2018, showed that while the majority of the freight transport companies could offer intermodal solutions to the company, they chose to only offer unimodal despite the interest of KHC towards intermodal. In

addition, while there are several studies researching the option of intermodal integration in the supply chain like the paper “The collaborative supply chain” by Simatupang and Sridharan or the opportunities and the barriers of intermodal transportation in metropolis like “Strategies and new business models in intermodal hinterland transport” by Roy van den Berg and the “Refinement of the virtual intermodal transportation system (VITS) and adoption for metropolitan area traffic simulation” by Wittmann et al., there is a lack of papers which research the power that the stakeholders have over the transport companies and the decision making regarding the promotion of intermodal transportation. Therefore, taking into account the reaction of the transport companies towards their customer’s interests KHC and the literature managerial gap on intermodal, the following research question is shaped:

“How can different stakeholders influence the freight transport companies to offer increased intermodal transportation to their customers”.

Theoretical Framework

In September 1970, Milton Friedman, a Nobel prize American economist, released an article in The New York Times magazine where he stated “There is one and only one social responsibility of a business — to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud” (Friedman, 2007). According to Friedman, there is only one kind of “stakeholder” or “stockholder” according to Friedman that the company should care for and it is the owner or owners of the company or the people who have invested their money in the company. Except this group of people, the company has no responsibility to other stakeholders in order to create value for and therefore no other stakeholder has power over the company. In fact, the only obstacle for the company to create as much financial profit as possible is the rule that it has to obey to “the basic rules of the society, both those embodied in law and those embodied in ethical custom” (Friedman, 2007).

A contrasting theory was released by the American philosopher Edward Freeman originally in 1984, when he released his stakeholder theory, stating that in order for a business to be proven successful it has to generate value for its customers, suppliers, employees, financiers and the community in which it is included in (Freeman, 2010). The company cannot confront any of the above stakeholders

in isolation but only as a combined power in which all of the interests of the stakeholders have to align and contribute to a greater value generation for the company and for them. Each one of the stakeholders are crucial to the final and sustainable success of a business, as the combination of them can contribute to the creation of unique value (Freeman, 2010). Freeman's theory correlates to Corporate Social Responsibility, a business approach which argues that corporations should deliver not only economic gains but also environmental and social ones, in such a way businesses can be a part of sustainable development. Sustainable development is also in the agenda of the EU Strategy 2020 which wants to tackle unsustainable procedures conducted by businesses and organizations which contribute negatively to climate change (Europe 2020, 2010), a topic which is the center of attention of many organizations including United Nations.

Throughout the years, there has been a constant discourse among economists and philosophers on which of the two above contrasting theories stands true in practice. With this research question and the appropriate collected data, the researcher will try to resolve this discourse by using the example of the transport companies working with companies in the Fast Moving Consumer Goods industry.

Stakeholders:

Stakeholders can be defined as any individual or group of individuals which can affect or be affected by the strategy and goal of a company (Freeman, 2009). This wide theory originates from the principle that if a group can affect the influence a company then the company needs to confront it. In principle, the primary stakeholders of a business can be defined as the customers, the suppliers, the employees and the stakeholders which can finance or fund the projects of the company (Freeman, 2009). In addition, other stakeholders can be the government, NGO's, the media and other interest groups which can affect the way through which the company creates value for its primary stakeholders. Though understanding the primary and secondary stakeholders then the company can start aligning their needs and thus align its strategy to create the appropriate value (Freeman, 2009).

In order for a business to understand the different levels of stakeholders, its managers should be asked who of the people who interact directly or indirectly are important and have the power to affect the company but also be affected by it (Freeman, 2009).



Figure 3: Stakeholder Map of a Very Large Organization (Freeman, 2010)

Value creation

The companies find the common ground of the interests among their stakeholders, despite of their conflicts, their interests should go in the same direction (Freeman, 2009). This principle also applies to the shareholders of a company, contrary to Friedman's theory that a company's only obligation is to create value for its shareholders, according to Freeman by complying the company's goals with the stakeholder's needs and values automatically shareholder value is created.

How can stakeholders affect and be affected by a company

There are many ways through which a stakeholder can affect the success of a company, therefore add or deduct value from the company. Most importantly is the economic affect which can positively or negatively be altered according to the satisfaction of a particular stakeholder or

stakeholder group (Freeman, 2010). The aspect of profitability or cash flow of a business is the most volatile part which requires exceptional attention and increased stakeholder management in order to be avoided. In the case of customers, when there is a situation where they are dissatisfied they can express their discontent with the company by participating in strategies which will add pressure to the companies to change (Freeman, 2010). Firstly, the customers can stop their transactions with the particular company and search for another one to conduct business with, which will provide them with increased fulfillment and satisfaction, this can be recognized as the “exit” strategy (Freeman, 2010). This action is considered as the fastest and easiest for the customer as there are a variety of companies nowadays which offer the same services and products. This action is the paradigm of the economic strategy. When a noticeable amount of customers choose to stop their transactions with the company, then the company is starting to realize that the product or service they provide is no longer competitive and attractive to their customers and they will start to alter their strategy (Freeman, 2010). According to Hirschman (1970) the feedback that the managers, who rely on this reaction, receive from their customers are "poor, nasty, brutish and short."

Secondly, another strategy, with which the customers can choose to show their dissatisfaction, is called “voice”. Voice is used when the customers choose to make complaints about the service or the product that is provided as a mean of pressure for the company in order to change (Hirschman, 1970). This strategy is mainly recognized in the political sector, when voters use it in order to achieve higher benefits from the political parties. Furthermore, consumer groups can use their “voice” in order to initiate the political process as a mean to pressure companies to change. This type of strategy is more visible to the respective company. Hirschman (1970), illustrates that the level of organizational loyalty, from the customers to the company, will result to the final mix of using the exit or voice strategy. In addition, both of these strategies are crucial to the effective operation of the marketplace, as on one hand the repercussions of the exit strategy alone are very high and in most cases the company will struggle and may never recover from it while on the other hand the voice strategy in order to work effectively there is a need for voice mechanisms to be in place which may be costly (Hirschman, 1970). Contrariwise, the stakeholders may also receive diverse actions originated from a particular firm which can lead to financial well-being of them. Such occasions can be recognized when the stakeholders have an economic stake or marketplace power. Furthermore, the companies can also have the power to affect financially big stakeholder groups, such as government or activists’ groups, through their power of fund them or providing solutions for budgeting important projects (Hirschman, 1970).

Moreover, the suppliers of a business can effect its financial return. By having the power to provide the business with products or services with sufficient quality or competitive pricing, suppliers can partially determine the satisfaction of the end consumer of the product or the service (Freeman, 2010). Concerning the customers of the business, which are indirectly affected by the suppliers of a business, they have the power to determine the success of a product or a service. For example, in the case they are dissatisfied with the company's product they can find a substitute by choosing another company which will either provide them with a more competitive price or with an increased quality (Freeman, 2010). By addressing all the stakeholders that can influence a business, one of the most important ones which has direct and strong influence on financial returns has to be acknowledged. The regulatory institutions can have economic effects on a business by adopting rules which request compliance on resources, prevent competition and allow a limited group of companies to manage and control the prices in an industry (Freeman, 2010).

Another aspect on which the stakeholders may influence the company is technology. Though allowing or preventing the company to implement technological improvements or adopt innovations to upgrade the services or products it offers. By raising barriers to the technological adjustments, the competitors of a company can decrease its competitive advantage, as the company will not be able to keep up with the technological developments and will offer to its customers outdated products or services (Freeman, 2010). This can be succeeded through increased patenting. This typology of stakeholders can “overnight” destroy the competitiveness of a company especially in fields such as software.

Additionally, stakeholders can have power over the social image of a company through altering the opinion of society towards this company, groups of such stakeholder can be environmentalists or media. Having either the permission or the constraint from the public to perform in a society will depend on the image and reputation that the particular company will have (Freeman, 2010). Reversely, a company is capable of altering the reality for a group of people by offering products or services which will influence their lives. For instance, cellphones have changed the way people communicate and act with each other. On one side, the social effects commonly result to political effects on the company. Often the requests and satisfaction or opposite reaction from the society will involve political intervention in order to achieve the desirable social outcome (Freeman, 2010). On the other side, powerful companies can have political affect on stakeholder groups by increasing or decreasing their chances of success in a political debate. Especially in the US, it is common for companies to lobby with specific political parties which are in favor of them and will eventually manage and control the political and social agenda (Freeman, 2010).

Lastly, a stakeholder can influence the management of a company by pressuring to change the managerial processes, style and values. This influence can be identified as one of the most important ones, as it can define the ability of a company to recognize and understand its relationships with its stakeholders and account them in their decision making (Freeman, 2010).

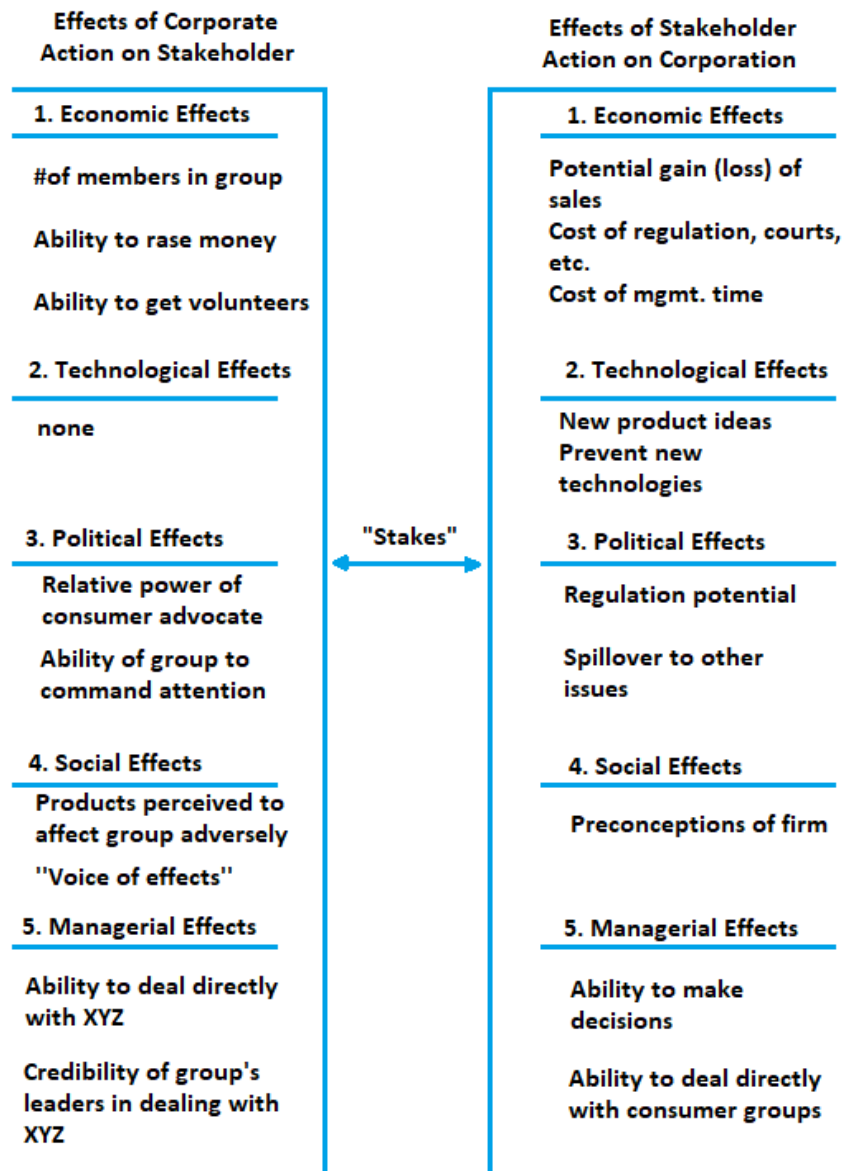


Figure 4: Interrelations of stakeholders (Freeman, 2010)

