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Value Propositions
in the Canadian Trucking Industry

By

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Abstract

Our research is aimed at investigating what are the value propositions of the leading trucking carriers in Canada. In order to fully identify and examine the value propositions in the trucking industry, we begin our research with reviewing literature related to not only logistics and transportation domains but also the concept of value. Afterwards, we perform a qualitative analysis, evaluating the website-based content using the constant comparison process from the grounded theory. After analyzing the messages of 50 Canadian trucking companies extracted from their websites, we create four main categories where companies emphasize, namely, characteristics of the company, services offered, assets and capabilities, and results of service offered. The service offered are the bundle of service carriers can offer to their customers, while the results of services are the benefits carriers can deliver to their customers. We propose that the value propositions in the trucking industry are the combination of the bundle of services that carriers can offer to their customers and the benefits that carriers will deliver to their customers. In addition, we conclude that the operation system (e.g. characteristics of the company, assets and capabilities) are the basis from which the value propositions are emerging. Three specific companies were taken as examples to explicitly link their value propositions to their operation systems.

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1. Introduction

Nowadays in the world of business, without the effective and efficient movements of raw materials and finished goods, the supply chain cannot work smoothly. In other words, transportation plays a central role in all logistics services (Bowersox, Closs, and Cooper, 2002).

A great number of studies (Andraski and Novack, 1996; Novack, Rinehart, and Langley, 1994 and 1996; Mentzer, Flint, and Kent, 1999) have frequently examined the general concepts of logistics values and have reached the conclusion that the customers' perception value is greatly influenced by logistics activities. Customers always have certain criteria in their minds when it comes to valuing their suppliers, helping them make decisions about suppliers' products or services. These criteria include the quality and reliability of products or services, their features, service guarantees, etc. (Singh and Paliwal, 2012). However, in the transportation industry, the scope of transportation value-added elements is limited only to basic ones, namely time and place utility (Kotler and Armastrong, 2006; Langeley, 1980).

To address the lack of knowledge on transportation value in the business world, our research is designed to identify the specific value created by the transportation industry by investigating what are the value propositions of the leading trucking carriers in Canada. To fully identify and examine the value propositions in the trucking industry, we analyzed the

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website-based content using the constant comparison process from the grounded theory. This qualitative methodology enables us to propose a framework for the value propositions in the Canadian trucking industry.

This thesis is organized as follows: in chapter 2 we present literature reviews, beginning by introducing the concept of logistics in transportation and continuing by explaining the concept of value, which includes the classification of value, value propositions, and the value creation process. In chapter 3 we explain the methodology chosen, including the reason why we chose the constant comparison process from the grounded theory and the steps that we took for our research. In chapter 4 we extensively present and explain the results of the data analysis and the research implications are given in chapter 5. Chapter 6 presents our main conclusions and future research opportunities.

2. Literature review

In this section, we not only conduct a literature review of works within the logistics and transportation domains but also on the concept of value. Using this literature review, we will identify a gap in the current body of literature and propose how we can position our study.

2.1. The logistics and transportation concepts

As our research focuses on the interests of companies in the trucking industry, it is necessary to introduce the concepts of logistics and transportation.

2.1.1. The definition of logistics

As defined by the Council of Logistics Management, logistics is the "process of planning, implementing, and controlling the efficient effective flow and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements" (Council of Logistics Management, 1991). It includes activities such as transportation, warehousing, inventory and materials management, customer service, etc. (Langley and Holcomb, 1992). In the logistics chain, the stakeholders include manufacturers, wholesalers, retailers, customers, and carriers. Carriers are responsible for transporting goods from one stakeholder to another. A study

of 100 American companies within a variety of business fields provides data on different

logistical activities, as shown in Table 1.

Table 1: Activities included in logistics organizations

Source: Langley, et al. (1987)

Activity	Percentage of respondents indicating inclusion of each activity*
Outbound traffic	93
Inbound traffic	90
Finished goods warehousing	84
Proprietary transportation	75
Plant warehousing	73
Finished goods inventory management	68
Order processing	65
Customer service	64
Purchasing	52
Production planning	50
Sales forecasting	41
Packaging	40
Raw material in-process inventory management	36

*the percentages indicate the proportion of study respondents who included each activity

in their companies' logistics responsibilities.

2.1.2. *The definition of transportation*

"Transportation is a vital activity that allows the movement of goods and passengers around

the world." "The management of this activity is done through the purchase and control of

the transportation service that is used by a company to achieve its logistics goals." (Coyle, Bardi et Novack, 2006). Transportation is one of the most important representative activities of logistics.

Per Table 1, 93% and 90% of all respondents perform outbound and inbound traffic duties, respectively, taking first and second place among all logistical activities. In addition, 75% of the respondents included proprietary transportation in their operations, a significant figure. It is evident that transportation plays a key role in the whole of logistics operations.

Nowadays, the transportation company not only delivers goods to customers, but also becomes the party which needs to provide a variety of enhanced, bundled logistical services and support to their customers (CSCMP, 2016).

2.2. The value concepts

As our research examines the value propositions in the Canadian trucking industry, it is important to understand the concept of value. In this section, we explain the value concepts and its three main aspects: the classification of value, the value propositions, and value creation.

2.2.1. *The classifications of value*

According to Henneberg, Pardo, Mouzas, and Naude (2005), value can be classified into three categories, including exchange value, relational value, and proprietary value.

Exchange value is based on the offering of products or services provided by suppliers through their activities in service of the customer. Buyers must pay a certain price to get products and services from suppliers, and benefit from their own activities. From the buyer's perspective, the trade-off between the costs and benefits is taken as the exchange value. In order to become competitive in the eyes of their customers, suppliers need to increase the exchange value. For example, suppliers may provide add-on services to customers, reducing resources used by the customers themselves. These extended services include delivery services, maintenance, customer-used software, etc.

Relational value refers to the value created by any buyer-supplier relationship (Dyer & Singh, 1998). In other words, any interrelated activities between buyers and suppliers can create relational value. Other than the traditional and within-company capabilities, both suppliers and buyers need to develop their relational competences. This type of relational value involves both organizations and the people working within these organizations, and thus, is neither easy to copy nor simple to imitate (Dyer & Singh, 1998).

As for the last category – the proprietary value, it refers to the value created by and for the organization itself. For instance, organizations make capital investments as a means of improving their production efficiency. However, no part of the value created by this improvement is offered to their customers.

In the case of transportation, we think that these three types of value are applicable. More emphasis is put on the exchange value since it is related to what carriers offer and deliver to their customers. The relational value is concerned with the relationships developed between carriers' employees, customers, and suppliers. A sound relationship with other parties in the supply chain adds value that benefits both the carriers and their customers. With regards to the propriety value, it refers to the assets and capabilities carriers own, including both the intangible (e.g. technology, certificates, people) and the tangible assets (e.g. facilities, equipment, machines).

2.2.2. *The value propositions in logistics and the transportation industry*

After gaining some insight on logistics, transportation, and the classification of values, we will now discuss the concepts specifically related to the value propositions in logistics and the transportation industry.

2.2.2.1. The definition of value propositions

Value proposition is "an offer that describes the quantifiable benefits that individuals or organizations making an offer promise to deliver" (Singh and Paliwal, 2012, p.256).

2.2.2.2. Value propositions in logistics

Throughout the whole supply chain, customers want to know what their upper stream suppliers can provide them to make their processes more effective, efficient and productive. This is regardless of whether their upper stream suppliers are manufacturers, wholesalers, retailers, carriers, or other logistics service providers.

In order to create value for their customers, organizations involved in logistics have identified and proposed a set of tools and approaches that can be seen as their value propositions (Langley and Holcomb, 1992). Approaches include putting emphasis on customer service, sharp focus on supply chain management, development of strategic alliances, etc.

According to the Council of Logistics Management, customer services can provide the supply chain with value-added benefits in a cost-effective way (Council of Logistics Management, 1991). Therefore, companies have been willing to equip themselves with measures of logistical customer service. Carothers and Admas (1991) conducted a study

and identified a range of representative measures, including distribution system information, distribution system malfunction data, distribution system flexibility, order cycle time, product availability, and post-sale product support.

To produce an end product or service while providing the best value for the customers, the whole supply chain focuses their attention on the interaction between each of the members of said chain and the synchronization of all activities. It is not difficult to imagine that organizations involved in logistics have come up with some brilliant propositions for the value chain. For example, some logistical organizations have proposed the just-in-time or quick response approaches to product availability and inventory management, achieving a great degree of coordination and synchronization while meeting the value expected by customers (Langley and Holcomb, 1992).

Among different logistics organizations, another logistics initiative - the strategic alliances of channel partners - has been widely discussed. Suppliers, customers, and intermediaries (including warehousing or transportation service providers) have been aligning themselves to obtain the desired win-win relationship (LaLonde and Cooper, 1989).

2.2.2.3. *Value propositions in transportation industry*

Randall et al. (2010) have conducted a study into value propositions in the American trucking industry. They have found that the trucking carriers in the United States are

directing their selling points away from the service cost because the carriers think the service cost is not a differentiating factor. Moreover, they have categorized the value propositions of the trucking carriers in the United States into four main groups, namely time, place, value management, and value added.

Prior to their study, there was no research dealing with value propositions in the trucking industry. However, some scholars did conduct surveys and studies of value propositions in other industries that are similar to the transportation industry. We can borrow lessons from them. In the following section, we will define the value proposition of time and reliability, differentiating activities, and the customer's relationship with management.

As time-based transportation strategies can contribute to the competitive advantages and customer value creation (Morash and Ozment, 1996), some transportation companies think highly of the temporal advantages while setting company core strategies (Porter, 1985; Stalk and Hout, 1990; Stalk, 1988), as well as constructing the value delivery network (Hesket, Sasser, Hart, 1990). European airlines for example, in order to meet the temporal demand of transferring customers and synchronize intermodal transfers of people, co-locate terminals, stations, and equipment with some mass transit partners (including operators of subway, bus, and train services).

It is generally known that people place a great deal of value on schedule reliability. Several

experiments have been performed to study the value of time and the value of reliability. However, there was no such research that measured the value of time and the value of reliability per se or that gave the real price of these elements until 2001 (Lam and Small). These authors collected data from 1998 to 2001 on the behavior patterns of travelers and examined how these travelers valued travel time and schedule reliability. Per Lam and Small (2001), based on a sample \$31.69/hour weighted average wage rate, the value of time is \$22.87/hour, 72% of the average wage rate, while the value of reliability is \$31.91/hour for women and \$15.12/hour for men, representing 101% and 48% of the average wage rate respectively. As the research results show, travelers will act differently faced with time-varying toll schedules and choose different modes or routes based on predictions of congestion. Travelers in this sample can be taken as a kind of consumer in the transportation industry because both types of travelers and consumers need to pay a certain amount of money to use a specific service. Thus, an analogy can be deducted in the transportation industry that customers of transportation companies will value time and schedule reliability in a similar way.

Morash and Ozment (1996) conducted a study of the airline industry. The results show that external time-based strategies are very important to the customers while considering the quality of service. The external time advantages, including on-time reliability, the frequency of service, the fulfillment of service, and the relational responsiveness, can significantly differentiate the products or the services of the specific companies from their

competitors and improve customer satisfaction levels. In short, transportation advantages, such as time and reliability, will have greater influences on the customer's perceived value. Therefore, while determining their value propositions and setting out their company policies strategically, tactically and operationally, transportation companies need to take temporal advantages into consideration.

According to Harrington (1995), in order to provide value-added products to their customers, suppliers will choose the most suitable and competitive carriers, such as RPS, which is a business-to-business and small package air carrier aiming to provide second-day shipping to their shippers. Some offerings by RPS differentiate the company from its competitors. For example, RPS provides advice to their customers in terms of package design, making efforts to reduce damage to product incurred during the shipping process. Besides, it proves itself as an open-minded and flexible transportation service provider, because its senior managers are always willing to listen to their customers' concerns and gather information outside from company to better manage the relationships with their customers and improve their customers' experiences.

Gopal and Cline (2007) conducted a series of interviews and discussions with more than 50 transportation industry specialists, showing that customer relationship management is very important for the transportation service providers. The authors took General Motors as an example to demonstrate that customers associate a company with quality and

competitive prices if said company can manage customer relationships well. In General Motors, employees gathered information with customers from the interview, surveys and the observation process, using the information to create the "consensus map". Afterwards, they followed the recommendations extracted from this model to redesign the customer experience, change the marketing process of their products, and reinforce the feelings to their customers.

In the B2C (business to customer) context, it is not difficult to imagine that customers' experiences, or their emotional responses, play a very important role in their decision making process. We think that this assumption is also applicable in the B2B (business to business) context, where the transportation services take place, because businesses can be seen as groups of customers. The transportation service is a product offered by carriers to their customers. If customers' emotions matter while sellers offer their products, customers' emotions should also matter while carriers provide transportation services. Therefore, it is crucial for transportation service providers to understand buyers' true feelings and take the human element into consideration, in order to stay competitive in future business operations.

Previously, the value propositions were mainly discussed in the B2C context. However, in the trucking industry, both the carriers and their customers are the business operators; therefore, the context is much more related to the B2B. We think that the value propositions

in the trucking industry are the combination of the bundle of services that carriers can offer to their customers and the benefits that carriers will deliver to their customers. The detailed explanation of bundle of services and the benefits customers can expect from carriers' services will be given the chapter 4 and chapter 5.

2.2.3. The value creation process concepts

As our research is designed to examine the value propositions, it is necessary to understand how values can be created, namely the value creation process. In this section, we will begin with the introduction of the value creation process. Afterwards, we will explain how logistics activities, especially the transportation activities, create value.

2.2.3.1. Value creation processes

In this section, the explanation of the five value creating variables in the logistics industry and several basic types of the value creation will be discussed.