Methodology

For the current research to be in place the deductive theory will be followed, as it represents the most popular aspect of the link between theory and research. The researcher, depending on the known information of a specific subject and of its theoretical considerations, designs a hypothesis or

a theoretical framework which later will test its validity with the collected data (Bryman, 2015). Within the theoretical framework there will be concepts that the researcher will need to translate into items that can be researched upon. Moreover, the researcher needs to specify the way which will be used for the collection of the data representing the theoretical framework.



In addition, qualitative research will be conducted in order for the research question to be answered. The choice of qualitative research is due to its capacity to provide a better understanding of the issue through examining the participants involved in the issue. This quality can result to a deeper perception of the research and presumably to a more effective solution (Bryman, 2015).

Concerning data collection, semi- structured interviews will be used, as the research has already a clear focus and more specific issues can be reviewed. In addition, by using this type of interviews, the researcher can control the interview but at the same time the interviewee can have the freedom and flexibility to discuss some relevant issues which were not brought to the attention of researcher before (Bryman, 2015). Therefore, the researcher can have a universal overview of the discussed topic.

For the sampling of the interviewees, the technique of purposive sampling will be used. Through this method the researcher chooses to sample the participants in a strategic way, so that they are relevant to the research (Bryman, 2015). For this reason, there will be twenty interviews conducted for all the relevant data to be gathered. The interviews will be split between the host company namely Kraft- Heinz Co (KHC) in Europe and its relevant to this research business partners, namely freight transport companies (FTC). The underlying reason of this split, is that there needs to be a clear understanding of the dynamics and the interrelations between the “customer” e.g. Kraft Heinz Co and the “business” which provides its services. Eventually, from the interviews there will be a better understanding of the “stakes” that exist between a company, in this case Freight transport companies, and one of its stakeholders, the customer. As the stakes between those two companies represent a risk for the success of the FTC, it is of ample importance to pay attention to this

interrelation and either improve or change its organizational profile or strategy. This will increase the stability of the relationship between the companies and it will result to a creation of “value” between the companies. Therefore, we can argue that there is a reverse dependency between the “stake” and the “value” in the relationship of the corporation and the stakeholder.

Regarding the interviews with the host organization, the expected results will show the perception of sustainability in the logistics department of the company and the relevant options that are available in the open market of freight transportation. In addition, the relationship between demand and supply of intermodal options between KHC the FTC as well as the barriers, the risks and the opportunities of implementing a complete intermodal solution for the transports. For the collection of these data, there will be in total ten interviews conducted with the relevant employees which are responsible for the decision making of such issues namely the transport planner in Europe, the European Logistics HUB manager for the European supply chain. In addition, interviews with the respective Regional Logistics managers from all the seven Business Units of KHC in Europe will be held.

From the side of the FTC, there will be ten interviews with the business partners of KHC dealing with the local and international shipments throughout Europe. The FTC can either be a second - party - logistics company (2PL) which means that the company owns all of the means of transport e.g. Planes, ships, trucks, wagon or a third- party- logistics company which means that the company uses third party businesses to outsource their shipments. From the interviews with the FTC, it is expected to be gained a further understanding of the sustainability issues and options in the logistics department, a detailed analysis of stakeholder identification and their respective relationship with the company, the different value that the company perceives from each one of stakeholders, the risks and opportunities for providing increased intermodal solutions to their customers and the difficulty of transitioning their operations to a fully intermodal service.

As a next step, after the completion of the interviews with both parties, the researcher will conduct a literature review regarding the interrelationship between the FTC and the rest of the identified stakeholders. Using all the collected data, there will be available for analysis a complete overview of the different values or stakes existing between the corporation and the stakeholders which can result to an organizational or strategic change from the corporation.

Finally, the analysis of the data collected will show whether the “stakeholder theory” by Freeman stands true, e.g. the company interrelates with several types of stakeholders and exchanges value which is crucial to its success or the “stakeholder theory” by Friedman is true, translating that the only concern of the company is to increase its profits exchanging value with only its owners or its financial investors.

Kraft Heinz Co.	Transport companies	Literature review
<ul style="list-style-type: none"> • Financial gains • Reputational gains • Competitive advantage • Barriers and opportunities for intermodal adoption 	<ul style="list-style-type: none"> • Competitive advantage • Policy incentives • Barriers and opportunities for intermodal adoption • Financial gains • Reputational gains • Market expansion 	<ul style="list-style-type: none"> • Regulations • Policies • Pressure groups • Competition • TOther incentives

Figure 5: Examples of data that will be researched through the interviews

Data Analysis

1.Data Analysis from Interviews- Freight Forwarders

1.1 UGL

- UGL, a UK based freight company, does not have any sustainability goals or priorities but it is aware of the environmental issues caused by the transportation industry and the large carbon footprint. When building proposals for clients they include the emitted CO2 emissions in their offer but the clients are mostly interested in cutting costs than saving carbon emissions. In UK they are pressured from the city councils and the cities with the environmental regulations. They do not take any actions to reduce their footprint and the only way they are contributing to sustainability is that as a company they try to promote as much as possible intermodal transportation. UGL sees intermodal not as only a way to reduce CO2 emissions but also as a way to reduce the conjunctions/ traffic on the highways and the ports, as it will help to reduce the risk of delays on the delivery of the cargo.
- UGL recognizes no strict regulations in UK based on carbon emissions, however they recognize some schemes on cargo owners.
- UGL tracks the CO2 emissions per customer and when they switch from unimodal to intermodal transportation for a client then they always present the CO2 savings from the switch. They do not consider the CO2 emissions as theirs but as their clients. This also eliminates the pressure to handle the CO2 emissions as a company as eventually they do not take ownership of the carbon footprint.
- At the time, the company mostly offers intermodal transportation. In Europe they switched from unimodal to intermodal three (3) years ago. This happened because they brought in some expertise- employers that influenced the company to increase their intermodal services, so the company when revising the strategy of the company took into account its stakeholders' (employees) opinions.
- UGL plans on increasing their intermodal services in the future. This goal is mostly based on the fact that they do not own their own trucks and thus they cannot control fully their service in unimodal, therefore they believe that intermodal transportation will offer them more control in their operations
- In Europe they offer 50% intermodal services and 50% unimodal while globally it is 98% intermodal which is mostly due to deep sea shipments.
- According to UGL, their clients have increased and intensified their requests and pressure for cost effective transports, where intermodal is the answer.

- There were cases where the customers which initially used only intermodal, later on they reduced its use due to the higher transit time as opposed with unimodal transportation.
- The company did endure pressure to increase intermodal transportation although this was mainly because intermodal offers reduced transportation costs and not because it also offers decreased carbon emissions.
- UGL recognizes that the biggest pressure to change comes from its customers and also from the competition.
- They did not have any environmental groups that have pressured them to be more sustainable or take any action.
- They did not have any pressure from the market or the consumers of their clients. The reason is that in the supply chain of a product, the logistics part is overlooked since it is not something that it is interesting for the consumer. For example, the consumer can be motivated to buy coffee which comes from sustainable sourcing or farming because it gives value to it, but the logistics part is not something that a consumer gives value to in order to pressure a company about it.

1.2 Macandrews

- Macandrews is a German based freight company. It offers to their clients end to end intermodal services and it is only focused on intermodal transportation.
- They started their business in 1770 and they have a long history in intermodal services.
- They do not count their own CO2 emissions and they do not consider the CO2 emissions released from the transports as their own but as their customer's emissions. However, their business is providing to their customers, options in order to reduce their CO2 emissions through transportation and this is their primary focus.
- In 2003 their business changed to 100% fully intermodal due to the fact that the company was sold. This change contributed to also a change in the company's strategy and services they provided. At that time this change was not influenced by any environmental concerns as the market was not demanding on this subject, however it contributed to the competitive advantage of the company in the freight industry.
- The market changed focus after 2008 when the businesses had to look in more cost effective solutions for their transport in Europe and therefore the intermodal solutions were the answer.
- The customers are using the services of Macandrews firstly because they offer expertise in intermodal and secondly because of the environmental benefit.

- Macandrews argues, that as the market evolved after the crash in 2008, the concern for environmental issues grew and at the current time it is important for a company to care and manage their supply chain more sustainably. Especially in the case of leading companies like Kraft Heinz, Unilever, Procter & Gamble, there are a lot of opportunities to manage more efficiently their supply chain and not only reduce their carbon footprint but also cut costs.
- The only governmental pressure that the company feels is concerning the deep sea transports where there are strict regulations on the type and specification of fuel they use in the ships e.g. Low sulfur fuel. But the company has not entailed any pressure in order to either start tracking their carbon footprint or reducing it which was originated from governmental parties.
- There were cases that the customers stopped using 100% intermodal because of the transit time, as “trucks will always be faster”.
- The company gained market share because of their business that offered only intermodal after 2003 and especially after 2008 that the environmental concerns were more demanding.
- Good reputation was gained as well because of the only intermodal nature of the company.
- No pressure was occurred from their competitors as of 2003 as they offered only intermodal solutions and no pressure to start calculating their own carbon footprint. The same applies to environmental groups and their customers.
- The company recognizes that there is a need in the market for creating more lanes where intermodal is applicable and they have as a goal to start investing more in order to provide this to the market in order to gain more customer satisfaction and thus market share.

1.3 GTS

- The interviewer is the manager director of the Netherlands and a 1/3 shareholder of the company in the Netherlands.
- According to GTS, sustainability becomes more important in terms of the CO2 emissions. GTS believes that intermodal will provide the solution to the carbon emissions and at the same time attract more customers.
- The company does not have at the moment specific sustainability goals however they try to invest as much on intermodal transportation so that they can be as greener as they can and gain a positive market reputation.
- The company started in 1977 in Italy and in 2009 they started their own railway company in Italy and since then they started to focus on intermodal.

- The reason that the company aims for more intermodal services is due to their customer pressure for more environmental transportation. Intermodal would provide reduced CO2 emissions.
- They do track the CO2 emissions of each of the shipments they conduct for their customers on their websites. In addition, when they send offers to their clients they include the CO2 emissions from every freight transport in order for them to make an informed decision on which mode of transportation they will use.
- The company considers the emissions from the transports as their client's emissions and not their own, so in this way they do not have a carbon footprint to offset.
- As they also offer deep sea transportation, the company in total offers 90% intermodal services.
- Their customers choose intermodal firstly and most importantly for the reduced costs in transportation and secondly for the environmental benefit of this choice. The customers, especially the last decade, have been continuously pressuring the freight forwarders for reduced costs in transportation.
- There have been some cases where the customer has stopped or decreased its intermodal use due to higher transit times than unimodal.
- GTS has fully utilized the intermodal transportation in the lines that they provide transport in Europe, thus in those lines it is not possible to increase any further their intermodal services- those lines would be Netherlands, UK, Turkey, Greece to Italy and back. However, the customers are requesting intermodal transportation in other lanes such as Germany to Italy or Scandinavia to Italy, lanes which GTS has not still progressed their services in intermodal. Therefore, they aim at investing more on those lanes in order to gain more market share.
- So far there have been no policies to switch to intermodal, however an incentive has been given as the road taxes have been increased, eventually the transportation only by truck has become more expensive leading the path to intermodal transportation which is more cost effective. In addition, another incentive for intermodal is the fact that the fuel prices, especially the last years, have been increased which also translates to an increased cost of only truck transportation as opposed to rail transportation.
- Competition is considered a major form of pressure for GTS, as the company thrives to be the best company having the bigger customer segment as opposed to their competitors. This pressure, drives GTS to always innovate and progress their business in order to be the best and first in the market.
- Customers are considered by the company a big part of pressure and also the most important stakeholder, as they are the ones who according to their needs the company changes its strategy

and creates new products and services for them. Because of the customer requests the company transformed and became more transparent in regards to costs, transit times, GPS systems and CO2 emissions.

- Since 2009 when the company became the owner of a rail line to Italy and could offer more intermodal solutions, its market share and reputation increased.
- They have not felt pressured to increase their intermodal solutions or offset their CO2 emissions from any environmental groups.
- A barrier for intermodal and international shipments is the lack of a Pan-European legislation in regards to safety systems. So the modes of transportation that ship freight between countries of Europe have to apply to each country's legislation and system.
- Lack of infrastructure and a plan B is also a barrier for having a trustworthy intermodal service. An incident in Germany in September 2017 where the "high speed rail tunnel being built underneath the German town of Rastatt, close to Frankfurt" collapsed, created delays of six weeks in the transport of the cargo as there was no contingent plan ("Tunnel collapse closes key European international route for weeks | Trains Magazine", 2018). These types of incidents create an uncertain environment to the customers of the freight companies and lead them sometimes to avoid intermodal.

1.4 CH Robinson

- CH Robinson is a US 3PL company and is amongst the ten biggest freight providers globally.
- The company is aware of the environmental issues caused by the transport sector and thus it tries to neutralize all the CO2 emissions from the business travels of their employees.
- CH Robinson has no sustainability goals yet but it is in its vision to start having specific sustainability goals and reduce the CO2 of the transports.
- The company calculates the emissions from the transports and they consider these emissions as their customer's emissions. They include the CO2 emissions in the proposals when they send them to their customers.
- Intermodal solutions represent 5% of the total freight transport solutions the company offers.
- The company started offering intermodal solutions because of the market interest (customers, sustainability trend, competition) on intermodal- due to its sustainability positive effects and the cost benefits.

- There were many cases where customers asked for more capacity with intermodal but the company had to decline as they did not have the offer, this led them to include in their future goals investing in intermodal.
- The primary request from the customers in freight transportation is cost and transit time, sustainability is in their least important requests.
- CH Robinson has as a goal to increase their offer on intermodal services 1. Because the market asks for it, 2. Their competition is increasing on this issue, 3. Because of the benefits of cost, capacity and sustainability.
- The company has endured a lot of pressure from the customers and potential customers.
- According to the company there is no pressure from policies and regulations for more sustainable solutions.
- The company did not endure any negative reaction either from customers or regulation or environmental groups on the fact that their intermodal services offered is low.
- CH Robinson has identified as its most important stakeholders their customers, employees, competition and suppliers (of trucks and rail).
- Concerning the barriers to adopt intermodal the company identified 1. When using rail, the stations in many occasions are far from the customer, so eventually it is not cost effective or time effective to transport the cargo with rail but with truck. 2. When using intermodal (rail) there is always one train that starts from the station carrying cargo which has specific capacity while with trucks is more flexible in terms of capacity (as you can use as many as you want) and also the starting time and ending time of the route. 3. When using rail, if the cargo misses the train, it has to wait in many occasions up to days in order to be transported with the next train.
- There are some occasions where customers have stopped using intermodal due to their increased transit time as opposed to using trucks and also due to the lower predictability.

1.5 GEODIS

- Geodis is a Spanish based company which operates in 67 countries and is considered to be amongst the biggest freight providers worldwide.
- The company has as a goal to decrease the emissions of CO2 from the transports but the goal has no specific end date yet.
- Geodis calculates the emissions of CO2 from every transport per each customer and it sends this information to its customers. In addition, the company represents the savings of CO2 emissions from the intermodal services that it provides to its customers.

- Geodis calculates the CO2 emissions from the transport as their customer's emissions, so eventually there is no pressure to deal with the environmental degradation that its transportation causes.
- One of the reasons the company increased its intermodal services, especially the last year, is because at the moment in Europe there is a lack of truck drivers (the customers are pressuring for decreased prices which make truck drivers switch professions in order to gain more money), which not only made the truck freight transportation more expensive but also there is reduced capacity in the market. By increasing the intermodal services that the company offers, it solves the above issues and at the same time the company is achieving its goal of decreasing the CO2 emissions from the transports that it conducts.
- Another reason that Geodis increased and also is planning to increase the intermodal solutions is because there was pressure and request from its customers to do so. Furthermore, an additional reason is that as a company Geodis do care about its carbon footprint and wants to contribute in helping the environment.
- According to Geodis, the customers that ask only for intermodal solutions are the big multinational companies which conduct a lot of transports. Through this way, when the companies request a lot of freight transportation and they switch to intermodal the transport costs decrease together with the environmental impact. Another positive impact of switching to intermodal is the positive reputation that the company gains, which is affected by the marketing campaign that it conducts in order to share this change with its customers.
- Geodis has not received any complaints from customers which use only intermodal. On the contrary, it has received a lot of complaints from the transports that have been conducted by only using trucks due to the delays in transit time due to the increased traffic on the highways.
- One big barrier in order to switch to 100% intermodal is the big investments that are required in order to set up rail lines close to every port that cross all of Europe and stops in every important station in Europe. In addition, the different regulations and safety conditions that have to be met in every different European country makes the transition even more difficult and complicated.
- A practical barrier is the fact that intermodal (rail) is not as flexible as unimodal (truck). Given as an example the incident in September 2017 where the tunnel collapsed near Frankfurt and all of the trains were stuck for six weeks unable to cross the country.
- There was no pressure from competitors that made the company increase its intermodal services, as the company consists to be one of the highest providers of intermodal in Europe. However, the company identifies competition in general to be a pressure point to improve and aim for innovative solutions.

- The company has not endured any pressure from regulations or policies to increase intermodal or decrease CO2 emissions.
- One important change that made the company increase intermodal is the fact that three years ago the company hired a new commerce director who is responsible for innovation and he set up sustainability goals for the company and also pressured the company to increase intermodal (employee- stakeholder pressure).
- The company has gained market share and good reputation since it started offering increased intermodal solutions.
-

1.6 P&O

- The company believes that sustainability is a key element in the transport sector. As at the current moment the capacity in the market is limited, there is a need for innovation in order to solve the capacity problem and also to neutralize the environmental problems caused by the sector. In addition, sustainability is of an ample importance in order to be competitive in the market.
- The company measures and reports the CO2 emissions that it has through the transports that it conducts. In addition, through having innovative trucks and new technologies in place it can measure and limit the CO2 emissions from each transport and each truck.
- The company considers the CO2 emissions as their customer's emissions, therefore no pressure for the company to deal with the environmental degradation.
- The company has specific environmental targets that it needs to meet each year, this was by request of the company's customers in order to show its sustainability improvements.
- When the customers request for a transport solution, the company sends the offer which is accompanied with the CO2 emissions that will be emitted from each type of transport. In case of intermodal, the company promotes it to its customers as is not only the most cost efficient solution but also the most environmentally friendly solution.
- The customers are often skeptical of using intermodal as at the moment it is not completely reliable and flexible as opposed to unimodal transportation. For example, if some shipment losses the train, then the shipment will have to spend days in order to wait for the next available train. This delay, not only causes issues in the supply chain but also unexpected costs in the transportation. In addition, with intermodal the transit time is longer than unimodal which can add up to a 24-hour extension of the overall transit time. However, there are new developments in intermodal transportation and the benefits are multiple than the negatives. The issue is that

many of the customers are “stuck” in the old way of operating transportation and do not take the initiative to use a different approach than unimodal. Unfortunately, an event that gave negative publicity to intermodal and the inflexibility of the service is the collapse of the tunnel in Germany in September 2017 which led many shipments to delay, this publicity did not help on the promotion for intermodal.

- The company started using intermodal since 2008, after the general economic crisis in the US and Europe there was a change in the market and more pressure for cost effective shipments.
- Intermodal transportation consists the 1/3 of total transport services that the company offers.
- Usually the companies that request mostly intermodal are the multinational companies which if they switch from unimodal to intermodal they have a greater cost benefit and secondly environmental benefit.
- The company until now, did not endure any pressure from its customers in order to increase its intermodal services. According to the company this is because, they are at the moment ahead of the market and they are constantly innovating in order to be the best freight forwarder in Europe. However, the company admits that if the relevant pressure is endured, the company will change its strategy.
- The competition is very strong and tough and is a very important source of pressure for the company to keep innovating. The company wants to keep its competitive advantage and therefore it started offering and investing in intermodal.
- There was no pressure to the company from either a governmental side or from pressure groups such as environmental groups.
- There was an incentive and initiative from the internal managerial structure of the company to invest more in intermodal and also dedicate a department of the company just to intermodal transportation and innovation (stakeholder pressure).
- Another incentive to increase the company’s intermodal services is also the lack of drivers in the market, the liability of employing a driver and also the cost of employing a driver. The solution to these issues was intermodal, as it decreases drastically the need of the drivers and also the costs.
- The company since it started using intermodal, it gained market share and also improved its competitive advantage and its reputation. One of the reasons of these benefits is that through intermodal the company can satisfy a broad range of customers, the ones that want to have more capacity or less costs or more environmentally friendlier solutions.
- The company keeps investing in intermodal and thrives to offer in all of its lines the possibility to use intermodal.