In a market, which is extremely competitive, such as the international freight forwarding and logistics industry, the cost and quality of services play a critical role in terms of the competitiveness of the organizations. There are five value creating variables which have been identified, namely, staff responsiveness, staff professionalism, internal operations, customer satisfaction, and loyalty (Abdel-Maksoud and Kawam, 2009). The cause-effect

relationships between these five value creating variables have been demonstrated by the authors as shown in Figure 1.

Figure 1: The causal order amongst value creating variables

Source: Abdel-Maksoud, A., & Kawam, M. (2009).
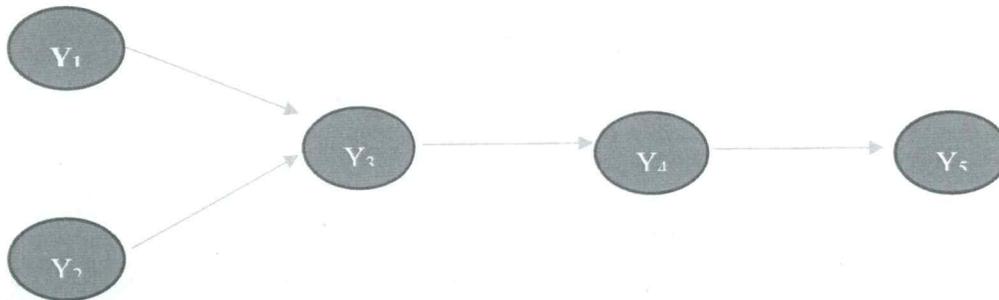
Where: Y_1: Staff Professionalism; Y_2: Staff Responsiveness; Y_3: Internal Operation; Y_4: Customer Satisfaction; Y_5: Customer Loyalty

According to the model, the staff professionalism and the staff responsiveness will contribute to enhance the internal operations performance. In turn, customers will feel more satisfied with the organizational services, resulting in their becoming more loyal to their suppliers. Thus, the financial returns or the profitability of organizations can be expanded because more and more customers are loyal to said organizations.

In the previous section, we explained three types values, namely, exchange value, relational value, and propriety value. Here, in Figure 2 three basic types of value creation production have been proposed by Mollen (2006), comparing the exchange-based value with the relational-based and, illustrating the complexity of the value creation production.

Figure 2: Basic types of value production

Source: Möller, K. (2006)

Core Value Production exchange oriented relationships	Value-adding relational value production	Future oriented relational value production

High level of determination of the value system

- Well-known & specified value activities
- Well-known actors
- Relatively high stability
- Well-known processes

Incrementally changing value system

- Change through local & incremental modification within existing value system

Low level of determination of the value system

- Emerging value system
- Old & new actors
- Radical changes in old value systems
- Creation of new value activities
- Uncertainty about activities and actors
- Radical system-wide change

Low relational complexity

Current time

High relational complexity

Future orientation

The core value production is related to exchange value and consists of specific and well-known activities and actors. For example, in the case of transportation, the core value is produced by the means of characteristics of services, such as mode, place, type of cargo, type of industry and specific services offered, such as trucking related services and logistics related services. Even though this type of value production has the high determination of the whole value system, it has the low relational complexity and can be, to some extent, imitated easily.

The other two types of value production are both related to the relational value. The main difference between them is that the value-adding relational value production is current time oriented and incrementally changes the value system and that the value system will change radically when the future oriented value production happens. Both types of relational value production are related to the employees' involvement and other parties related. Therefore, it is difficult to imitate, in comparison with the exchange value oriented core value production.

2.2.3.2. Logistics creates value

Logistics activities are recognized as a manner of creating customer value. It represents a comprehensive process, not only consisting of a variety of activities, i.e. transportation, warehousing, distribution, but also acting as the key linkages with other strategic supra-

systems (Langley and Holcomb, 1992). Throughout the logistical services, customer values can be achieved through some elements of customer service, such as product availability, timeliness and consistency of delivery, and ease of placing order (Lalonde, Cooper and Noordeweier, 1988). Thus, logistics provides the unique and meaningful opportunities for achieving best comparative net value to the customer (Langley and Holcomb, 1992).

Logisticians can create value for customers. The integrative aspects of logistics, which are the great contributor to the customer value creation, have drawn considerable attention. According to Flint and Mentzer (2000), logisticians can create value by themselves, because they have certain logistical expertise and can support marketers in terms of anticipating and responding to the varying customers expected logistical desires in time. More and more logistics managers are encouraged to work closely and consistently with their colleagues, who are specialized in other areas, such as finance, marketing, manufacturing and general management (Langley and Holcomb, 1992).

There are three generic ways for logistics to create customer value, namely, effectiveness, efficiency, and differentiation (Langley and Holcomb, 1992). Effectiveness refers to the matter of performance (e.g. customer service). There are seven "key result areas" of the customer service, which can identify the level of performance, namely market standing, turnaround, in-stock availability, convenience, product guarantee, retail service, and innovation (Carothers and Adams, 1991). Efficiency refers to the ability of organization to

offer the customer the expected product or service at the acceptable cost (e.g. cost).

Differentiation refers to the capabilities of organization to create value for the customers

by the unique and distinctive logistical services. In our research, we think that effectiveness

is related to the results of services offered, including service quality, service flexibility,

service visibility, services timeliness, etc.; efficiency is related to the service cost;

differentiation is related to the characteristics of services, i.e. time utility, place utility, type

of cargo, and the specific services offered, including trucking related services and logistics

related services. All the above-mentioned elements create value for customers.

2.2.3.3. Transportation creates value

Nowadays, with the globalization of businesses, companies can import and export all kinds

of commodities and finished goods from/to anywhere around the world. Because

companies, with the help of transportation, can compete strategically on cost, service, or

time, transportation has been playing an increasingly important role in the supply chain

structure, integrating and coordinating flows throughout the whole supply chain (Morash

and Clinton, 1997).

According to Morash and Clinton (1997), the integrative transportation, referring to

delivering the right products or services in the perfect condition to the right place at the

right time, drives five transportation capabilities, namely, time compression, reliability, standardization, flexibility and customization.

First, if all the operations throughout the supply chain can be coordinated and all the information can be shared among all parties involved in the structure, shipping time as well as the total supply chain costs can therefore be reduced. Second, through the instrumental information sharing and the technical operational planning, the variability of shipping times can be reduced, fostering the transportation reliability. It is generally known that customers value more the reliability of delivery time than the speed of the transportation time (Morash, 1990). Third, integrative transportation expects organizations to have standardized transportation and logistics policies and practices among their operations. As a result, flows and activities in the supply chain can be more predictable, increasing the customers' consuming experiences. Fourth, the integrative structure of transportation requires organizations to build up strategic alliances with customers, share information among different parties, and set up regular meetings between their partners in the supply chain. Consequently, flexibility of transportation can be established and the total cost can be reduced. The last capability relates to the customized transportation services. For example, in order to respond to some specific market areas, the store-site delivery or the customer-managed reordering systems are innovated, while the direct delivery or cross-docking process are designed for the other markets segments. In short, all of the

transportation capabilities mentioned above can minimize total costs and maximize customer value.

In order to stay competitive and achieve success, tools and methods are invented to develop value-added services, because more and more customers are expecting transportation companies to bring more value-added services. For example, more and more shippers adopt the intelligent transportation system (ITS) or intelligent traveler information systems (ITIS). These applications can provide shippers in time with electronic information and retain control in the transportation process, or provide travelers with more customized assistance. Therefore, customers will achieve value-added services from their suppliers and perceive their suppliers as valuable in certain areas (Marines-Torres, Diaz-Fernandez, Toral, and Barrero, 2013). It is the assets and capabilities companies have that sustain the value propositions.

2.3. The importance of the interaction between customers' value expectations and suppliers' value proposition

Because of the fierce competition, it is very important for organizations to find proper ways to gain as well as retain customers. However, suppliers and customers do not necessarily share the same opinions over the value composition (Moller, 2006). To be specific, supplier may pay more attention on the products cost, while customers may care more about

whether suppliers themselves can provide specific expertise in the customers' own business field.

From previous researches, it has been shown that organizations' strategies on emphasizing customer value may help significantly while relieving this difficulty. Suppliers need to forecast and accommodate to the changes in the customers' value expectations (Woodruff, 1996). Moreover, suppliers need to understand their own competencies clearly and express these competitive competencies to their customers. To be clear, these competencies are not only developed in the internal terms, but also regarding their customers' benefits (Golfetto, 2003).

Therefore, the interactions between customers' value expectations and suppliers' value propositions are very important. To be specific, to create value for their prospective customers, suppliers need to match customers' value expectations with their own value propositions, requiring suppliers to involve their prospective customers into the interaction process and make them an intrinsic part (Singh and Paliwal, 2012). Moreover, the case study of GASCO and CERACO conducted by Singh and Paliwal (2012) reflects that more intensive and engaging relationships between customers and suppliers are needed in the services industry, such as the transportation industry, because more intensive customers' involvement is required while creating a new service based solutions in the business processes.

However, it is not realistic to compare the customers' value expectations and suppliers' value propositions in our thesis, since the customers' opinions are hard to achieve by only analyzing the carriers' websites.

There is a gap in the literature since only one paper is looking at value propositions in the trucking industry and the paper has been done based on U.S. companies. Even though, we think that the study done by Randal (2010) presents some flaws, we are improvised by the concepts and methodology explained in it and conduct our own research. After discussing our data analysis in chapter 4, we will compare our research results with the ones achieved from Randall (2010) in chapter 5.

3. Methodology

In our research, we investigate what are the value propositions in the Canadian trucking industry. We perform a qualitative analysis, evaluating the messages of 50 Canadian trucking companies extracted from their websites, with the constant comparison process of grounded theory. The exploratory study using the qualitative analysis, which is similar to the one used by Randall et al. (2010), is deployed to understand the underlying elements of the value propositions provided to customers by the trucking carriers.

Grounded theory is "an inductive pattern searching process that seeks to relate developed categories in a theoretical structure" (Glaser, 1978). This approach emphasizes on letting theory emerge from data rather than using data to test theory. The constant comparison process is the foundation of the grounded theory and "an inductive data coding process used for categorizing and comparing qualitative data for analysis purpose" (Glaser and Strauss, 1965). According to Glaser and Holton (2004), the process of comparing consists of comparing data with data, data with category, category with category, and category to concept. In our research, we use it to iteratively assess the website-based content to see whether the data support and continue to support merging categories. The detailed steps of our research will be given in the following.

The construction of the grounded theory with constant comparison process begins by framing the research question, which is about the value propositions in the Canadian trucking industry, and reviewing the relevant literature. It is accomplished through the introduction and literature review sections.

At the second step, we determine the population and data source for content analysis. We select randomly Canadian trucking companies from those identified in the Today's Trucking annual listing of the top 100 carriers (2016). We believe that all the webpages on the company websites are equally useful, and, therefore, choose to use all of them as the data source. These carriers' websites are the perfect data sources for the content analysis for two reasons. First, the Today's Trucking is a well-known journal that publishes those rankings every year. Second, the website is the most commonly used way for companies to inform customers on their businesses and offers, therefore, we affirm that the data is rich and relevant to help answer the identified research question. However, we are aware that the messages delivered on the companies' websites may be different from how they behave in their business operations. We think that the size of companies may have impacts on the research results, thus we want our sample to be different-size blended. In the ranking, there are around 30% of companies who are large, 60% of companies who are medium, and 10% of companies who are small. To be noted, the size of companies is determined by the number of employees each company has. The company with more than 500 employees, more than 100 employees but less than 500 employees, less than 100 employees are

deemed as large, medium, and small, respectively. Accordingly, we want 30% of companies who are large, 60% of companies who are medium, and 10% of companies who are small, in our sample. At this stage, we are not sure about how many companies we will analyze, and, therefore, we only give the percentages instead of numbers of companies.

At the third step, we choose the first group of sample, and import its data into an analysis software, called Atlas.ti. At first, we could not determine how many samples would be enough for our research since we choose to use the saturation criteria. At each point in the process, we consider the possibility of collecting additional data in ways that complement, expand, or better inform the emerging conceptual structure. This key process is referred to as theoretical sampling. On the opposite of theoretical sampling, it is the theoretical saturation, which is the decision we make to stop data collection because more data do not add anything new or make too much difference to the theory which is being created. Therefore, we decide to make the first sample group of ten and randomly choose them from all the 100 carriers. In the sample, there would be three large companies, six medium companies, and one small company. Afterwards, we search for their correspondent websites, translate them into word document, and import them into the software.

At the fourth step, after a certain amount of data has been accumulated, we read between every line of the first website-based content from the group data, undertake initial coding of key terms and interpretation of the data, and memo if necessary, to gain a sense of the

core concepts and the meanings of those concepts. All pictures, links, words, etc. listed on

the websites should play a part for companies to express themselves to the public and may

contain the value propositions companies hold. Thus, it is important for us to read carefully

throughout the whole website-based content. After understanding about what companies

want to express, the codes should be made. Meanwhile, we engage in a practice called

memoing, involving writing ideas and conceptual notes that may contain valuable

comments and insights and that are potential sites where rich analysis may occur (Bogdan

& Biklen, 2007).

At the fifth step, we do the same thing as we do in the fourth step for the other nine website-

based content from the same group – we read, code, and memo. Sometimes, we may think

certain content is meaningless and do not code it at first. However, this content constantly

shows up later and turns out that it may be important and that it should be coded. Thus,

every time a new code is created, we go back to the former document as well as the earlier

parts of the same documents and code again if necessary.

At the sixth step, we combine those codes with similar themes and recode them with the

same term, because sometimes, we should look and code from a broader perspective.

Meanwhile, we review the data source to ensure key terms are considered in the correct

context. During the coding process, all codes are linked back to the original website-based

content, providing us with the ability to judge intended meaning more carefully and precisely.