- There were some customers that started using intermodal but stopped due to the increased transit time of 24hours more than truck.
- The barriers for Europe to adopt fully intermodal solutions are firstly the increased transit time as opposed to unimodal, as some of the supply chains cannot handle this increase. Another barrier which is also equally important is the fact that even though Europe is one union, there are different regulations and requirements for rail in each country as well as the conditions and the infrastructure for rail in each country differ.

1.7 DB Schenker

- DB Schenker is a leading company in logistics and supply chain management in Europe and based in Germany, started its business in 19th century in Austria.
- As a company its goal is to be the greenest logistics company in Europe and therefore it sets goals of reducing their CO2 emissions. The company has clear and specific targets such as to reduce 30 percent until 2020 of CO2 emissions and 50 percent until 2030 compared to 2006.
- The company calculates the CO2 emissions from each transport that it conducts and it reports them to its clients. When DB Schenker sends the offer to its customers, it also includes the CO2 emissions released from each mode of transportation, in order for the customers to be able to make an informed decision.
- In 2000 the company established a joint venture for rail related logistics services and they started offering intermodal (rail) services.
- The company has endured pressure from its customers to increase intermodal and expand its services to other lanes as well. Due to this pressure, the company has as its goals to start investing in more intermodal solutions.
- The company continuously invests in sustainability as it believes that it is a key element in the transport sector and there are multiple benefits that can be derived from related actions. In addition, according to the shareholders of the company, acting on sustainability and continuously innovating, is one way of maintaining a competitive advantage in the market.
- The company considers the CO2 emissions as their customer's emissions, therefore there is no pressure for the company to deal with the CO2 emissions from the transports.
- There was no pressure to the company from either a governmental side or from pressure groups such as environmental groups.
- Since the company adopted intermodal in 2000, it gained market share and good reputation in the market.

- The barriers that the company recognize in order to have a fully intermodal operation are the different legislations and policies throughout Europe and the lack of financial incentives from governments to invest in new rail lines and rail hubs.

Discussion Results of Carriers

Transport companies results:

For the collection of the data, I conducted interviews with seven different freight transport companies which are either fully active in Europe or have part of their business in Europe. These companies had either their own fleet so they owned their own trucks, ships, trains or they were renting these vehicles in order to provide their services as transport companies. The results of the interview have been categorized in means of gaining value. The value identified and gained by the transport companies enables them to change their strategy and adopt more intermodal solutions. The value gained can be value in terms of financial gain, reputational gain, market share expansion and competitive advantage. In addition, contrary to the value added which can provide an incentive to adopt intermodal, there can also be value loss in the same categories as the value added. It is entirely upon the transport company to recognize what value can be potentially gained or lost and act accordingly.

During my thesis I was not only searching for an answer to my research question but also looking for the answer on which of the contradicting theories stakeholder or shareholder theory stand true in the transport sector. From the data collection that I conducted by extracting information from academic literature, conducting interviews and also from being a participant in daily activities and conversations regarding transportation during my internship and working experience, the conclusion to the question is that the stakeholder theory is the one that is more relevant and applicable to the transport sector. All of the transport companies have changed their strategy and increased their intermodal services because of pressure other than the one coming only from shareholders. In all of the interviews from the transport companies, the response to whether they would increase or if they have increased their intermodal services because of pressure coming from their stakeholders was positive, especially in cases where pressure was coming first from the customers and also from the competitors in the sector. In addition, the transport companies recognized the financial and

market share value derived from keeping their customers satisfied and adhering to their requests for more intermodal. Furthermore, by taking into consideration the recommendations of their employees to start offering intermodal, the companies gained market share and more financial returns (economic value).

The stakeholder theory on firm performance is derived from the value that a firm creates throughout its activities to its stakeholders and from its stakeholders. It is based on the core idea that all of the firm's direct and indirect stakeholders own the power to engage or not to engage with a firm, depending on the value that is created for them from the company's actions and strategy. Furthermore, stakeholders determine their own value criteria. The amount of value the stakeholders receive from the firm, influences whether they choose to engage with the firm or not and how they act when engaged in transactions with the firm. The criteria incorporate not only the tangible value the stakeholders seek, but also the process and distribution of value. According to Barney, 2011 the criteria are the following i. stakeholder value which is linked with goods and services, ii. stakeholder value associated with organizational justice, iii. stakeholder value from affiliation, and iv. stakeholder value associated with perceived opportunity costs and benefits. Many of the early stakeholder theorists provided stakeholder-based strategic management tools. Freeman's (1984) model of the strategic management process started by evaluating the stakeholders, continued with a set of tools for managing stakeholders to facilitate the accomplishment of organizational objectives, and ended with measuring stakeholder satisfaction with organizational outcomes. Harrison and St. John (1994) provided further development of this approach by integrating stakeholder-based perspectives with a variety of other strategic perspectives, based on the theories of industrial organization economics, the resource-based view, cognitive theory, institutional theory, organization theory, transactions cost economics, and agency theory. They used the stakeholder approach as an overarching framework within which traditional approaches operated as strategic tools. Murillo-Luna, Garcés-Ayerbe, and Rivera-Torres (2008) added additional empirical evidence regarding the ability of stakeholders to influence firm decisions. Specifically, they analyzed the influence of stakeholders or "pressure agents" on the strategies adopted by 240 industrial firms as they responded to environmental requirements. They classified response patterns based on the level of proactivity of firms, as indicated by the scope of their environmental objectives and their allocation of internal resources. The results illustrated that stakeholders had an impact on four response patterns the firms adopted. A related study, found that aspects of the general business environment of 134 service firms in the ski industry was moderated by the relationship between the stakeholder integration capability and their environmental strategies (Rueda-Manzanares, Aragón-Correa, and Sharma 2008).

Integrating the stakeholder's theory to freight transportation and intermodal services, the role of each stakeholder of intermodal transportation including from the final road leg, the intermodal terminal operators, the railway infrastructure managers and railway train operators etc. is crucial for the development and success of intermodal (Evers et al., 2000). Freight Forwarders have the responsibility of organizing correct, uninterrupted and sustainable intermodal transport chain from beginning until end. It is also in their responsibilities to make future plans to construct special intermodal terminals and railway routes to ensure modal shift towards rail (Evers et al., 2000). Relationships have a strong value on stakeholders' ability to operate in the market. Relationships built on a foundation of trust, collaboration, commitment and accountability are recognized as opportunities of creating value in the market and thus in the intermodal service. Stakeholders which are willing to commit and be accountable for service level, for example, would facilitate their customer (a freight forwarder) having enough confidence to offer the same in return to their customer (a cargo owner)—an offering which would differentiate them in the market and therefore would gain market share. Strong partnerships appear to be successful when there is a clear alignment on the roles and responsibilities and a system for checks and balances of the process are established. Furthermore, there are incentives or rewards in both directions for stakeholders' participation. Examples of unwillingness to commit and be accountable and favoritism were offered by interviewees and perceived negatively in terms of their effect on hinterland transportation.

The pressure to increase intermodal comes mainly due to external and practical reasons. With the use of intermodal, there will be a greater capacity for cargo movement and less need for drivers as opposed to using trucks. Since 2017, there has been a shortage of truck drivers which led to the prices of truck transportation to rise. So the change towards more intermodal services comes from also a financial need, as from one side the costs of truck transport has increased and from the other side the customers of the transport companies are pressuring for decreased transportation costs. Furthermore, the change towards intermodal will contribute to reduced congestion in the railways, which at the moment is an important issue for freight forwarders as it contributes to an uncertain transit time and unreliability in their service. In addition, The Electronic Logging Device (ELD) mandate—which requires the trucks to install devices that track the driving time—is steadily approaching and an important number of truckers still have denied to comply. As of October 2017, nearly one million truck drivers have not installed ELDs while many are still strongly against e-logs altogether (Bektas & Crainic, 2007). Many of these truckers have even threatened to exit the

transport industry once the mandate goes into effect. If the threats go into effect along with the current truck driver shortage in Europe it will result to even decreased available truck capacity in Europe in 2019. Taking into consideration the above, the prediction is that the ELD mandate will cause a change towards intermodal transportation. "Transport Topics" foresees that "shippers expect to put more freight on railroads next year," because of the concern that the ELD mandate will reduce the capacity of trucks on the roads (Bektas & Crainic, 2007). Already, freight forwarders have started to switch from having mainly truck transportation services to railway in order to avoid trucking rate increases. Whether or not this will constitute a temporary shift in the market, intermodal transportation is expected to increase in the near future as it consists the answer to all of the above issues.

Intermodal transportation refers to the transportation of people or freight, from their origin to their destination by at least two transportation modes. The core idea of intermodal transportation is to consolidate loads for efficient long-haul transportation, while taking advantage the efficiency of local pickup and delivery operations by truck. Freight intermodal transportation is often equated to moving containers through multimodal chains (Crainic and Kim,2007). Goods have to arrive without loss, damages or delays and it is at points of interchange that these are most likely to occur. Although, the goods are not physically moved from the unit of carriage it is an important concept to pay attention to. Potentially congestion can be reduced by modifying the supply chain to ship freight from the port and ship containers to an inland port facility via rail. Movement by rail reduces the number of trucks from highways thereby it reduces the amount of roadway congestion (Crainic and Kim,2007). According to the American Association of Railroad, freight trains are capable of carrying loads equivalent of 280 trucks in a single haul making space for 1,000 or more passenger automobiles on the roads. Freight rail advocates argue that increased intermodal services can significantly reduce highway infrastructure maintenance and expansion costs. In addition to reducing infrastructure costs, decreased congestion could result in billions worth of savings in travel time and fuel consumption which will eventually lead to reduced carbon emissions in the environment (Crainic and Kim,2007).

All of the transport companies recognized as their direct stakeholders 1. Their customers, 2. Their employees, 3. Their competitors and 4. The government which also comprised of the legislation. According to Taylor (2005), the major stakeholders who are shaping urban freight distribution are the shippers (companies who produce and sell products which need to be shipped), the customers

(people who consume the products that the shippers produce and sell), freight forwarders (the companies which arrange the transportation of the goods that the shippers produce and sell) and regulators (legislation which is shaped according to each country's transportation infrastructure and system). The most important relation is between the shippers and the customers, with freight forwarders acting on the shippers' (beneficiary cargo owners) behalf. The relationship between the shippers and the freight forwarders is crucial, as both of them strive to satisfy consumers' needs. Regulators are trying to set rules under which urban freight distribution takes place with the multi-perspective and at times contradictory aim of satisfying their constituents as well as commercial, transport and distribution interests (Taylor ,2005). As each stakeholder has its own objectives and interests to satisfy, this constitutes a difficult process for urban residents to assess the issues that relate to freight transportation and thus they can form advocacy groups which can deal with related issues such as congestion on the roads due to multiple trucks, quality of life and environment, urban development projects, etc. Under normal circumstances, the relations between the stakeholders tend to be neutral. However, when a challenge in city logistics emerges, the relationships between stakeholders is likely to change (Taylor ,2005). Due to the limited space, the density and the complexity of the urban landscape, it is usual that conflicts of interests between the stakeholders may rise. This is caused as the externalities imposed by urban freight forwarders on local communities for projects are no longer acceptable by residents and regulators. When conflicts arise between the residents and freight forwarders over specific issues triggering NIMBY (Not in my backyard) responses, then regulators intervene and attempt to stop a development project (e.g. a new distribution center) or to intensely regulate an activity (e.g. access to a commercial district or parking). Having to deal with such situation can contribute to reputational damage for the transport companies and also increased governmental control which can result to lost operation freedom for the company and therefore lost value.

On the other hand, usually achieved when additional mitigation strategies are added to a project (change in design) or to modes of operation. It is agreed through a consensus that the existing capacity is to be used and shared more rationally. Public-private partnerships are examples where private goals and public interests can be mitigated. Although, shippers and freight forwarders bid to access urban real estate and facilities for their operations. Freight forwarders also compete to attract and retain customers over their freight distribution services. Commercial and residential developers are also competing within the land use zoning framework for real estate projects (Taylor ,2005).

All of the transport companies did not recognize the government or legislation or any policies in place as a pressure in order to change their services into more sustainable or converting to 100% fully intermodal services. On the contrary all of the companies recognized the governmental part as a barrier to increase their intermodal services. Rather for the European Union to act as one, there are different regulations in place that differ from country to country and this makes the change towards fully intermodal more difficult.

While the last five years have seen an explosion of papers on intermodal transport and intermodal terminals, the contribution of regulation for the expansion of intermodal has been overseen. In part, this is due to the fact that the rail infrastructure tends to have fewer implications than ports, with simpler schemes of governance and less governmental involvement (Monios, 2015). The governmental “eye” usually is more present in the start-up phase by using public money to attract a private operator into the market. After this phase there is an assumption that the site will be run fully by private operators with no further government involvement (although there are exceptions, as discussed in this paper).

The access to multimodal terminals lies in the center of the discussion regarding modal shift. Due to the wide-meshed network of intermodal terminals in Europe, intermodal can be only competitive for long distance transport services. Only in this case the benefits of intermodal can show their full potential. Intermodal transportation compared to unimodal can have an advantage of up to 60% reduced carbon emissions (IFEU and SGKV, 2002). However, a shift of transport demand to rail or ship is not possible for all transport activities at the moment and for this issue EU has to take immediate action in order to facilitate a smooth and successful change towards a more sustainable future. Until now, there is a limited access to direct railway and waterway network. In fact, this access has decreased significantly in the last twenty years. Therefore, direct train or ship services constitute a rare case. Pre- and post-transportation by truck is needed at the moment in order to provide a door to door freight transport service. As a result, access to multimodal terminals is an important aspect when EU governmental institutions plan a modal shift (Monios, 2015). However, as there is a forecast by the EU that the intermodal transportation will be the main transportation mode in the near future, in order to deal successfully with the growth of intermodal and for the railway companies to be ready to adapt and competitive products, it is of ample importance that there is a sufficient infrastructure in EU for this modal change which will be also accompanied with the appropriate legislation. In the White Papers by EU, there is a specific part which has identified the appropriate investments and stakeholder participants in this modal shift (government authorities, railway companies, operators, infrastructure management) that need to take action with

specific measures indicated in the White Papers in order for the shift to be successful. The measures range from investments in rail and terminal infrastructure, technical-operational improvements, to the fostering of the working procedures of all the stakeholders in combined transport rail-road.

The transport companies recognize that there is a need for a greater action in order to produce less CO₂ emissions but on one side there no financial or reputational added value in order full responsibility for the CO₂ emissions that they omit and and on the other side there is no risk or financial or reputational value lost. In part, that is because the CO₂ emissions that they produce from the transportations, they do not consider them as their own but as the customer's that hired them for the transportation. So eventually, when speaking of CO₂ emissions, all of the transport companies they show that they do not have any.

The total growth of demand for international transport services accounted for the 49% of total CO₂ emissions. The largest change in emissions was due to international transportation services related emissions, but this was also offset by the emission efficiency and the Leontief effect, resulting in an eventual decrease in total emissions (Young Yoon et al, 2018). For example, in the case of Asia, which is the second highest carbon emitter, the emissions are high, but having implemented measures to tackle this issue, the final emissions are drastically reduced eventually. In addition, the United States also experienced an increase of carbon emissions od 2 mt during 2004–2007 to about 5 mt over 2007–2011. The main factor responsible for the for the high emissions is international transportation services, which accounts for 56% in 2004–2007 and 64% in 2007–2011(Young Yoon et al, 2018).

Reducing the carbon emissions in the the transportation sector is vital in order to accomplish climate objectives for cities and countries. For example, the city of Dresden in Germany, has as a goal to reduce its CO₂ emissions by 40% in 2030 compared to the ones of 2005. This constitutes for a 1.5-million-ton reduction. For this to be possible, the transportation sector needs to participate to the initiatives for the reductions of carbon emissions. In addition, actions by policies and governmental institutions need to be in place. Approximately 51% of the actions include investing in a range of sustainable transportation modes in order to be able to offer multi-modal, compact transport-oriented cities and regions. To achieve these goals, there is need for an increased focus on providing an integrated multimodal network by improving the rail services, developing reserved lanes and creating more infrastructure for intermodal hubs (International Association of Public Transport, 2014).

The biggest pressure that the transport companies endure comes from their competitors. In order to win a greater value through obtaining more market share and keeping or gaining the competitive advantage, the transport companies tend to compete with the other transport companies regarding their innovative services, their prices, their capacity and their level of service.

The institutional change of competitive conditions for the transport sector benefit actors from Eastern Europe that have substantial cost advantages compared to the rest of EU. The advantages of the transport companies in Western Europe are specialization and reduced costs. The market of logistics and road freight transport is organized as a hierarchy of specialized third party logistics operators and general freight forwarders, these actors are huge and outsource often road freight transport to smaller actors (Cui and Hertz, 2011). Haulers from West European countries endure pressure as they compete with transport companies from East that operate with different and lower cost structure, especially in the case of employee labor costs. In general, EU12, regarding the transport costs offer lower prices than EU15, i.e. EU Member States before the 2004 enlargement.

In the sector of freight transportation competition levels are very high. This sector has a low entry and exit barriers especially in regards to the road freight, as well as a competition which is almost completely based on the pricing of the service offered. The above result a sector which is comprised of a high number of small companies and a limited number of rather large firms which operate with minimum benefit margins. The economic crisis in the EU the last decade, has further increased the competition pressures between companies. The issue is that the transport services mainly differ through price, while innovative products contribute only to a small fragment of the overall turnover of the sector (about 20%) (Grant, 2013; Anderson et al., 2006; Anderson et al., 2010). Therefore, transport companies focus mainly on strategies which will decrease their costs while have lower incentives to invest in R&D (European Commission, 2009). Finally, competition in the freight market can also vary depending in the transport mode and also in the carriers. The main competition parameters in a free market are the freight price and the freight quality. The freight quality is distinguished by factors which include the transport time, capacity of cargo, delivery date reliability, frequency of any scheduled services, the risk of damage to goods in transit, the flexibility of the transport mode plus customer service (Meixell & Norbis, 2008).

All of the transport companies admitted that since they either adopted or they increased their intermodal services, they gained value in terms of reputation and market share.

Market experts have agreed and concluded that intermodal transport is likely to have a high increase than unimodal transportation due to major enhancements in rail and intermodal transport such as improved quality, increased capacity of cargo, reduced pricing compared to unimodal and reduced CO2 emissions (Nikolova, 2009). On the other hand, there have been signs that unimodal transportation will have a lower interest from freight forwarders as there will be increased control of trucks on the roads and taxes which will be connected to road infrastructure usage. In addition, in its White Paper (Commission of European Communities, 2001), the European Commission concludes that there is a forecast for an increase in intra-European Transport by all modes of approximately 38% during the period of the next ten years. The forecast illustrates a growth ranging from 8% to 15% in the rail freight's market share by the year 2020. In order to be able to meet this expectation successfully, an important number of freight forwarder companies have implemented an aggressive strategy where intermodal transport is at the core. Contrary to the general trend of only rail freight transportation, rail-road intermodal transport more than doubled between the years of 1986 and 2000 - attaining 180 million tons of cargo (Nikolova, 2009). Therefore, the expectations towards the intermodal transportation system is high and quite important as it will be a significant part in the modal shift that is needed to sustain the mobility, the environment and the competitiveness of the European economy.

The kind of pressure that the transport companies have suffered in order to increase their intermodal services is firstly because it would increase their capacity for transport, it would simultaneously lower the cost of transport and last because it would contribute to better sustainability by lowering the CO2 emissions. In addition, if they do not start complying with the current trend and need for intermodal they are threatened by their customers exit strategy, which will result in a combined value lost of both market share and financial loss. On the contrary if they increase their intermodal services, not only will they gain value through good reputation in the market but they will also keep their customers satisfied which can in long term add value to their business.

Railways and highways both have an important role to fulfill while they tend to compete in different but partly overlapping market segments. Sustaining or growing the freight rail mode share for long-distance transportation is at the core of the strategy for a potentially more environmentally sector. By improving the efficiency of freight logistics and supply chains, reducing empty backhauls, and expanding the market for intermodal freight will result in a sector which will have lower carbon

emissions, increased cargo capacity combined with reduced transportation costs and risks. In addition, only in the case of maximizing the efficiency of each mode of transportation which is included in intermodal will guarantee a punctual, reliable, and flexible as well as sustainable freight transportation. Freight forwarders who at the moment focus on only unimodal truck transportation, cannot expect to reach the full potential of cost and energy savings if they do not start investing in intermodal transportation. Without this adaptation of intermodal services, they will face risks of losing customers when shippers will become increasingly aware of the environmental costs related to transportation (Rodrigue et al,2001).

There is no pressure (or incentives) from NGOs or national parties for the carriers to offer more intermodal to the market.