At the seventh step, we begin to develop major initial aggregate categories. To be specific, we specify relationships among those codes, integrate them into categories, and delimit a theory, by consulting those memos.

At the eighth step, I meet with my supervisor to compare category findings, resolve any discrepancies, and re-categorize if necessary, after I get codes and aggregate categories from the first group of sample. We repeat from the beginning at step 3 as necessary to reach saturation. In our study, we repeated this process five times. After finishing analyzing the fifth group of sample, it did not provide any substantially new insights and the theoretical saturation has been reached, and, therefore, we stop repeating and we got our sample of 50 companies. The list of companies that we analyzed is given in the Exhibit 1. All the above steps are summarized in Figure 3, eventually leading to the writing of the theory.

Figure 3: The steps of research methodology
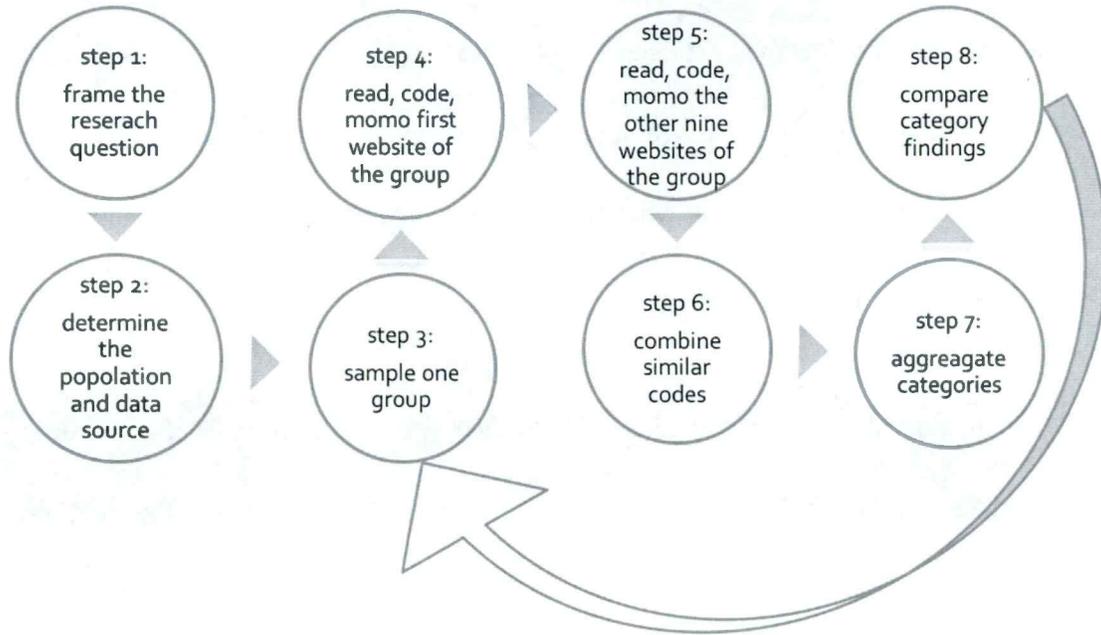
4. Data analysis

In this chapter, we will explain and analyze all categories and sub-categories of company emphasis. Afterwards, detailed explanations of codes that show up more than 10 times in the sampled companies will be given under their respective sub-categories. All the data analysis in this chapter will show what aspects the companies emphasize on, and what consist of company value propositions.

Before analyzing all the data extracted from the websites, we want to, at first, show a general picture of the whole family of company emphasis. As shown in the Figure 4, the family tree consists of four main categories at the first level, namely characteristics of the company, services offered, asets and capabilities, and results of services offered. The next several levels of the family tree are given in the Figure 5, Figure 6, Figure 7, and Figure 8.

Figure 4: Four main aspects of company emphasis

Characteristics of the company

Services offered

Assets and capabilities

Results of services offered
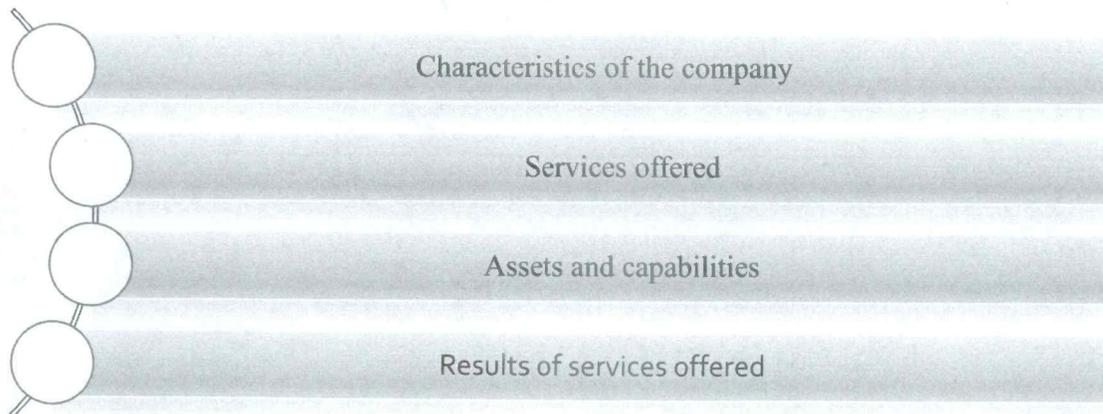
Figure 5: Family tree of characteristics of the company
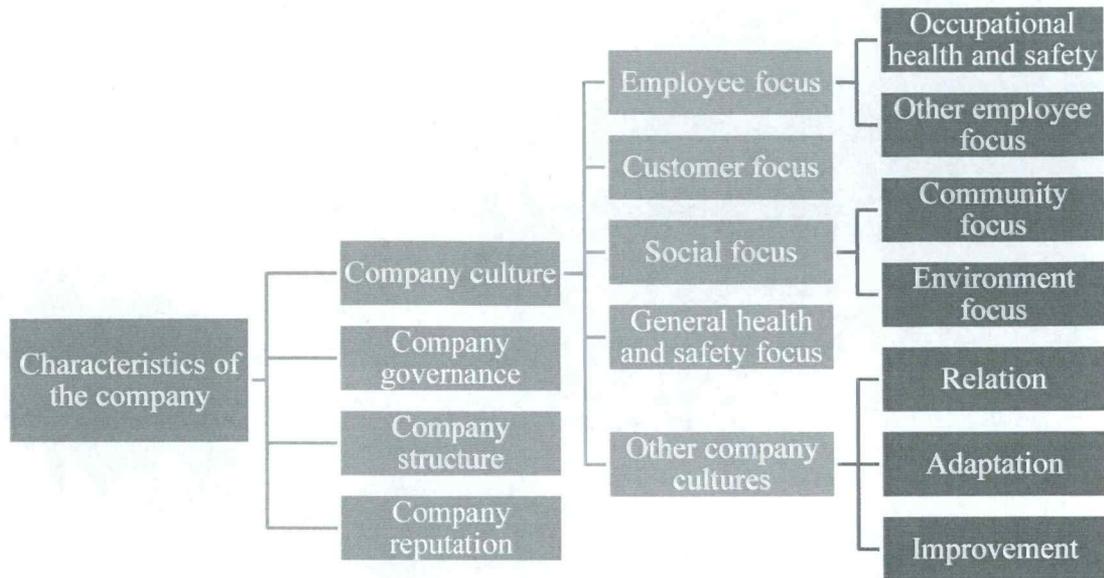
Figure 6: Family tree of services offered
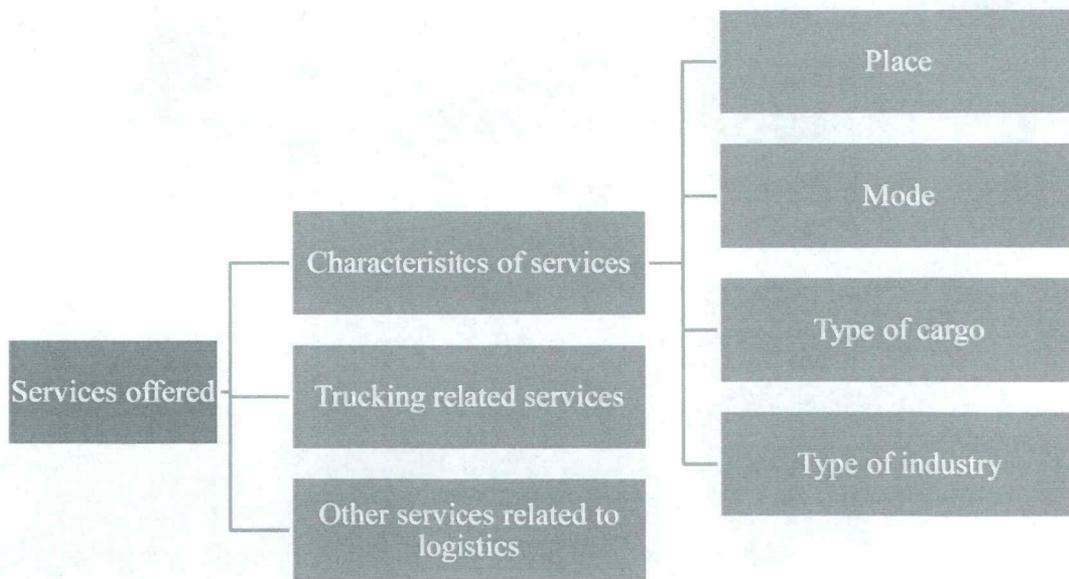
Figure 7: Family tree of assets and capabilities
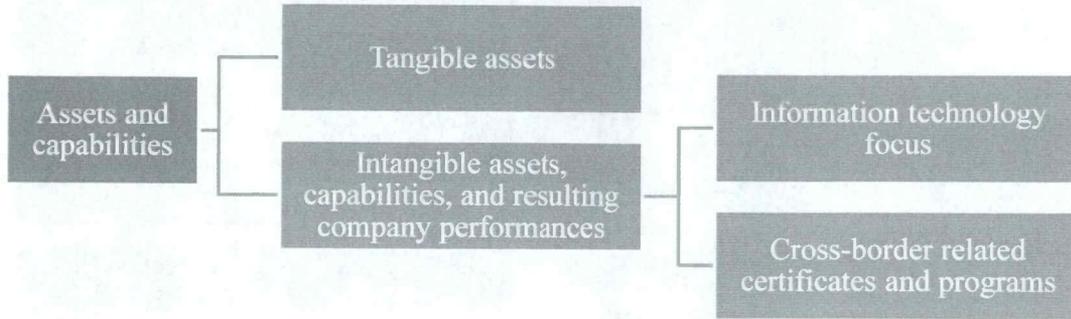
Figure 8: Family tree of results of services offered
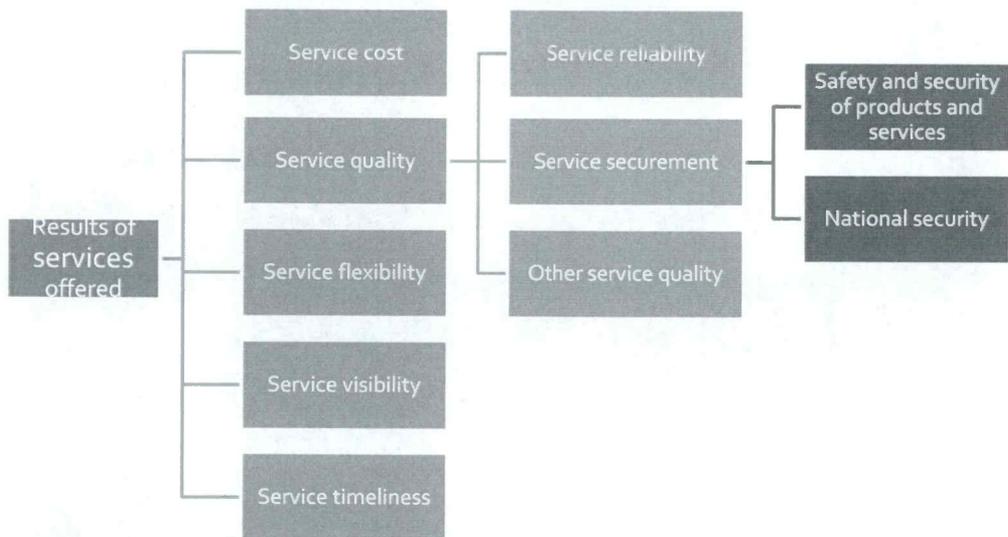
In the following part of this chapter, we will discuss all the categories, sub-categories,

and their assigned codes.

4.1. Characteristics of companies

There are four main types of characteristics of the company, which are: company culture, company governance, company structure, and company reputation. All types describe how company function from the top-down perspective.

4.1.1. Company culture

The company culture, which is the alternative term for organizational culture, refers to "the values, beliefs and behaviors that contribute to the unique social and psychological environment of a company" (The Business Dictionary. Organizational culture. Accessed June 22, 2015). According to Needle (2004), it is the product of the company history and market where the company operates its businesses; evolves with the development of the company goals, strategies, and structures; and becomes the impacts brought by the company's investors, employees, customers, as well as the greater community.

4.1.1:1. Employee focus

According to Hollon (2012), the companies that have an employee-focused culture will have continued success despite the ever-changing economic environment. Thanks to their clear understanding of their intangible assets, or to say their talented people, company are able to adapt more easily to the severe business world and thrive better than the competition.

If companies take care of their employees and pay attention to their professional and personal conditions, they will in turn be able to   capitalize on their knowledge, skills and abilities and benefit greatly.

4.1.1.1.1. Occupational health and safety

It is generally known that it is the people who drive companies forward. Therefore, it is key to keep people in a work environment that is safe and healthy, and it is crucial to maintain high occupational health and safety standards at all times.

Occupational health and safety is concerned with the health, safety, and welfare of the employees. It is also related to the procedures or mindset of providing protection for not only the staff of the company, but also to their family members, the, customers, and all the other parties that can be affected by the workplace environment.