Governments and the NGOs are called upon to reorganize their priorities and important role to facilitate an easier path for more intermodal services. Some of the new projects that the government can launch include making an arrangement with the private sector in financing, constructing and operating more intermodal facilities to the market. Additionally, at the same time, various governments are making proposals for making private some of the public transportation facilities such as the port and airports in order to attract more investments and (Ambrosino et al., 2016).

Intermodal transportation has been in the center of the agenda of EU, as it is important to balance the constant increasing freight transport volumes, the increased congestion on the roads and the environmental issue that is caused from the carbon emissions of all the freight transportation (Bontekoning and Priemus, 2004). Intermodal transportation can offer all of the advantages of all the modes of transportation combined in one integrated transport chain and at the same time can offer decreased transportation costs and carbon emissions (Rodrigue et al., 2009). One of the most important goals of European union is to facilitate the change towards more intermodal transportation and thus the successful advocacy of intermodal services rests in the heart of actions in order to achieve the successful change (Tsamboulas et al., 2007). Therefore, intermodal transport has been advocated through policies that are discussed at all the political levels, however, the increase of intermodal has not reached the desired levels until that moment, which suggests that the policies in place in favor of intermodal have failed.

Kraft Heinz Results

In order to answer to my research question, I conducted interviews within Kraft Heinz European Supply Chain. The interviews were conducted with the transport planner of Europe, the European Logistics HUB manager for the European supply chain and the respective Regional Logistics managers from all the seven Business Units of KHC in Europe. According to the results of the interviews there are several strategies which Kraft Heinz can adopt in order either to pressure the transport companies with the threat of losing value (financial value, reputational value and market share value) or to provide incentives to the transport companies in order to offer increased intermodal solutions (long term financial value and market share value)

All of the interviewees from KH were fully informed on sustainability issues and especially the ones that are related to logistics. They do believe that sustainability is a topic that will capture the attention of the companies in the shortcoming future. However, the current concentration and focus of the companies and especially of Kraft Heinz is not yet entirely on sustainability. The pressure from the public is not that strong at the moment to pressure the companies to change their strategy rapidly into more environmentally friendly. The consumers that are aware and concerned of the environmental issues caused by the FMCG companies, they usually oversee the impact of logistics in the supply chain, and thus there is no profound reaction from the public to address the issue.

Flammer (2013) emphasizes that awareness of sustainability issues by corporations and people facilitate the formation of a favorable microeconomic environment that leads to a productive economy. If the clients are fully informed and aware of the sustainability issues, they would be demanding for clear and correct rules from the companies and adherence to environmental concerns. The demanding and conscious customer, for example, will consider whether the company has respected environmental laws, whether it has an adequate policy with its employees or if the company generates quality products amongst other things. This behavior of the consumer is demanding a new posture for the companies and those that disregard this new environment will start losing competitiveness and therefore will lose the company's biggest value which are the customers. The role of companies is no longer limited to the generation of products and services, society expects more and values those that develop clear social investment strategies such as sustainable transport operations. As argued by Stead (2014), the community is an essential stakeholder for a businesses' strategic formulation, no longer just a potential consumer market. The consumer already begins to prioritize those companies that invest in social actions and that are concerned with allying their image to a cause of public interest. When companies start to develop

social projects in partnership with the community, contributing financial or human resources, social responsibility emerges as an essential factor, adding value to the company brand and providing to a better quality of life for the poor (Schaltegger, Lüdeke-Freund & Hansen, 2012). The excess of competition in the business world can cause companies to offer products with little differentiation, and social responsibility can be an opportunity to differentiate products, services, and brands (Grayson & Hodges, 2017). Customers are becoming more cautious and demanding, aware of the importance of consuming products that do not harm the environment, valuing companies prioritize a relationship based on ethics with its stakeholders. According to Flammer (2013), studies show that when the product's price and quality are similar, the consumer chooses for that product whose company indulges in some socially encouraged actions such as sustainable production. However, as illustrated from the interviews the transportation of products and the negative role that it plays to climate change, is not yet an attention point from the customers of FMCG companies. Therefore, there is not no pressure towards the companies in order create policies and set up goals which will target the issue. This is also supported by Guo Et.al. which illustrated that there are two stages of the FMCG industry where greenhouse gas is generated and also are linked to international trade (Guo, Peeta, & Mannering, 2016). The first one, is during the production of the goods for trade and the second, is during the transportation of the goods from the manufacturers to the consumers or to the trade partners (Guo, Peeta, & Mannering, 2016). Various literature papers have researched the gas emissions that are connected to the production of goods at the industry, however when the goods get transported through different countries with varying intensities of gas emission is a topic which has noticeable fewer research papers which investigate the issue. In addition, in general until recently there has been little or effort to control the gas emissions from the logistics part of FMCG companies. (Guo, Peeta, & Mannering, 2016).

Guo et. (2016) argue that international transportation has been overlooked by most of the research on trade and the climate change. In addition, they suggest that the neglect maybe due to having insufficient data and therefore could not make any concrete conclusions, furthermore there is also the suggestion that this negligence may also be because there is the assumption that the overall international transportation of goods represents only a minor proportion of has emissions compared to the overall emissions by the whole FMCG international trade (Guo, Peeta, & Mannering, 2016).

Guo et al (2016), further illustrate that despite the fact that transportation maybe be considered to be only a small part of the overall gas emissions produced by international trade, still they form eventually a large proportion of trade-related gas emissions. Globally, over seventy-five percent of the total gas emissions are because of the activities involved in international transportation and the transport equipment, machinery used in trade goods, and the electronic apparatus. All this evidence

clearly show the urgent need to consider not only the production but also the transportation during the designing of policies to control greenhouse gas emission globally (Guo, Peeta, & Mannering, 2016).

The company was created by the merger of Kraft and Heinz labels in 2015. Since then, the strategy of the company is to reduce the costs, so they can invest as much capital as possible to grow the brand. This is also embedded in the original vision of the company “to be the best food company, growing a better world”. The results of this strategy, however, have also led the different departments to follow more efficient procedures and to rethink the status quo of the operations leading the company eventually to not only save costs but also save energy, CO₂emissions, and material use. Correctly, in the area of logistics within the company reducing costs translates to reduce unnecessary transport, so using as fewer trucks as possible for transporting the goods or planning more efficient transportation within the distribution centers to avoid empty vehicles on the roads. In the end, even though sustainability is not a part of the current strategy of the company, it proved to be an unexpected positive result of an approach that was opting only for financial gains.

Agamez-Arias and Moyano-Fuentes (2017) state that efficiency for a long time has been discussed to be an important part of climate policy since it provides cost-effective energy savings despite the nonexistence of greenhouse gas minimization objectives. Therefore, the reduction of CO₂ emissions linked with the use of power is another added advantage to the already existing cost-effective strategy. Efficiency has been considered to be a way of providing at least more than two broad benefits for the protection of climate. The first benefit is the use of energy by the use of non-emitting technologies or strategies that lower the average emission rate (Agamez-Arias and Moyano-Fuentes, 2017) while the second benefit is directly linked to the first benefit and it refers to the reduction of the cost of achieving the goals of climate change management (Agamez-Arias and Moyano-Fuentes, 2017).

The company, at the moment, does not have clear environmental targets concerning any sustainability issues including the CO₂ emissions. In fact, until 2017 there was no strategy other than growing financially and gaining market share. However, in 2017 in a failed attempt for the company to acquire Unilever in a hostile takeover the company lost part of its reputation. During that year, to restore part of the lost reputation, they announced their CFR strategy. So far, that is the only big step of the company towards creating value which excludes purely financial means.

Social responsibility focuses on the value that it creates for the company's business chain and its stakeholders. In this dimension, the company targets its social actions on ethical principles and

values and reinforces its relationships with its customers, suppliers, shareholders, partners, government, society and community (Flammer, 2013). From the moment a company acquires relevance within its sector, be it industrial, commercial or services, there are numerous key factors and events of vital importance that can condition its future short or long-term success. In addition, there may be multiple occasions that can cause an anomalous situation beyond the company's control which can result to be an potential crisis. Risks may be attributed to: unforeseen or accidental circumstances or foreseeable events derivable in short-term crises, due to abrupt changes in economic trends, capable of affecting both the social, labor and business sectors and in turn transforming them into a conjectural crisis (Regester & Larkin, 2008). Also, and depending on the degree of importance of the event and how the company acts with it, these crises could seriously affect the same company and even its environment or the society in which it operates. One of the biggest impediments to business success is negative publicity that can be caused by unethical practice such as hostile takeovers (Zhu & Chang, 2013). When the image and reputation of a company are threatened or compromised, its relationships with associated stakeholders suffer significant consequences. To respond to the crisis or bad reputation the business may engage in activities that can redeem its reputation through restorative strategies. This can be recognized in the situation where Kraft Heinz undertook a CFR strategy in 2017 to redeem the company from the bad reputation from the failed Unilever hostile takeover.

The logistics department of Kraft Heinz has no specific CO2 reduction targets. However, some of the suppliers of the company (the transport companies) have set specific environmental goals and therefore they have to measure the impact and the savings of emissions with each transport that they conduct for the company. Thus, Kraft Heinz has also the responsibility to regulate the emissions and the carbon savings and when is possible also to act to reduce them, as is influenced and pressured by its suppliers. Eventually, even though the company itself has no internal environmental targets and strategies, it is compelled to act on the issues by its suppliers.

The concept behind sustainable development is slowly getting recognized, though it is a new idea for the majority of the businesses (Wang, Liu, Choi & Yue, 2015). For most, the idea is still an abstract and a mere theory. Protecting the business capital is an accepted principle. However, business owners have failed to apply the same protection to the environment and the society. For sustainable development to meet its goals, the idea of environmental conservation has to be integrated within the planning of the business enterprise. And for this to happen, the idea has to get articulated in a manner which is familiar to the business (Wang et al., 2015).

Business depends on both human and natural resources. However, the economic activities should not affect or destroy the natural resources of the earth (Wang et al., 2015). As much as the idea of having sustainable development goals is being advocated for, the concept cannot get achieved by a single enterprise. Every stakeholder within the confines of the global economy has to comply to the idea. This is because it has been noticed that economic growth is a contributor to environmental problems (Wang et al., 2015).

Understanding the relationships between companies is one of the most important ideas in the business world as it establishes the strategies undertaken by them and it can also influence and determine the value creation between buyers and suppliers (Sarkis, Gonzalez-Torre & Adenso-Diaz, 2010).

There are several changes that occur worldwide, which raise the level of uncertainty and competition from the markets, demanding a new position on the part of companies to participate in set interest practices. The realization of these changes allows companies to adopt specific requirements that enable them to have stable business relationships with their stakeholders. If the suppliers in order to engage in business relationships with the customers, demand services with unique specifications such as minimal CO2 emission in transport, the company must adhere to them or stand to lose the good relationship with its stakeholder-supplier (Berntsen & Fuglestedt, 2008). In this regard, the suppliers exert some authority and can pressure companies to adopt such measures as embrace intermodal transport and reduce the carbon emissions of the conducted transports. According to the value chain theory and the firm perspective of chain performance improvements are only possible when establishing long-term commitments with a business's key suppliers (Chiu, Wang, Fang & Huang, 2014).