According to the Ministry of Labor, one of the most important jobs in any workplace is preventing work-related illness and injury. Although adhering to the governmental regulations and legislations in place is crucial, it is unfortunately not sufficient to   protect people in the workplace from all dangers. Companies should have their own measures and guidelines of health and safety put in place. Additionally, specific training programs should also be provided to help the employees to clearly understand what they should do in which situation.

As shown in the Table 2, the awareness of providing occupational health and safety is evident, and several measures are taken in place.

Table 2: Codes under occupational health and safety

Codes	Frequency	Number of companies
Employee education and training	107	35
Employee health and safety	46	22
Safe and health work environment	17	12
Driving standards	13	11
High quality work environment	13	7
Other codes (Frequency: 40 in total): over the road speed, hours of service, on and off the road safety, pre-employment hiring, employee orientation, Workplace Hazardous Material Information System, control sudden starts/stops		

Employees are amongst the most valuable assets of the company. Therefore, providing them with a safe and healthy work environment should be amongst the priorities and the core value of all companies. In order to keep their employees safe, companies take on several measures. Taking *Rosedale* as an example, the company develops tailored training programs for their drivers, which include defense driving, hours of service, safety inspection, transportation of dangerous goods, etc. The extensive employee education and training programs enhance employees' personal skills, help them understand the basic and important industrial regulations, and let them be aware of what they can do and what they should not do while performing their jobs. Taking *Q-Line Trucking* as another example,

the company offered the orientation program to its employees. The orientation consists of a two to three days program, which allows the demonstration and explanation company's standards to their employee, contributing to a better performance, especially in terms of health and safety issues.

4.1.1.1.2. Other employee focus

It has already been said that a company cannot survive or prosper without the combined efforts of its people. Apart from focusing on the occupational health and safety hazards, companies focus on many other aspects with regards to their employees such as maintaining a strong and sound relationship with their employees, which plays a determining role in the company culture. The Table 3 shows that maintaining the relationship with employees are taking places in many aspects.

First of all, companies offer a supportive and high quality work environment, where people are empowered, motivated, and inspired to perform well for their employers. For example, having an open-door culture and treating people with honesty, openness and respect are some top aspects. Moreover, companies give abundant opportunities and challenges to those who want to try new and exciting ventures, allowing them to move ahead, promoting their personal growth, and rewarding their efforts. Initiatives such as opportunity for

Table 3: Codes under other employee focus

Codes	Frequency	Number of companies
Employee education and training	107	35
People focus	70	30
Supportive work environment	33	19
Employee benefit	28	19
Opportunities for employees	26	16
Personal growth	25	14
Competitive wage packages	22	17
Rewarding for employees	20	13
Invest in employees	14	10
High quality work environment	13	7
Employee relationships	13	12
Flexibility to employees	13	9
Employee skill upgrading	13	10
Employee promote within organization	12	6
Open-door culture	11	8
Employee assistance	10	8

Other codes (Frequency: 52 in total): employee initiatives, personal integrity and skill, communication with employees, employee incentives, employee scholarship, employee convenience, retirement planning, employee orientation, business management certificate program, employer of choice, employee testimonials

promotion within the organization are put forward in many companies. Employees are in turn motivated by these efforts to take care of their customers and help the business thrive.

Secondly, companies invest a lot in their employees. They can provide competitive wage packages, including diversified employees' benefit plans, such as medical, dental, and life insurance, for their valuable employees. In addition, companies equip themselves with extensive initial and refresher training programs that can tackle their demanding roles at the very front lines of their business. These education and training programs not only focus on the health and safety issues, but they also provide employees with tools that enable continuous personal growth. That is why we put the code of employee education and training under both sub-categories of occupational health and safety and other employee focuses. Companies do not only develop the education and training programs themselves, but they also encourage their people to continuously upgrade their skills in order to keep up with todays' challenges and tomorrow's needs. After all, it is the education that builds the foundation of the future.

Lastly, companies pay much attention to support their employees in achieving a balance between their personal and professional lives. For example, some companies develop the employee and family assistance program to help them cope with the unexpected difficulties that can arise in their lives. Giving their employees some flexibility is another way. For example, drivers in *Trans-West* can choose the mileage they want to drive and the company

perfectly understands and respects their drivers' driving availabilities. As a result, drivers

can choose to maximize the time spent at home with their family, minimize empty miles,

and reduce the amount of long haul trips. Taking *Paul's Hauling Ltd* as another example,

the company's terminal management team work with their drivers to select the best shifts

and commodities that support their individual priorities and needs.

4.1.1.2. Customer focus

While delivering services or products to customers, a company with customer focus always

try to serve their customers' best interests and needs, and hold the belief that the customer

is always right and that the customer comes first. By making sure that each individual and

all of resources work together towards customers' satisfaction, taking customer focus as

one of the cornerstones of the company usually greatly contribute to the overall success of

the businesses as a whole. Therefore, many companies run the service programs on a

regular basis and maintain the effective customer relations. Different companies may have

a variety of ways to show their focus on customers (Table 4). However, every strategy they

put into practices must have one common goal – to attract and retain customers and to

develop a business that can stand the test of time.

Companies view themselves as customer oriented and put numerous efforts on maintaining

the strong and long-term relationships with their customers, striving to build mutually

Table 4: Codes under customer focus

Codes	Frequency	Number of companies
Customer needs	268	45
Customized	117	34
Flexibility to customers	83	29
Customer relationships	69	34
Visibility to customers	57	23
Integrated solutions	55	20
Customers oriented	55	29
Dedicated logistics services	53	22
Customer convenience	45	19
Dedicated solutions	38	21
24/7	37	21
Online services	35	21
Add value to supply chain/customers	33	15
Customer expectations	28	18
Customer benefits	27	16
Help customer grow	27	11
Enhance customer competitive advantages	26	16
Simplified services	25	10
Strong understanding	22	15
Unique solutions	21	8
Reduce customers' assets deployment	14	7
Solution-based company	10	5

Other codes (Frequency: 67 in total): communication with customers, employee eager to listen, secure customers' reputation, customer interface, 24 hours, user-friendly technology, customer feedback, mutual benefit, customer self-service, mobile technology, turnkey solutions, after sales support, customer rewards, 7 days, aftersales support

respectful and trustworthy relationships. The way that companies treat their customers determines whether their latter come back or not. Some companies view every single client as a partner and not just as a simple a customer while other always put them at the center of their business. However, no matter what philosophy they choose, maintaining good relationships with their customers is how the companies will, in the end, be able to anticipate and meet their customers' needs as well as benefit them and assist them in their growth. As a result, companies can therefore add a big value to their supply chain and customers, while benefiting themselves at the same time.

Satisfying customers' requirements is extremely vital for businesses, and whatever their customers' needs and expectations might be, companies should always try their best to anticipate , meet ,and even exceed them in the most efficient and cost-effective way. Listening to customers and gaining a strong understanding of their wants and needs should always be the first move. After gaining a deep understanding, companies will then be able to provide customized services to flexibly meet their customers' unique requirements. For example, a wide range of companies, such as *Rosedale, Day & Ross, Thomson, Chester Cartage*, etc., offer customer-tailored transportation and distribution solutions as well as a unique blend of services that is customer-specific. The services that companies offer and the way that they operate their business could be as flexible as they want. Taking *Transfreight* as an example, they even have the UPO program, which allows customers to have the option to add additional freight to an existing timeline, right up until the time

when the truck is scheduled to depart from a facility. In short, one of their main goals is to become a solution-based company, offering any service and any cost-combination customers deem appropriate.

In addition, different companies carry out different diversified programs, all of which emphasize on benefiting their respective customers. The term "dedicated", which they employ to showcase their commitment, has been mentioned many times on the companies' website. Inventing the dedicated solutions is a way to identify potential efficiencies, minimize risks, and implement brand new supply chain technology. For example, *Transfreight* has the dedicated facility aimed at providing dedicated solutions to each specific customer, while *Day & Ross* has a division called dedicated logistics that provide dedicated solutions and that commits to provide the expertise and capabilities to their customers. Except for being dedicated, bringing convenience for customers can also benefit customers. Companies invent several approaches to take the weight off their customers' shoulders. For example, Day & Ross has its own third party freight management service, which provides a start-to-finish solution. *Fastfrate* wants it to be easy to do business and so it has a simplified LTL pricing procedure, which lets the account managers have a good level of autonomy to quote on the spot. *Rosedale*; on the other hand, owns online tools which let customers integrate shipping, tracking, estimates, pickups and return capabilities directly into the website, online store, order management systems, and their custom software application, providing valuable visibility to their customers. Another example

would be *Thomson*, which provides 24/7 dispatch support and customer service, and has the best equipment with an extensive maintenance program and service center open to the driver 24 hours a day.

Last but not least, competitive companies solve their customers' logistic issues with practical and dynamic solutions that improve efficiency, and often lead to reduced asset deployment, and therefore, enhance customers' experience. No company should underestimate their impact this has on its customers. As stated on the company's website, businesses who maintain excellent relationships with their customers, and who are able and willing to help them gain industry insight, increase capacity, drive revenue growth, decrease turnaround and operating costs, support distributions, and, finally, help their customers grow, are amongst the most competitive ones within their respective industries.

4.1.1.3. Social focus

After stepping into this new century, many companies have been positioning themselves as social-focused organizations and claim that pursuing profits is not their sole business objective. Moreover, companies are, on a wide range of issues, encouraged to act in a socially responsible manner (Welford and Frost, 2006; Engle, 2006). Therefore, they must do the deed to show that they in fact do take on their social responsibilities.

Company social responsibility commonly refers to the concept that the company is willing to balance the profit-oriented businesses with the activities that contribute to a better society and a better environment (European Commission, 2001). The company social responsibility gives the duty in the hands of companies themselves as well as the individuals within them. All of the parties involved should act towards the best interests of the environment and society as a whole.

Dahlsrud (2008) conducts a qualitative research by using word frequency counts, in order to see how company social responsibility is defined. Then, five dimensions are defined, namely the environmental dimension, the social dimension, the economic dimension, the stakeholder dimension, and the voluntariness dimension. Baughn and McIntosh (2007) conduct a study in 15 Asian countries, examining the two aspects of the company social responsibility, which mainly social and environmental.

In our research, we think that the social aspect can be re-named for "community". Therefore, under the social focus, there will be two sub-categories: the community focus and the environmental focus. There is a variety of approaches or programs across and within industries that allow companies to showcase their social responsibilities.

4.1.1.3.1. Community focus

The term "community focus" in our research is equivalent to the terms "social dimension" (Dahlsrud, 2008) and "social responsibility" (Baughn and McIntosh, 2007). Per Dahlsrud (2008), the community focus refers to the concept that a company maintains the trade-off relationship between its business and society as a whole. A company that has the community focus is one that is willing to "contribute to the better society", to "integrate social concerns in their business operations", and to "consider the full scope of their impact on communities" (Dahlsrud, 2008). Some approaches are shown in the Table 5.

Table 5: Codes under community focus

Codes	Frequency	Number of companies
Social responsibilities of company	25	15
Contributions to communities	22	14
Support many community initiatives	13	10
Support charitable organizations	12	11
Other codes (Frequency: 13 in total): employee giving and volunteering, community needs		

Many companies recognize that they have social responsibilities and are also willing to take them. They are, in several different ways, striving to be the valued members of the communities where they live and operate in.

First, they are committed to conducting their business safely, responsively, and in a manner that contributes to the overall well-being of the community. Secondly, one of the fundamental values and beliefs of some companies is to give back or contribute to the community. Supporting community initiatives, and making contributions to both local and international charitable organizations in the form of both donations and support are among those most popular measures. For example, *Groupe Robert* has taken part in the *Breakfast Club of Canada* and has been delivering pallets of food to many of breakfast programs free of charge for twenty years. Thirdly the employees themselves are encouraged and willing to be active in both charitable acts and volunteering.

4.1.1.3.2. Environment focus

According to Dahlsrud (2008), the environmental focus refers to the concept that a given company maintains the trade-off relationship between its business and its surrounding natural environment. A company that has an environmental focus is willing to contribute to "a cleaner environment", constantly holds "the environmental stewardship", and takes "the environmental concerns in business operations" (Dahlsrud, 2008). Some approaches are shown in the Table 6.

Almost all companies have many pages that talk about their environmental responsibilities and how they develop their businesses sustainably on their website. We can notice that

Table 6: Codes under environmental focus

Codes	Frequency	Number of companies
Employee education and training	107	35
Equipment/facility maintenance	87	30
Optimize fuel/energy consumption	58	20
Reduce adverse impacts	37	18
Rail	36	17
SmartWay	33	19
Environmental responsibilities	31	19
Sustainable development	28	14
Environmental management and protection	27	14
Best emission outputs	24	12
Be green	22	15
Eliminated idling	20	17
Recycling	18	12
Curtain side	17	12
Improve environmental standards	15	11
Aerodynamic vehicles	14	8
Long Combination Vehicles	14	8
Speed governors	10	10

Other codes (Frequency: 120 in total): over the road speed, returnable packages/containers, reduce greenhouse gas emissions, reducing waste, reusing, single wide-base tires, reduce mileage, automatic transmission, FleetSmart, reduce empty miles, Partners in Transportation, environmentally friendly systems, disc brakes, paper-less, prolong the life of parts, environmental awards, reducing material consumption, thermostat, water management services, automatic shut-offs, auxiliary heating systems, liquefied natural gas, motion sensor lights, minimize overcrowding, exhaust gas recirculation technology, low energy lights, compressed natural gas, Ecoflotte, electric vehicles, carpool service, alternative fuel, reduce air pollution, inflate tires with nitrogen.

these companies are fully committed to environmental management and protection and they therefore integrate a wide range of environmental policies, programs, and practices as the essential elements of management at all levels and functions.