The company started to get interested and to increase the use of intermodal since 2017. The main reason was that they wanted to have an increased capacity to move their goods and also to decrease the overall cost of transporting them. Also, at that time in Europe, started a crisis in the transportation business by having fewer offers of truck drivers. This led to having a limited capacity for trucks and also raised the prices of truck transportation immediately. The move towards more intermodal transportation instead of unimodal (only vehicle) was inevitable. The intermodal transit was the solution to all the above issues and at the same time offered an extra advantage that the company was not prioritizing at that time, which was fewer carbon emissions.

According to several studies that have been conducted on the reasons of choosing different transport services, the most important factor is cost (Hansen et al., 2012). However, in some occasions cost has to be traded off with factors such as capacity, punctuality and availability. In

addition, other important characteristics that influence the transport mode decision is the average transit time and the delivery time reliability. Of course, the mode transit time's importance can change according to the cargo that it transports. In cases, where goods have a short expiration date and their quality is decaying with time such as meat, fish etc. the transit time is the number one priority when choosing a mode of transportation (Hansen et al., 2012).

The criteria upon which the customer will choose the transport mode for shipping the goods are directly dependent to the industry of the customer (Hansen et al., 2012). To give an example, the transit time and the reliability of it is more important than the transport costs in cases of short lived goods while for industries which produce products which are less time sensitive and in big quantities, cost is the priority. Regardless of the industry though, capacity and availability are always influencing the decision of the customer on the transportation mode (Hansen et al., 2012).

The company, however, cannot afford to adopt a fully intermodal transportation system as there are still some implications which cause issues in the supply chain. Even though intermodal is reliable regarding capacity and collecting the goods for the transportation, once the products are collected, there is a challenge that the goods will take a lot longer to be delivered than using trucks. In addition, when issues occur when using intermodal they are usually harder to fix than when the company uses road transportation. For example, if there is a load from U.K. to the Netherlands and it is being transferred with intermodal, usually the cargo has to wait for the schedule of the barge and then wait for the program of the vessel. If there are any implications and the load loses either the barge or the vessel loading, it means that it will have to wait for the other vessel which might be one week of difference. The advantage of trucks is there are no such implications in the process. When the cargo is loaded, then it is inevitable that it is on its way to the final destination and the transport planner does not have to count on those uncertainties along the way. Besides, there are some difficulties from the company's side which can set intermodal not to be financially competitive. The location of the factory (origin of transportation) and the warehouse (destination of shipment) can influence the final price of the traffic. For example, the lane from Poland to the Netherlands where the factory is far from a train hub, the truck which will pick up the products will have to drive plenty of kilometers to reach the train station. After that, the train would take a short distance into the Netherlands and then another truck would be needed to drive from the train hub to the warehouse. Eventually, it is cheaper and less time to consume to choose unimodal in this case (barriers to adopt intermodal).

Monios (2016) concludes that the general barrier for the adoption of intermodal transportation is the lack of an integrated system which can be used to meet the customer's standards. Monios (2016) states that there is a great need for all the policy sectors and policy levels in working towards a common direction. Working in harmony is the only solution to adopting the intermodal transportation system (Monios, 2016).

More specific barriers to the adoption of intermodal transport system are related to finding the right prices and capacity improvement of the alternative transportation systems (Monios, 2016). Here synergies are to be used as pricing might augment the probabilities of obtaining infrastructural funds. Even so, there is likelihood that it will be necessary to re-allocate funding within transport, from road transport to rail and waterborne transport. The quality of the services offered by the intermodal, with regards to the flexibility, its punctuality and the transportation time should be improved (Monios, 2016). Increasing the intermodal capacity and its maintenance would greatly help, but the operators of the multimodal transport system also need to adopt more effective policies that are customer friendly. However, there are still many barriers which are critical, such as increasing the local perspective against the proposed intermodal infrastructural system and the attitudes of some of the authorities which think that the challenges are to be solved by the market (Monios, 2016).

The Intermodal Choice Criteria regarding the size of a company, geographic location, and distance between terminals, volumes, and Frequency of shipments including the perception of Intermodal Transport are also among the impediments to adoption of the practice. The main advantage of intermodal transport is precipitated upon the possibility of combining the inherent benefits of the different modes of transportation involved.

There is a reduction in social costs from atmospheric and acoustic pollution, energy consumption and raw materials and road safety. Also, according to Montreuil (2011), intermodal transportation leads to the reduction of infrastructure costs by reduction of traffic by road, reduction of congestion, and better use of the current capacities of transport systems. However, if any of the internal factors such as company size or location does not cause a reduction in costs or proves financially difficult, companies are most likely to avoid intermodal transportation.

Countries have been forced to create competitive advantages to face international markets, with the formation of the economic blocks and the possible disappearance or reduction of trade barriers worldwide. The products that are consumed in the internal and external market are those capable of competing in favorable conditions without considering the place from which come from. The desire by transport companies to conform to the market regardless of the existing challenges ultimately influence their decisions to offer intermodal transportation services.

The company is not satisfied with the amount of intermodal offered in the market. At the moment in the entire transportation that they conduct in Europe, they use intermodal for approximately half of them. However, they are pressuring the market for more intermodal solutions and also for reduced transportation prices. In addition to the pressure for more and cheaper intermodal, they also compel the carriers to solve the reliability issues for intermodal. The pressure, depending on the line and how important and significant for their operations if the company for the carriers is that in the case that the carriers do not comply with the company's constant request and pressure, then the company will drop the contract and search for another carrier.

In the case where the customer is not satisfied with the product or the services of its supplier, there are many ways through which the customer can express the disappointment and the need for change (Freeman, 2010). The most effective but also harsh way is the exit strategy. When the customer is not satisfied by the supplier, and the supplier is not active enough to change in order to satisfy the customer more, then the customer can immediately stop the transaction with the supplier and start engaging with a supplier which is more sensitive to the customer's needs (Freeman, 2010). This strategy is one of the most popular ways of pressure towards suppliers, as it can immediately effect the success of the business by reducing the economic value of the company. The suppliers must adhere to the customers and realize the value that the customers add on their business such as financial, reputational etc.

Also, in the case the company does not represent a significant part for the carrier's operation, so the company does not hold negotiation power, then they form coalitions with other FMCG companies, to increase their negotiation power and intensify the pressure for the carrier.

William A. Gamson is considered to be amongst the "fathers" of the coalition theory (Bolduc and Lemieux, 1992). Gamson published in 1961 an article which illustrated coalitions as formations within groups of individuals and companies which reach for the same goals. Gamson then went further to propose four characteristics upon which the coalitions would be successful or not as well as the initial formation of them, such as which parties will engage in them (O'Neil et al., 1997).

The first parameter consists of the allocation of the initial resources. Each participant of the coalition, can contribute different value to the coalition such as information, prestige, important connections, wealth, technology etc. The resources contributed by each of the participant are an important asset of the coalition as they will contribute to the importance of the coalition and will be one of the most important factors of success (O'Neil et al., 1997). The second parameter consists of

the value that the participants expect to gain from the coalition. In principle, the participants engage in coalitions in order to gain value from activities that normally they would not gain value from when acting individually (O'Neil et al., 1997). The third parameter is the 'non-utilitarian preferences' where it illustrates each individual's member of the coalition. This parameter relates to each participant's bias to engage with any of the other participants regardless of the level of resource control the participant might own. The last parameter is the 'elective decision point'. Through this parameter the coalition will control the decision making of the group and also the allocation of the resources of the coalition. In most of the cases, the rule of the majority is the principle way of acting (O'Neil et al., 1997).

However, for the carrier to increase capacity of intermodal it requires a substantial investment. Thus either the customer must represent an essential part in their operation (so the carrier will lose value (financial or reputational) or the carrier will make a deal (incentive value) with the customer to offer more intermodal in exchange for a permanent or a long-term contract with them to ensure the success of the investment.

Companies across the world need to handle the daily fever of determining the best method of getting their products to reach their targeted clients (Fanti, Iacobellis, Mangini, Precchiazzi & Ukovich, 2017, September). However, when it comes to decisions when big investments have to be made in order to keep the customers satisfied, the companies need to measure the impact of that investment in their business and the return of the investment that they will have. The suppliers need to measure if the value gained from investing, will be sufficient enough to cover the costs and the liability of the investment (Freeman, 2010). If the value gained from the investment in terms of financial gains, reputational gains and market share is satisfactory then they will make the change. Otherwise, if the transport company evaluates that the incentives are not high enough and also the customer does not represent an important part of the business then the investment will not be made.

There is no pressure of reputational risk involved from the companies to the carriers in case they do not offer more intermodal.

In which way the reputation of a company is regarded by the stakeholders, can have an immediate influence on the short or long-term success of the company (Cohen-Rosenthal & Musnikow, 2017). The financial value and the advancement of the company can be affected in a positive or negative way according to the reputation of the company in the market. Moreover, potential talent can get attracted or repelled based on the status of the company, in that case the company can again gain

value by attracting employees with advanced skills and knowledge to advance the business or can lose them. There can also be fluctuation in the investments along with the various corporation connections with government officials from the different counties of operation (Cohen-Rosenthal & Musnikow, 2017).

From a survey that was conducted by Cohen-Rosenthal & Musnikow (2017) it was illustrated that when a company has a positive reputation, is more likely to attract investments and gain in the future more market share than a company with a negative reputation. Especially in the current times, where social media and internet have a strong influence on opinions, it is really important that companies manage properly their reputation.

Companies nowadays have grown to relate their enterprise's reputation to their strategic outcome matters, as reputation represents an important source of value to the company and its business (Cohen-Rosenthal & Musnikow, 2017).

Recommendations

Taking into consideration the results of the interviews and the literature review, the below recommendations should be taken into account in order to have increased intermodal solutions offered in the future. The below table illustrates the recommendations according to the category they concern the most, the actual recommendation, the description of the recommendation which explains the according action, in which fields the recommendation adds value, the priority of the recommendation either medium or high in order to ensure increased intermodal services in the future, as well as the actor which should act on behalf of this recommendation. All of the recommendations are based upon the potential value added or lost from each activity. The value added or lost can be in terms of reputation, market share, financial, strategic and technological value.