On one hand, they work with governments, industry groups, and the public to improve and develop environmental standards and a deep understanding of the relevant environmental issues. For example, they invest on environmental research and development to expand scientific knowledge and improve technologies to protect the environment.

On the other hand, within the organization, they conduct environmental compliance reviews at select locations and regular intervals to figure out different methods to reduce the adverse impacts of their business on the environment and try to be as "green" as possible.

One option is to optimize their energy consumption. For example, many companies become part of the *SmartWay*, which is an environmental program that fosters voluntary collaboration between the U.S. Environmental Protection Agency and the transportation industry and that aims to achieve improved fuel efficiency and reduced emissions. The specific measures that are taken by these companies to get the best emission output are given as follows. First, companies emphasize on the education and training of their employees, because better driving techniques can reduce emission. Secondly, it is

important to source or procure fuel-efficient machinery. For example, some companies choose rail transportation over road transportation; if possible, because trains, to some extent, are more energy-efficient than trucks. Besides, Long Combination Vehicle (LCV), aerodynamic vehicles, vehicles with curtain sides, and vehicles with speed governors are also widely used in the transportation industry. Except for sourcing and procuring energy-efficient machinery, constantly keeping well maintenance for all the equipment and the facilities, and making sure that they can act in a more environmentally friendly way is also essential. Thirdly, many companies show zero tolerance for truck idling and put efforts on eliminating empty miles on trucks. Some systems, which are used in the transportation industry, such as electronic control modules (ECM), can monitor the idling times and give guidance for those companies who want to eliminate idling.

Another way to remain sustainable is to reduce waste. Recycling plays a huge part in this aspect. Companies recycle tires by using them as a base for pylons in road construction sites. Moreover, they recycle metal from equipment, water from truck wash, oil, and so on.

4.1.1.4. General health and safety focus

Health and safety, which are some of the identifiable aspects of a company's daily activities, have an extremely large impact on the success or failure of the business. Therefore, health and safety become one of the company's top priorities, and most competitive companies

have been strict regarding their health and safety standards, extending them to virtually every aspect of their operations.

Every company establishes the safety culture, which consists of shared beliefs, practices and attitudes. Unfortunately,, some companies omit to specify on their website which approaches they are currently undertaking and what areas they are choosing to focus on. Thus, we decided to create a sub-category called "general health and safety" to put these implicit descriptions, or to say, these general terms discussed from a broader view. We also put the other codes (Table 7), which explicitly describe the different areas that the companies focus on, in their corresponding sub-categories, including occupational health and safety, national security, health and safety of products and services. We have already discussed the occupational health and safety while we analyze the employee focus, and we will explain the national security and the health and safety of products and services later in this section.

Compromising safety is the same as compromising the personal well-being of people, and it is not acceptable. On the website of *Schneider*, one of sentences said by Al Schneider is "Nothing we do is worth hurting others or ourselves." It is widely recognized and accepted that safety is not just an afterthought or an added-value feature, but it is the foundation that all companies should provide to their customers as well as the cornerstone of work environment that they want to provide for their employees. Safety in general is so important

that all the companies are committed to establish the safety culture consisted of shared

beliefs, practices, and altitudes.

Table 7: Codes under general health and safety focus

Codes	Frequency	Number of companies
Safety performance	124	32
Commitment to safety	111	35
Equipment and facility maintenance	87	30
Legislation and regulatory compliance	75	32
Safety standards	43	21
Safety inspection	30	19
International Organization for Standardization	15	8
Safe equipment	14	11
Safety certificates	13	9
Regular examination	10	8
Emergency preparedness	10	6

Other codes (Frequency: 60 in total): licensed employees, safety awards, accident-free

services, incident investigation and reporting procedures, Agrichemical Warehousing

Standards Association, health and safety policies, disc brakes, Health Safety and

Environment management systems, Certificate of Recognition, Servicemembers Civil

Relief Act, safe facilities, Partners in Compliance.

First and foremost, companies clearly set and demonstrate safety standards for work

practices and procedures. They comply with or exceed the applicable legislations,

regulations, and industry standards in all the aspects of their businesses. There are several different safety standards that they can follow, such as the *International Organization for Standardization* (ISO).

In addition, on top of making sure that everyone knows what is expected and what is not accepted, companies constantly measure, review and improve their actual safety performances. For example, *Thomas* has a state-of-the-art maintenance facility and their corresponding crew in this facility works hard to ensure that their fleet, equipment, and all other systems are kept in pristine conditions and that all of the equipment is safe enough to be used. To be specific, they conduct regularly scheduled preventative examination, inspect every piece of equipment before use, and, in some cases, open service center to drivers 24 hours a day in order to be prepared for an emergency. According to these companies' website, they are proud to get the best safety ratings and own diversified safety certificates.

4.1.1.5. Other company cultures

After putting codes under the sub-categories of employee focus, customer focus, social focus, and general health and safety focus, there are still several codes left. Some of them explain the different company cultures from a broad perspective and are therefore hard to be categorizing, while some other are a minority of company cultures and it is, to some

extent, unnecessary to give them a sub-category. Thus, we put all these kinds of codes

under the sub-category of the other company cultures (Table 8).

Table 8: Codes under other company cultures

Codes	Frequency	Number of companies
Continuous improvements	91	36
Partners	68	26
Mutual trust and respect relationships	40	26
People drive the organization forward	38	23
Teamwork focus	29	16
Diversification	28	19
Expanding range of services	26	13
Lean	25	3
Relationships with other parties involved	24	16
Adapt to changing business world	23	13
Work hard	22	15
Commitment to values	21	17
Proactive problem solver	21	12
Think tomorrow	18	13
Leadership	15	10
Communication emphasis	15	10
Enthusiastic team	13	9
Challenges for employees	12	6
Employee respond with actions	10	7

Other codes (Frequency: 90 in total): equal to employees, creativity focus, dynamic workplace, common goal, employee eager to listen, kaizen, employee involvement, entrepreneurial spirit, expanding scientific knowledge, mutual benefit, prepare work ahead of time, hands-on management, have confidence in own services, results-oriented, balance each of values, divisional strategy, courteous, confidence in employees, consensus-based decisions

Different companies may focus on different values. However, no matter what values they are committed to, their success is founded in, and, ultimately sustained, by this basic set of values and by following the proven business principles. Moreover, it is important to notice that companies need to transform their abstract values into a culture that is expressed clearly in their daily activities.

In the earlier parts of this thesis, we have discussed some of the largest parts of company cultures. Now, we are going to explain some of the other cultures where companies show interest. Three groups in terms of the other company cultures can be created, namely, relation, adaption, and improvement.

First of all, the relation aspect includes both the within-company relation and the outside-company relation. On the one hand, companies understand that they do not provide superior customer services by themselves, but it is their people do. It is them who drive the company forward. From a thorough study of the websites, we can tell that teamwork must mean a lot to the companies, because phrases such as "teamwork focus", "communication emphasis", "leadership", show up many times. Besides, the way employees behave in their daily operations truly affect the outcomes of companies' performances. Therefore, many companies demonstrate that that they have the outstanding employees, by using the terms, such as "employee respond with actions", "enthusiastic team", etc., on their websites. On the other hand, conducting business is to deal with the outside world. Thus, it is necessary

for companies to work closely and strategically affiliate with other parties in a wide variety of sectors, helping them to establish a broad network, and thus providing a service that is amongst the most flexible and extensive ones. Besides, in the current competitive markets, it is important to not only make an alliance with others, but to also build mutual trust and respect with them.

Secondly, adaptation is another important aspect because the ever-changing business environment. Many companies mention phrases such as "think tomorrow", "adapt to the changing business world", "diversification", and "expanding range of services", etc., on their websites. They challenge themselves to be students of history, but to not be stuck in the past. They view tomorrow as there they want it to be, requiring them to think about what is happening around them today and to develop a strategy on how to position their companies better in order to be successful in the future. To catch up with fashion and to be in tune with the current market trends, companies must adapt to the changing economic realities and expand the range of services.

Lastly, improvements must be implemented in different areas, such as health and safety performance, quality of products and services, human resources, technology, equipment and terminal network, environmental performances, and so on. Some companies deem themselves as the proactive problem solver, always working hard to make continuous improvements to perform better. It is also interesting to find the word "lean" popping up

frequently too. Lean focuses on eliminating wasteful activities and creating smooth products and processes. The lean environment requires a constant dedication from all team members and understanding that the path to perfection is a continuous and never-ending journey.

After this detailed analysis, we think that the family of company cultures plays an important role. Also, it is not difficult to understand that the strategically chosen company culture can differentiate a company from its competition. As a result, we did another analysis of company cultures. We counted how many times each company culture shows up on all of the fifty companies' websites and we summed up all of them under the same family. The result is shown in the Exhibit 2.

Then, we drew a pie chart (Figure 9) showing the percentages of each company culture. By doing so, it was easy to figure out which company culture has greater emphasis over the others. In terms of the four main company cultures, customer focus is the most popular one, while general health and safety are less popular. The percentage of employee focus, customer focus, social focus, general health and safety focus, and the other company cultures are 19%, 29%, 19%, 15%, 18%, respectively.

Figure 9: The percentages of each company culture
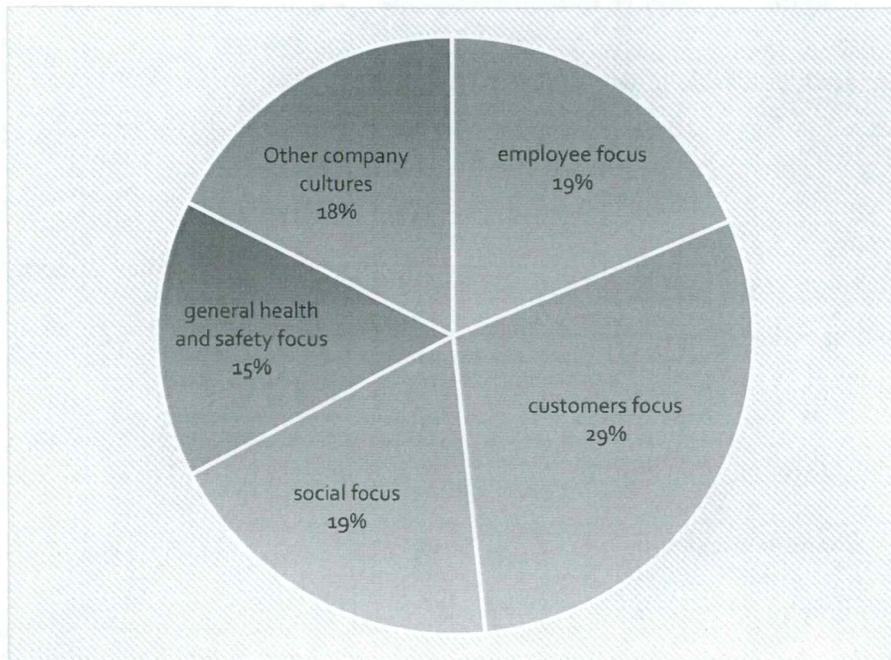
*the percentages indicate the proportion of total frequency

4.1.2. Company governance

Broadly speaking, company governance is the system of mechanisms, rules, practices, and processes by which company behaviors are controlled and directed (Shailer, 2004). Company governance identifies the distribution of both rights and responsibilities among different participants involved in companies, and balances the interests of their stakeholders, including shareholders, financiers, management personnel, employees, suppliers, customers, government and the community as a whole. Companies need to make sure that their businesses adhere to all the rules set by the company governance, so that

they can ensure accountability, fairness, and transparency in their relationship with stakeholders, so that everything is clear and proper. The different codes under company governance are given as follows (Table 9)

Table 9: Codes under company governance

Codes	Frequency	Number of companies
Legislation and regulatory compliance	75	32
Integrity of company	33	20
Employee responsibilities	25	14
Governance practices	21	14
Commitment to principles	16	9
Responsibilities of company	16	12

Other codes (Frequency: 54 in total): clearly defined strategies, ethics of company, transparency, Human Resource tools, meet requirements within organization, audit matters, workplace standards, company policies, stewardship, disclosure policy, Business Code of Conduct and Ethics, Human Resource education.

Companies are fully aware that they need to take care of not only themselves, but also their people, equipment, customers, communities, and the whole environment. Thus, they have to be committed to the proven business policies and principles, and dedicated to enforce rigorous and disciplined their business governance standards and practices.

Keeping their integrity is an important aspect of issuing those responsibilities. It is the basis of how they operate their business; therefore, all companies should follow the highest standards of ethics and integrity. For example, legislations and regulations should be complied with in every aspect. *Mullen Group* employs the whistleblower policy. They think that understanding and acting upon any issues that exists regarding financial, accounting and audit matters is an essential component of its ability to take action and to ensure the highest levels of integrity, and especially financial integrity.

In addition, it is well known that employees do play an important role in their companies' growth and development. Thus, companies put an emphasis on the active involvement their employees and make sure that each one of them clearly understands their unique role and responsibilities. It is really the key to success. For example, *Group Robert* has a competitive remuneration program based on a set of criteria that take into consideration their employees' qualifications, skills, and performance. The employees, who are clear about their roles and who can take on more responsibilities, and perform better, will be able to achieve more in the medium to long term.

4.1.3. *Company structure*

Usually, when we talk about a company structure, we only refer to "the overall makeup of all of a company's different departments and areas, such as marketing, finance, accounting,

human resources, and IT" (The Business Dictionary. Company structure. Accessed June 22, 2015). Even though each of these departments has their own responsibilities, they all work together to contribute to the overall mission and common goals of the company . However, the term "company structure" used here describes one of these categories and refers to a broader sense.

Company structure, discussed here, includes the company's ownership structure. For example, some small businesses are privately owned or operated, while large ones are often publicly owned. Besides, if the company is operated under the control of its parent company, it may become a wholly owned subsidiary.

Besides the ownership structure, a company structure also consists of the ways in which the company organizes its business units. For example, some companies have an asset-based infrastructure and benefit their customers with their strength and stability, while some other companies believe that the non-asset-based infrastructure can take off investment burdens from their own shoulders and add flexibility to their customer services if they establish partnerships with other parties and outsource some of their non-core businesses. Additionally, some companies are self-managed and run their businesses independently, because they think they can deliver a wide range of special services to thousands of customers through the independently operated business units. By doing so, different business units are accountable for their own results, returns on capital employed,

and overall performances. The Table 10 shows those different company structures and the resulting ways in which their business operates.

Table 10: Codes under company structure

Codes	Frequency	Number of companies
Outsourcing	68	26
Asset-based infrastructure	27	14
Owner-operator	26	17
Contract business model	19	13

Other codes (Frequency: 57 in total): family-owned, privately owned, independent business, non-asset based infrastructure, wholly owned, family-run, sub-contractor, publicly owned, self-managed business, distinct business segments, lease-operator, private fleet conversion, limited partnership

On the one hand, some companies, such as *Day&Ross Freight, Thomson, Transpro, Total Logistics Trucking, Schneider, Simard, SLH Transport*, etc., consider themselves asset-based. They own trucks, people, equipment, machines, facilities, or other tangible as well as intangible assets. Companies can provide their customers with much more strength and stability of operations as well as much more convenience and capacity of the third-party freight management services, because of the asset-based infrastructure.

On the other hand, other companies may deploy the contract business model. Companies with asset-based infrastructures can use the contract business model too. These two ways are not mutually exclusive. On the contrary, they can be complimentary. For example, *Day&Ross Freight, Transpor*, ect. are both asset-based and contract-used. Contract

logistics business focus on transportation management utilizing longer-term agreements and the strategic alignment of a partnership network. Affiliated partners can help companies establish a broad and valuable network. Thus, companies can fully serve their customers' capacity and coverage requirements, in a more flexible and cost-effective way, by relying on their well-established partners' network and owner-operator network. For example, *Transpro* has owner operators that meet the seasonal needs, in order to fully serve their customers' capacity and coverage requirements.

4.1.4. *Company reputation*

"A company's reputation is the collective assessment of the company's past actions and the probability of its ability to deliver the improving business performance in the future, which is held by its internal and external stakeholders" (The Business Dictionary. Company reputation. Accessed June 22, 2015). Many companies work actively to build a good reputation because they believe that a company can achieve its objectives much more easily if it has a good name and image among its stakeholders. A good reputation shows in several different aspects, and there are diversified terms to describe it (Table 11).

Company rankings are one way to measure a their reputation. Some companies think that they are competitive and the best in everything. For example, *Mullen Group* claims to be

Table 11: Codes under company reputation

Codes	Frequency	Number of companies
Long history	115	42
Leading company	81	31
Experienced company	72	31
Growing organization	49	27
Largest service provider	40	18
High reputation	37	25
Top company	25	13
Customer base	23	12
Succeed	22	17
Reliable company	21	13
Successful track record	21	11
Long-term viability	21	12
Competitive company	19	14
Best in everything	18	13
Premier service provider	12	8
Other codes (Frequency: 3 in total): employer of choice		

the leading company; *Transfreight* views itself as the premier service provider; *Groupe Robert* believes itself to be the top company; *Thomas* think it is the largest service provider.

Another aspect of a company reputation can be described from the company's development road. Some companies evaluate themselves as experienced company with a long history, while others think of themselves as growing organizations with long-term viability and potential. For the former group of companies, such as *Schneider, Gibson, Bruce R. Smith*, etc., they are always proud to have an extensive experience in delivering certain services to their customers, because one of their fundamental strengths lies in providing a high level

of familiarity with their business. For the latter group of companies, such as *Mullen Group, APPS International, SLH Transport*, etc., think that their constant growth and development will ensure their ongoing prosperity. However, no matter what kind of company they are, in order to succeed today and tomorrow, they believe that the cornerstone is to become a "reliable company". The reliability of the company is built on the "successful track record", which, in turn, will contribute to the establishment of the "customer base" and therefore, a "high reputation".

4.2. Services offered

Usually, for companies in the trucking industry, there are many kinds of services that they can offer, namely trucking related services and other services related to logistics. Thus, we will have those two main families under the services offered and explain them in details. In addition, in order to have a better understanding of the services offered by trucking carriers, we need to explore the characteristics of services first before going into the details of the services offered.

4.2.1. Characteristics of services

Services can have variety and a multitude of characteristics. Here, we will only discuss the four main ones, which are place, mode, type of cargo, and type of industry, because they

are the most important ones that help us show how company conduct their services and how they propose their values.

4.2.1.1. Place

Place utility, in the transportation industry, refers to the ability to get the freight to the customer's desired location (Drucker, 1954; Langley, 1983; Plowman, 1964). Some large companies may have a large geographic scope of operations because they have enough resources. By taking advantages of comprehensive business networks, they may operate businesses across borders or even all over the world. However, some other companies, who are small or medium-scaled and who neither have enough tangible nor intangible assets to deploy, may only conduct businesses within a relatively small geographical area. The areas that these companies can cover are given in the Table 12. However, it does not necessarily mean that large companies are always more competitive that the smaller ones. Different sized companies will position themselves at different levels and to different target customer groups in order to benefit from their own competitive advantage. No matter how large their size is, all companies will continue to try to cover both pickup and final delivery points for their targeted customers on their own or by the help of other third parties.

Companies determine their geographic coverage on their background, size, assets, strategic alliances, and so on. Some of them operate internationally, and have a comprehensive

Table 12: Codes under place

Codes	Frequency	Number of companies
Canada	131	34
USA	129	40
North America	105	33
Ontario	95	29
Quebec	64	19
Western Canada	44	19
Regional	35	18
Toronto	31	9
Montreal	28	13
Vancouver	27	11
Calgary	26	11
Between Canada and USA	26	16
Coast-to-coast	24	7
National	24	10
International	22	12
Edmonton	22	11
Local	20	11
Domestic	20	13
Greater Toronto Area	19	9
Atlantic	18	6
Saskatoon	18	8
Winnipeg	17	9
Regina	16	8
Alberta	16	8
British Columbia	13	7
Around the world	12	6
Eastern Canada	11	8

Other codes (Frequency: 159 in total): the continent, Manitoba, along the corridor (Windsor/Quebec City), Halifax, Quebec City, central Canada, Eastern US, Newfoundland, Mexico, Thunder Bay, Windsor, China, Ottawa, interprovincial, Moncton, Saskatchewan, Brandon, provincial, Pacific, Kelowna, maritime provinces, New Brunswick, overseas, mid-west Canada, Mississauga, Victoria, Western USA, St. John's, Europe, Hartland, Brampton, between Canada and Mexico, North Eastern US, Northwest Territories, southern USA, New York, Granby, Georgia, Dalton, Remote Points, Surrey, Prince Edward Island, New Mexico, New Jersey, London, Pomona, New Westminster, Nova Scotia, Alaska, Africa, Asia, Barrie, abroad.

network around the world, while others only focus their efforts on specific areas. Some

companies offer services from coast to coast, while others only offer services in the

Western Canada or the Atlantic areas. Because of the geographical location of Canada,

many companies have businesses in North America, especially between Canada and USA.

For those companies who only have businesses nationally or domestically, some provinces

such as Ontario, Quebec, Saskatoon, British Columbia, are among the most popular ones.

Also, those companies who only have regional or local services are especially active in

some metropolitan cities, such as Greater Toronto Area (GTA), Montreal, Vancouver,

Calgary, Edmonton, Winnipeg, Alberta, and Regina.

The place is one of the most important categories we should consider. However, the codes

we give in the Table 12 may be too specific to develop the general concepts on how

companies propose values in terms of it. To do so, we also establish the Table 13 to put all

codes related to the place utility under 6 geographic coverages. The detailed data is given

in the Exhibit 3.

Since a company which is offering international service will most of the time also offer

continentally, national, provincial, reginal, and local service, we have assigned the biggest

territory covered to each company, in order to minimize redundancy. Afterwards, we built

Figure 10 to demonstrate how many companies out of the 50 selected are offering services

internationally, continentally, nationally, provincially, regionally, and locally.

Table 13: Place-related codes under the each of geographic coverage

Internationally	International, around the world, China, overseas, Europe, Africa, Asia, abroad
Continentally	USA, North America, between Canada and USA, Atlantic, the continent, Eastern USA, Mexico, Pacific, Western USA, between Canada and Mexico, North-Eastern USA, Southern USA, New York, Georgia, Dalton, New Mexico, New Jersey, Alaska, coast-to-coast, Pomona,
Nationally	Canada, national, domestic, interprovincial,
Provincially	Ontario, Quebec, Alberta, British Columbia, Manitoba, Newfoundland, Saskatchewan, Provincial, New Brunswick, Prince Edward Island, Nova Scotia
Regionally	Western Canada, regionally, Eastern Canada, along the corridor (Windsor/Quebec City), central Canada, Thunder Bay, maritime provinces, Mid-western Canada, North Western territories, remote points
Locally	Toronto, Montreal, Vancouver, Calgary, Edmonton, local, Greater Toronto Area, Regina, Saskatoon, Winnipeg, Halifax, Quebec City, Windsor, Ottawa, Moncton, Brandon, Kelowna, Mississauga, Victoria, St. John's, Hartland, Brampton, Granby, Surrey, London, New Westminster, Barrie

Figure 10: Numbers of companies offer services in each of the geographic coverage
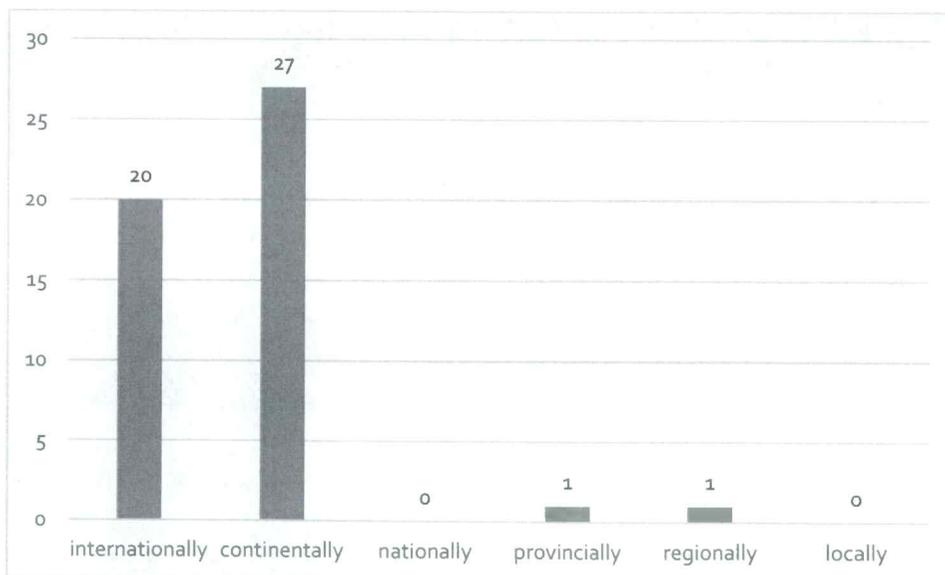
The numbers of companies who conduct business internationally, continentally, nationally, provincially, regionally, and locally are, 20, 27, 0, 1, 1, 0, respectively. Nearly half of the carriers can provide services around the world and more than half of the carriers can provide service within the continent. Besides, there is 1 out of 50 companies that does not mention its geographic coverage on its website.

4.2.1.2. Mode

In the trucking transportation industry, it is common that carriers also offer trucking related services based on four main types of modes, which are road, rail, ocean, and air (Table 14). In addition, some companies also use the multimodal modes if necessary.

Table 14: Codes under mode

Codes	Frequency	Number of companies
Road	120	38
Multimodal	81	21
Rail	36	17
Water	24	14
Air	13	11
Pipeline	2	2

As we conduct this research in the Canadian trucking industry, it is not difficult to find out that trucks are the most used mode of transportation for goods. Thus, road is, of course, the

most popular mode, compared to rail, ocean, and air. Moreover, many companies are currently using or plan to use the trans-load and intermodal services, which are commonly used when one mode cannot be enough for the whole trip. For example, it is used when the goods are shipped internationally from one inland point to another, requiring transportation by truck to an airport or port, then by airplane or ship overseas, and finally by another truck to its end-destination. Trans-load requires the handling of goods and therefore, some other logistic services, such as storage, handling, and so on, may be needed. In order to have the intuitive feeling about how many companies out of fifty use road, rail, ocean, or air, respectively while transporting goods, we also drew Figure 11.