Category	Recommendation	Description	Value	Priority	Actor
Governmental	Pan-European Policy for intermodal	All of the transport companies recognized that there is a need for a unified front of legislation amongst all Europe, which will enable the adoption of intermodal to be easier and faster than the current one. Therefore, the policy makers should create a pan European legislation with common requirements for all the countries in order to promote the adoption of intermodal in Europe.	Strategic Value	High	Governmental actors and policy makers
Governmental	Economic Incentives and subsidies	Policy makers and governmental actors should increase the subsidies and the funding towards the transport companies to provide increased incentives in order to invest more financial capital on intermodal services and opportunities of expansion.	Financial and Technological Value	High	Governmental actors and policy makers
Governmental	Financial penalties regarding environmental degradation	Policy makers and governmental actors should start penalize financially the transport companies when they exceed a specific target of CO2 emissions from the shipments they conduct and increase the taxed on truck transportation. Through this action, the transport companies will be pressured to change towards intermodal transportation as it emits less carbon emissions than unimodal.	Financial value	High	Governmental actors and policy makers
Governmental	Policy assessment and identification of the policy failures	There were many policies which reached for the promotion of intermodal in Europe. However, the results from the interviews and the literature review showed that the policies in place have failed to promote the expansion of intermodal and to facilitate an easier transition towards it. Therefore, an assessment on the reasons why	Political value	Medium	Governmental actors and policy makers

		these policies failed is necessary in order to avoid these mistakes in the future policies for intermodal.			
Economic	Permanent or Longstanding contracts	The FMCG companies should sign a long term business contract with the transport companies which are willing to start investing on creating more rail lines for intermodal. Through this incentive, the transport companies will recognize the long term financial value of the business deal and will reduce the risk of the high investment.	Financial value and market share value	High	FMCG companies
Economic	Contract to expand the business relationship to international market	In order to give a strong incentive to the supplier to increase its intermodal services by expanding their business to other lines, Kraft Heinz should offer to the supplier the opportunity to expand their business relationship to the international market and not only European. As Kraft Heinz is operating in all of the continents, the supplier can have the opportunity to expand its business to other markets having already the support of a big customer in those markets and reducing the risk of failure. Through this way the customer will realize the long term financial value and the value of expanding their market share to other regions.	Financial and market share value	Medium	Kraft Heinz Company

Economic	Join forces with all the Business Units of Kraft Heinz in Europe to act as one big front of pressure	At the moment Kraft Heinz is split in seven business units in Europe, each of the seven BUs is cooperating with a different transport company for the shipments. In order to intensify the pressure towards the transport companies, Kraft Heinz should join the demand of transportation of each BU and start negotiating with the transport companies having the negotiating power and demand of all of the seven BUs. In this way, the transport companies will face a jointly big pressure from the customer and either will face a big risk of losing the business from the seven BUs together in case of not complying with the requests of Kraft Heinz or will gain a bigger market share in case they comply with Kraft Heinz' demand of intermodal.	Financial and market share value	High	Kraft Heinz Company
Economic	Keep pressuring with the exit strategy	The exit strategy that Kraft Heinz is using so far, is one of the most effective pressure strategies towards change. Exiting a business deal with a supplier, can cause up to a major financial damage for the supplier, depending on the importance of the customer. The supplier should be able to understand the needs of the customer and recognize the potential value lost in case the business deal with the customer ends.	Financial and market share value	High	Kraft Heinz Company
Economic	Keep joining alliances with other FMCG companies to have a bigger pressure	Joining alliances when realizing that the pressure is not strong enough is one of the most important techniques in the business world for companies which have the same goal. It is up to the supplier to realize the potential future value gained from satisfying a big alliance of customers not only from gaining financial means from	Financial value, market share value, reputational value	High	Kraft Heinz Company and other FMCG companies

		the business deal with them but also from expanding the market share of the transport company and engaging in a positive reputation by being a supplier which values and changes according to the needs of the customers.			
Social	Realize the environmental degradation caused by the transportation of goods in a supply chain	NGOs have the responsibility to bring to the public's attention the contribution of carbon emission from every stage of the supply chain of a product. That means that except the manufacturing and the sourcing part, the transportation of a product should also have a similar popularity when it comes to addressing the issue of environmental degradation. NGOs should start realizing the major part that logistics play in the environment and therefore should increase the pressure for more actions towards not only the FMCG companies and their supply chains but also towards the transport companies which conduct the shipments for those products.	Reputational value	Medium	NGOs

Conclusion

The need to increase the use of intermodal and thus to increase the offer of intermodal in the market in competitive pricings is getting even more demanding and of great importance to this planet. Although, intermodal has seen an increase in it's use the last years, still there is a very big gap in the transportation sector which needs to be closed with more intermodal services offered. During this research two different sides were evaluated and researched upon in order to find out "How can different stakeholders influence the transport companies to offer increased intermodal solutions to their FMCG customers". In order to answer to this research question, I took several interviews first from the side of seven different pan European or international transport companies which are fully or partially offering their services in the European market and then I conducted interviews from the side of one of their most important stakeholder- customer, Kraft Heinz Company.

During the interviews I asked questions to both sides which were related firstly in the perception of sustainability that they have and also the importance of sustainability during our time and in the sector that they conduct their business. Interestingly enough, in all of the interviews the participants were fully informed on the issues caused by transportation to the planet and the great importance that sustainability has in order to balance the current situation of CO2 emissions in the atmosphere. However, despite the informed interviewees, the companies that they represented are not active enough, up until this moment, to tackle the issue of the carbon emissions. Intermodal, represents a way through which carbon emissions can be reduced compared to unimodal transportation, however intermodal is not preferred by the transport companies or the customers because of the environmental side. Intermodal, in most of the cases can offer decreased transportation costs to the customers, increased capacity to move cargo and also can contribute to less congestion on the streets. The environmental friendlier side of intermodal is put aside and can be seen, in most of the cases, only as a positive side effect but not as the main characteristic upon which is preferred compared to unimodal.

Furthermore, regarding which theory, the stakeholder of the shareholder, stands true in the case of the transport companies, from the findings of the interviews and also the literature review conducted, it is clear that the stakeholder theory is applicable in this case more than the shareholder theory. All of the transport companies recognized as their most important stakeholders, their customers, their competitors, governments and policy makers and their employees. In some cases, the adoption of intermodal and the further expansion of it by the company was an internal idea of

employees. All of the transport companies agreed that the most important pressure that they have endured and can endure comes from either their competitors or their customers. They recognize that both of these two stakeholders are of ample importance to their business' success and therefore they change their strategy and services according to them. Concerning competition, as all of the companies want to be the best in the business and gain more market share, they get pressure from the competition to be the best, invest more capital for technological advancements and business expansion and also compete on the quality and number of services including intermodal in order to keep or gain the competitive advantage.

Furthermore, the customers are considered as the most important stakeholder of the transport companies as they have the power to make the business a success or destroy it. When the customers are satisfied with the services provided by the transport companies then, they will continue the business relationship with the business and in some cases also intensify the business transactions with them. However, when the customers are not satisfied with the transport companies they have several strategies through which they can pressure the companies in order to satisfy their needs. Such strategies include the exit strategy which is also the most catastrophic for the supplier, as it can potentially ruin the business and also intervene with the company's reputation in the market. This strategy is the most effective and is usually used by the companies as a mean of pressure towards their suppliers in order to adhere to their requests. When the suppliers do not comply to the requests of the customers or do take any actions towards those requests, then the customers can immediately stop the business relationship with them and select another supplier to do business with. This tactic not only reduces the financial gains of the supplier (financial value) but it also intervenes with the market share of the supplier and also the reputation of it (reputational value). Of course, the importance of the customer to the supplier's business can differentiate the result of the exit strategy towards the supplier, the more important the customer to the supplier the higher the risks of the exit strategy, however, still when a customer chooses this strategy for pressure it can illustrate that the supplier is not flexible enough or does not have sufficient communication towards the customer to understand the needs of the customer. In addition, another strategy that the customer can adopt in order to pressure the supplier to change, is to form alliances with other companies which reach for the same result. In that way, the pressure and value stake of the supplier in case of not changing its business is high enough and thus there is no option of not compromising with the requests of the alliance. Furthermore, when the change that the customer requires from the supplier is too big for the supplier to make, such as in the case of intermodal where the supplier in order to satisfy the customer has to make important financial investments, the customer can pressure for changes but at the same time can also offer an incentive

of added future value to the supplier. The customer can offer a long term value for the supplier in case of changing, such as a long term business contract. In that case, the supplier can recognize the financial and market share value to be gained in the future and through it can reduce the risks of the high investments needed for the change.

The governmental and policy pressure towards the transport companies can be recognized to be low. Regardless of the fact that there are some policies which promote intermodal due to the fact that it can have less carbon emissions than unimodal and also can reduce the congestion on the roads, in general the transport companies do not feel pressured to change. On the contrary, they do recognize the fact that in Europe, the different legislations in place in each European country that the transport companies have to comply with, they contribute even more to the barriers of intermodal. All of the transport companies recognize the need for a pan European legislation which will facilitate the change towards intermodal as well as more incentives and investments towards transportation hubs and new rail lines.

A more generic pressure towards the transport companies also comes from the trend of the whole market. Not only from the suppliers but also from the market itself to have a less driver dependent mode of transportation, with reduced costs and also with a more environmental concern. Especially after 2008 when the economic crisis started in US and then in Europe, the whole market changed and started to switch to more cost efficient modes of transportation. Even more pressure from the general public, with the environmental concerns coming even more to the top of the agenda. All of the transport companies felt the pressure to be pro active and invest more in intermodal transportation and less in unimodal. However, it is interesting the fact that there is no direct pressure from either the final consumer (e.g. Consumer of the products of Kraft Heinz) or from any NGOs regarding adopting intermodal. This can be partially explained by the fact that transportation as a part of the whole supply chain of a product, is still a part which is not recognizable enough to the consumer and to the general public. Contrary to the raw materials or the production phase of a product which have raised an important concern in the market and the consumer is willing in some cases to pay more, in order to have chocolate or coffee which is responsibly grown or produced in a greener supply chain.

Regarding the limitation of this research, the results can be applicable only in the European market where truck transportation is more applicable to the shipments. Future research on intermodal transportation in international level is recommended, as in that case truck transportation use is reduced as the majority of the shipments are conducted by intermodal using in most of the cases a

combination of rail, ships and trucks. In addition, this research is conducted according to the FMCG sector. Kraft Heinz may have products with a small life cycle, however, still these products can endure transportation with a longer transit time of twenty-four hours. Contrary to products which their value decay within a very short time period such as vegetables, fish, meat etc. and in those cases intermodal transportation, which can increase the total transit time of shipping up to extra twenty-four hours, is not recommended. Furthermore, future research is recommended to understand the different legislations and policies in place promoting intermodal and the reason why they have failed until now to reach their goal. In the end, future research is recommended which will investigate the relationship of a greater number of FMCG companies and how the ways they pressure the transport companies to increase their intermodal services.

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