Figure 11: Number of companies transporting goods by each of mode
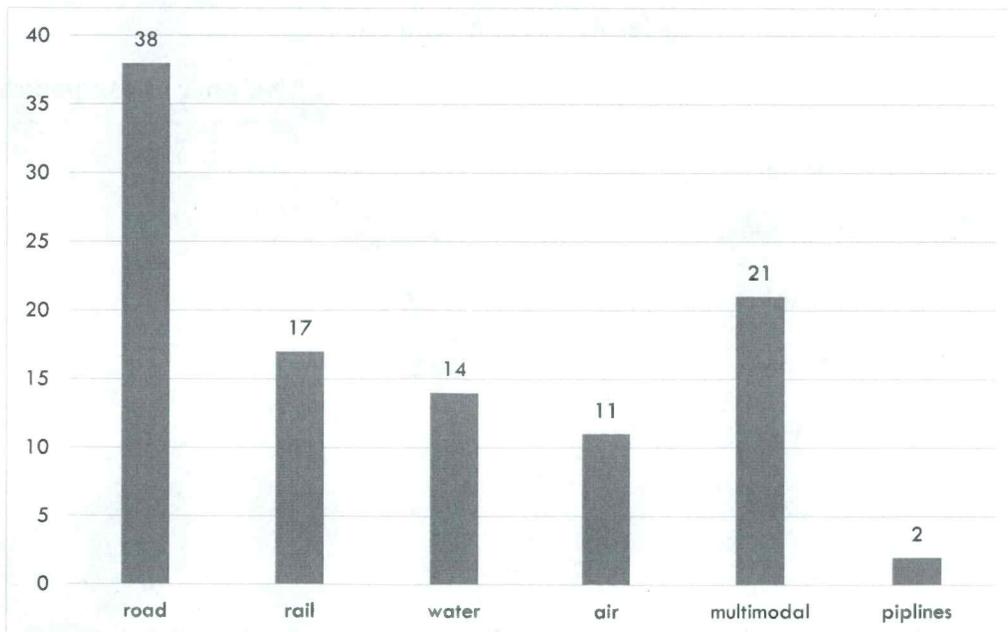
Of course, it is easy to understand that the majority of companies say that they only transport goods by road. However, the number of companies who transport goods by road is not equal to fifty. We think that it may be because some companies think it is not necessary to state that they provide road transportation on their website. After all, we are studying the companies that belong to the trucking industry. There are also 21 companies who can offer multimodal services to their customers. The numbers of companies who provide rail, water, and air transportation are 17, 14, and 11, respectively. There are also two out of 50 companies that offer transportation using pipelines. While mentioning the rail, water, air, and the pipeline transportation on their websites, carriers do not specify whether they do it with their own equipment or through the collaboration with their partners. Therefore, we think that they do not necessarily have the equipment but that they could provide different mode of transportation through a partnership.

4.2.1.3. Type of cargo

There are several different ways to categorize the type of cargo, and here we differentiate them by their own and specific characteristics (Table 15). These characteristics determine what kind of equipment should be used and what kinds of services (except transportation) may be needed in order to meet customers' demands. Taking the refrigerated products as an example, it is without saying that they should transported using temperature controlled equipment in order to make sure that will not go bad before getting to their final destination.

Therefore, it is necessary to understand which types of cargos are handled before analyzing the services offered.

In general, there are two main types of cargos that can be usually transported between the place of origin and the place of destination, namely, general freight and specialized freight.

For general freight, almost all carriers are able to carry it because it does not require any specialized equipment. Usually, the freight is palletized and can be carried in a van trailer or a container. The general freight includes packaged goods, bottled products, bulk freight, dry products, etc.

Table 15: Codes under type of cargo

Codes	Frequency	Number of companies
Oversize and overweight freight	38	15
Bulk freight	30	9
Dangerous goods	25	17
General freight	22	13
Dry products	15	14
Specialized freight	12	7
Other codes (Frequency: 30 in total): packaged goods, raw material, fragile freight, temperature sensitive products, bottled products, single piece freight		

In terms of the latter one, it requires the specialized equipment, and, therefore, different companies may have competitive advantages over other ones according to their strategic

proposition or their specific background. Specialized freight includes oversized and overweight freight, raw material, fragile freight, temperature-sensitive products, dangerous goods, single piece freight, etc.

The Figure 12 shows how many companies out of 50 can offer transportation of general freight and specialized freight, respectively. The detailed data is given in Exhibit 4.

Figure 12: Number of companies that offer services for general freight and specialized freight
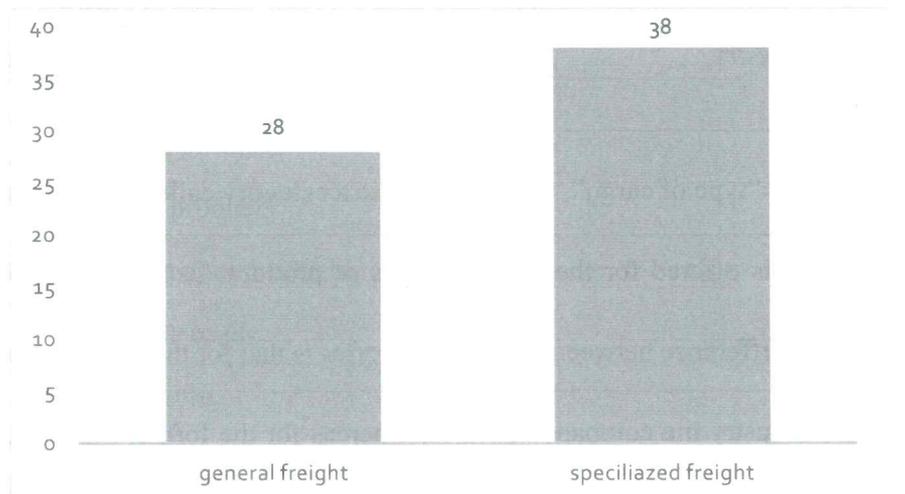
As we mentioned earlier, transporting general freight does not require the specialized equipment, Therefore, any company should be able to handle it. However, it is interesting to find out that the number of companies that can offer general freight transportation is not equivalent to fifty. We think that there may be two reasons for that. On one hand, those companies may believe that transporting general freight is the most important service for trucking carriers and it is therefore not necessary to mention it on their website. On the

other hand, a majority of companies only offer specialized freight transportation to their customers, because they believe doing so can help them differentiate themselves from those who do not want to waste their assets the general freight transportation.

It is important to understand that transporting certain types of specialized freight not only needs specialized equipment but the knowledgeable assets too. We will discuss it later in the section of assets and capabilities.

4.2.1.4. Type of industry

Besides the category "type of cargo", we also propose a category called "type of industry" for the service that is offered for the specific types of products in the specific types of industry. The main difference between the two categories is that for the latter one we know exactly in which industry the company operates, whereas for the former one we can only have a general idea about the specific characteristics of the shipped freight. The types of cargo that is being shipped by the carriers were discussed in detail earlier in this section and it includes the general freight and the specialized freight. Afterwards, we will discuss the industries in which the carriers may provide services.

From electronic products to fashion products, from the energy industry to the food industry, carriers transport a wide range of products for a wide range of industries (Table 16). As the type of products that are shipped and the type of industry that carriers serve may differ

Table 16: Codes under the type of industry

Codes	Frequency	Number of companies
Food products	35	15
Serve a wide range of industries	34	19
Retail industry	24	15
Manufacturing industry	23	15
Agricultural products	18	9
Construction products	16	8
Chemical products	15	9
Oilfield services	13	5
High-value products	13	8
Automotive products	12	8
Consumer products	11	7
Educational and paper products	11	7
Perishable foods	11	7
Furniture	11	4
Beverage	11	5
Petroleum	11	5
Industrial products	10	6

Other codes (Frequency: 130 in total): time-sensitive freight, oil industry, distribution industry, mining industry, electronics products, pharmaceuticals products, steel, liquid products, fashion goods, natural gas industry, aerospace, commercial products, energy industry, cosmetics products, sporting goods, flooring industry, forestry industry, water treatment industries, metals, tobacco, dairy products, hardware products, agrochemical products, hydraulic products, housewares products, housewares products, high-tech products, toiletries, paints, fabrication industry, footwear.

a lot, the needed resources, both tangible and intangible, can also differ to a great extent. Thus, knowing what types of products the carrier ships and what types of industries the carrier serves can help us understand their specific capabilities. For example, some carriers only serve the retailer industry and only transport basic products, while some carriers only operate businesses for the energy industry and only ship petroleum products. Different carriers can focus on different industries and gain competitive advantages over others.

Some companies have decided to serve a wide range of industries because they have extensive assets, while some other ones may only want to provide services for specific industries because they have more expertise and competitive advantages over the others and they can surpass the others in a specific niche. On the one hand, from the supply chain perspective of view, companies can provide services for the manufacturing industry, the retail industry, and so on. On the other hand, in terms of the specific type of products that belong to a specific industry, carriers can provide services for perishable and non-perishable food products, agricultural products, construction products, chemical products, high-value products, automotive products, consumer products, educational and paper products, furniture, beverage, industrial products, and so on. Since Canada is a wealthy nation, which has an abundance of natural resources, especially oil, it is also interesting to find out that some companies are capable of transporting goods originated from the related oilfield services, such as petroleum.

4.2.2. Trucking related services

As a business operator in the trucking industry, the main and core business offered by these companies must be the transportation and other trucking related services (Table 17).

Table 17: Codes under trucking related services.

Codes	Frequency	Number of companies
Truckload	180	42
Less-than-truckload	148	35
Canada/USA cross-border services	50	20
Container loads	43	17
Heavy haul services	43	19
Trans-border business	40	19
Customs bonded services	35	18
Long haul services	31	18
Scheduled services	27	12
Daily services	24	16
Delivery service	19	9
Courier	17	6
Home delivery	12	3
Pickup and delivery service	12	7
Other codes (Frequency: 20 in total): specialized delivery services, office delivery, short haul service, store-site delivery.		

At first, we created the codes of "transportation" and "hauling services". However, we assumed, afterwards, that it is unnecessary to have them and then suppress them, since being a trucking company, all of them should provide transportation services to their

customers. In the following part, we want to explain the trucking related service in two main groups, namely transportation and the other trucking related services.

In terms of transportation, we named several specific types of services to help understand what services carriers provide. However, in general, there are three types of services, including truckload, less-than-truckload, and courier. The codes of "heavy haul services", "long haul services", and "short haul services" should be in grouped together in "truckload", while the codes of "delivery services", "home delivery", "office delivery", "store-site delivery", and finally "specialized delivery services" should belong to the group of "less-than-truckload". Besides, some carriers can also provide courier services to their customers. The Figure 13 shows that the number of carriers that offer truckload, less-than-truckload, and courier are 42, 35, 8, respectively. Except for these three main types of transportation, some carriers also offer container load and less-than-containers load services to their customers, since they offer multimodal services. Detailed data is given in the Exhibit 5.

Figure 13: Number of carriers offer truckload, less-than-truckload, courier
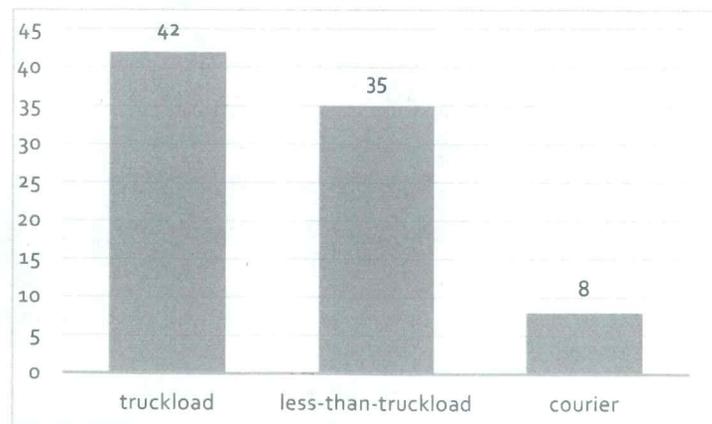
In terms of the other trucking related services, some other complimentary service, such as daily services, pick-up and delivery services, scheduled services, etc. should be discussed here. The first two services are easy to understand; thus, we only want to explain the scheduled services here. The scheduled services allow customers to make an appointment or schedules with carriers when they plan to pick up the freight themselves or when they want the freight to be delivered to a specific place. The carriers can ask customers to pay for the scheduled services, or they can just give charge the customers for them. It all depends on the carriers' own pricing scheme. In addition, we think it is necessary to have a group that describes the cross-border related services, because at least half of the carriers (Figure 14) that we have analyzed mention that they have related cross-border services, especially between the USA and Canada. With majority of large cities in Canada located not far away from the Canada - USA boundary and tons of transactions being operated between the two, it is not hard to imagine that cross-border businesses play an important role in the logistics' services, especially in the transportation sector. We put the codes "Canada/USA cross-border services", "trans-border services", and "customs bonded services" in this group.

Figure 14: Number of carriers provide/not provide cross-border related services
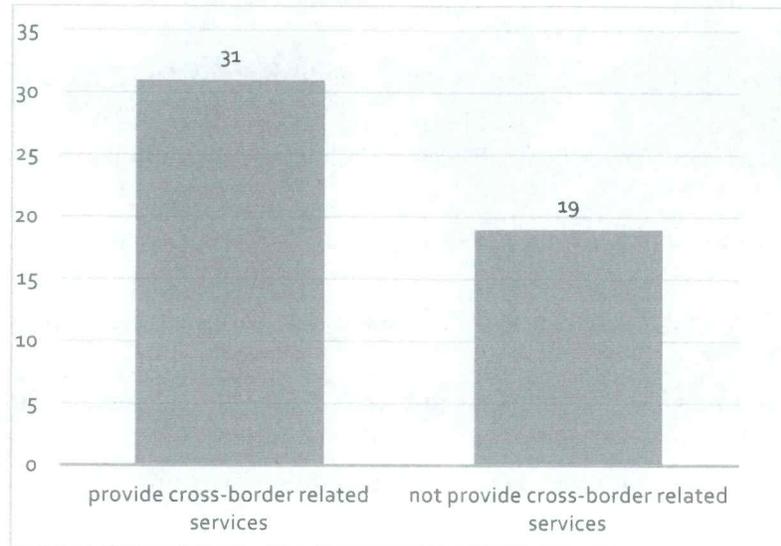
4.2.3. Service related to logistics

One of the most important value creations is the carriers' capabilities to provide extended services (Table 18), on top of transportation services. These service extensions are also widely known as value-added services. On the one hand, carriers consider themselves third party logistic providers, offering integrated or total solutions to customers. They develop capabilities to act on other logistical functions, such as consolidation and deconsolidation, consulting, storage, network optimization, cross-border related services, etc. On the other hand, instead of being third-party-logistics providers, some carriers only consider themselves as a fourth party logistics, offering freight forwarder service to their customers.

Table 18: Codes under services related to logistics

Codes	Frequency	Number of companies
Logistics services	109	33
Warehousing	107	31
Distribution	86	30
Trans-load and intermodal services	81	21
Integrated solutions	55	20
Storage	54	31
Cross-docking	47	21
Value-added services	45	21
Inventory management	38	20
Consolidation and deconsolidation services	36	19
Online services	35	21
Supply chain solutions	34	18
Third Party Logistics	32	16
Expanding range of services	26	13
Enhance customer competitive advantages	26	16
Handling	24	13
Pick and pack	21	13
Consulting	19	11
Dispatch	18	8
Supply chain security service	18	11
Brokerage business	18	11
Full service provider	17	6
Reverse logistics	17	6
Direct services	16	10
Freight loading and unloading	14	13
Insurance coverage service	14	9
Computerized services	14	9
Related services	13	9
Assembly	12	9
Freight management services	12	5
Emergency freight services	10	6
Packaging	10	6
Order management	10	7
Stuffing and de-stuffing services	10	8
Labelling	10	8

Other codes (Frequency: 172 in total): freight forward, services associated with the last mile of the supply chain, fleet outsourcing, post audit services, network optimization, white glove, kitting/sequencing, portfolio/blend of services, door to door service, customer interface, route optimization, facility services, racking, hold for pick up, palletizing services, storage trailer rental services, customer self-service, automated solutions, fulfillment services, forecasting and planning, sorting, business optimization, break bulk services, turnkey solutions, production services, B2C, trailer renting, marketing, milk runs, processing, B2B, drilling related services, blending, boxing, dewatering services, driver outsourcing, co-load delivery, restocking, carpool service, after sales support, exploration support services, preservation, leasing services, fractionation services, refurbishing.

The majority of companies that have been studied here offer not only trucking related services, but also other logistics services, which may add value to their customers, as well as the whole supply chain. Some companies provide integrated solutions to their customers while other ones only manage several specific tasks through the supply chain. For the ones that can provide a start-to-finish solution, they are either the third-party logistics that have strong tangible and intangible assets, or they are the fourth-party logistics that do not have the necessary tangible assets. The former group of companies are the full-service providers and can offer customers' desired services, while the latter group of companies only conduct freight forward and brokerage services. Both types of companies take off the burden from their customers' shoulders and allow them to focus on their core competences.

There are some specific services that may sound very familiar in the logistic services field, such as warehousing, distribution, trans-load and intermodal services, storage, cross-docking, inventory management, consolidation and deconsolidation services, handling, pick and pack, dispatch, freight loading and unloading, pickup and delivery service, assembly, etc. A part from these basic logistics services, some other value-added services, which bring more convenience to the customer, are also mentioned several times. For example, online services are provided by *Rosedale* to let customers get fast and competitive quotes, track their shipments, and manage their businesses in a more efficient way.

In addition, we also listed some other codes that are general and that do not refer to the specific services, including "integrated solutions", "supply chain solution", "expanding range of services", "value-added services", "related services", etc.

Because there are only two main types of services that a company can offer, namely trucking related service and services related to logistics, it would be interesting to find out which one draws more attention than the other. Thus, we drew a pie chart (Figure 15) to show their corresponding percentages of total frequency. The detailed data of how many times each type of services shows up on all the 50 companies' websites are given in the Exhibit 6. Besides, we also create a chart (Figure 16) to show the number of companies which mention each type of services on their websites.

Figure 15: The percentages of two main types of services
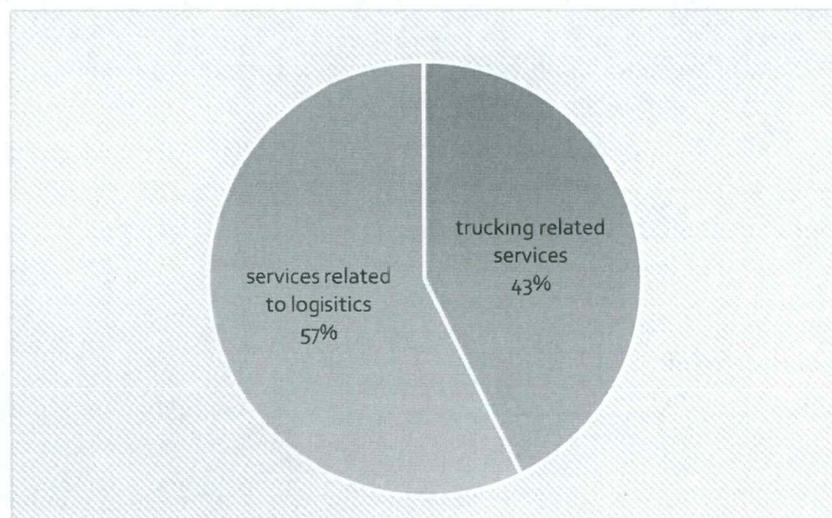
*the percentages indicate the proportion of total frequency

Figure 16: The number of companies with two main types of services
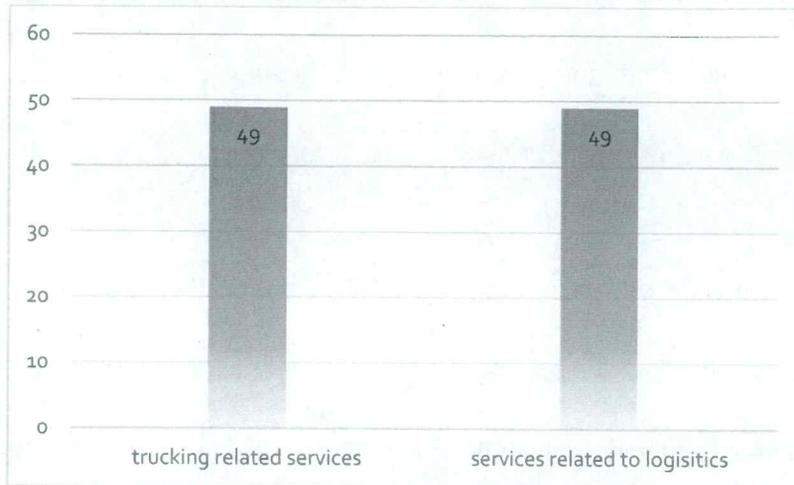
Even though the trucking related services should be the core services for a trucking company, services related to logistics are discussed more on the companies' websites. As shown in the Figure 15, trucking related services and logistics related services account for 43% and 57%, respectively. We think that the services related to logistics are the main ways to differentiate one company from the others and, therefore, companies explain more about it on their websites to draw their customers' attention. As shown in Figure 16, only 1 out of 50 companies does not mention the trucking related services on its websites, and, also, 1 does not mention the logistics related services.

4.3. Assets and capabilities

Assets and capabilities are the necessary tools to empower companies to conduct business today and in the future. Therefore, it is important to analyze the two main types of assets and capabilities, including the tangible and intangible assets.

4.3.1. Tangible assets

Tangible assets refer to "cash, equipment, machinery, plant, property anything that has long-term physical existence or is acquired for use in the operations of the business and not for sale to customers" (The Business Dictionary. Tangible asset. Accessed June 22, 2015). In the transportation sector, carriers need to have both general type of equipment (e.g. van, tractor, trailer, flatbed, etc.) and specific tangible type of equipment (e.g. specialty trailer, temperature controlled-fleet, etc.) at hand, to provide shipments for the freight. No matter what kind of equipment the carriers operate, it must be reliable. Besides, it is necessary for carriers to own other tangible assets, such as facilities and machinery since they offer more value to their customers. A wide range of tangible assets is given in the Table 19.

In order to provide better service for their customers, companies constantly invest in equipment or facilities. Equipment should be at least safe, reliable, and of high quality. It is the right tool that allows a reduction of downtime, and maintains the highest standards and that everyone need in order to succeed. In addition, the supportive equipment can best suit customers' specific needs, and the up-to-date equipment keeps abreast of the latest technology and ensure the best service performance.

Table 19: Codes under tangible assets

Codes	Frequency	Number of companies
Specialized equipment	104	31
Truck	85	32
Trailer	73	33
Capacity	57	17
Reliable equipment	57	22
Up to date equipment	56	21
Comprehensive network	50	15
Flatbed	49	24
Temperature controlled	47	22
Dry van	47	17
Fleet base	41	25
Superior locations	41	22
Large facilities	37	16
Heated	36	22
Van	33	18
New fleet	33	17
Refrigerated	31	14
Tractor	30	19
Invest in equipment/facilities	30	16
Supportive equipment	28	15
Reliable facilities	27	19
Asset-based infrastructure	27	14
Extensive terminals	27	12
Reefer	26	8
Decks	24	12
Tandem	19	11
High quality equipment	18	14
Own equipment	18	14
Drayage	15	8
Chassis	15	8
Safe equipment	14	11
Long Combination Vehicles	14	8
Tridem	12	9

Other codes (Frequency: 112 in total): air-ride trailer, steel, extensive facilities, well-maintained warehouse, solid infrastructure, power units, container frame, double drop trailer, extensive equipment, mobile unit, modern premises, roaldite, floats, forklift, hybrid fleet, cooler and freezer warehouse, rolling stock, safe facilities, tanker, genset, train, electric vehicles, watertight equipment, drilling rigs, wind tower hauling, lift tuck, own facilities.

There are some commonly used fleets, such as truck, trailer, flatbed, van, tractor, reefer, decks, tandem, drayage, chassis, tridem, and so on. For example, a van can be used for the general freight, which includes the packaged goods and the bottled products; temperature controlled equipment should be used for the perishable food; the heavy haul specialized equipment need be used for the oversize or overweight products.

In terms of the facilities, some companies put tremendous efforts on establishing a comprehensive network and build up extensive facilities in different areas. The areas chosen for the facilities largely depend on their positioned geographic coverage. Additionally, carriers are strategically located in a place they think is superior, if they decide to offer less-than-truckload service to their customers. Most of these locations have the characteristics like close to maritime terminals, airports, railways, or unmatched access to major highways. Besides, companies prefer to use some words, such as large, and reliable, to describe their facilities.

4.3.2. Intangible assets, capabilities, and resulting company performances

Intangible assets refer to "reputation, name recognition, and intellectual property such as knowledge and know how" (The Business Dictionary. intangible asset. Accessed June 22, 2015). The most important characteristic of an intangible asset is that it is nonphysical. Depending on the domain of the business, intangible assets may have different forms. No

matter what these forms are, intangible assets will greatly contribute to the company's value and its future growth, and can sometimes be more valuable that the tangible assets.

In the transportation field, the intangible assets could be the specialized skills and knowledge about the service offerings to the specific industry of operation, such as aerospace, construction, pharmaceuticals, and so on. We will now proceed to the in-depth analysis of different forms of intangible assets and their resulting benefits.

A business capability is what a company needs (e.g. people, process, capacity, materials, technology, etc.) in order to operate and perform its core functions. According to Leonard (1995), there are three types of business capabilities, which are: core capabilities, enabling capabilities, and supplemental capabilities. Both core capabilities and enabling capabilities are the ones that a company needs to have in order to run their business operations. The main difference between core capabilities and enabling capabilities is that the latter ones can be easily imitated and cannot provide the company with sustainable competitive advantages. Supplemental capabilities could also be imitated. However, they can add value to core capabilities, while enabling capabilities do not necessarily add value to core capabilities.

After analyzing all of the 50 company websites, we realized that two main types of intangible assets are discussed quite often; thus, we created two families to differentiate

them from the others. These two families are information technology and cross-border related certificates or programs.

4.3.2.1. Information technology

In order to provide larger and more important value to customers under circumstances of the ever-changing industry and the globalization, companies are forced to implement new information technologies and to update their operation strategies accordingly (Table 20).

Information technology, which is one of the most popular sub-categories of technology innovation, has been implemented in the supply chain (Russell and Hoag, 2004). The Council of Supply Chain Management and Rogers (2003), Hazen and Byrd (2012) define the logistics' information technology innovation as "an information technology application that is perceived as new to the organization of adoption that is used for planning, implementing, and/or controlling procedures for the transportation and storage of goods and services from the point of origin to the point of consumption".

By using this information technology, a variety of benefits can be achieved, contributing to a better overall performance both to the companies and to the customers. It can for example reduce processing costs and improve equipment utilization, planning process, and responsiveness while facilitating the decision making process, improving relationships with the trading partners, decreasing the number of administrative employees, reducing

cycle times, increasing productivity, enhancing channel cooperation, reducing the delivery

of incorrect product, and so on (Hazen and Byrd, 2012).

Table 20:   Codes under information technology

Codes	Frequency	Number of companies
Advanced technology	108	29
Tracking technology	90	30
Real-time technology	57	24
Visibility to customers	57	23
Transportation Management System	47	21
Online services	35	21
Monitor operations	35	18
Satellite technology	29	15
Helpful technology	29	9
Communication technology	27	15
Warehouse Management System	24	11
Invest in technology	22	10
Reporting technology	21	10
Onboard technology	14	12
Computerized services	14	9
Smart solutions	13	3
Competitive technology tools	11	7
Information Technology systems	10	9
Research and development	10	6

Other codes (Frequency: 75 in total): customer interface, best software, automated solutions, scanning technology, user-friendly technology, handheld technology, environmentally friendly systems, best telecommunications solutions, Information Technology solutions, mobile technology, Enterprise Resource Planning, best hardware, communication networks, Manhattan Associates, business intelligence systems, navigation systems, Integrated Design Suite (IDS) software, document management system, fleet management system.

Over the decades, technology has been a key driver in providing the effective transportation

services that we have today. New technologies can really make a difference for in resolving

environmental issues, establishing the optimum deployment of assets, offer maximum visibility to the whole supply chain, and provide flexible and exceptional level of services to the customers. In order to keep up with the trends and give their customers the information they need, companies promote on-going research and development, invest in technology, and try their best to improve and implement the most advanced and up-to-date technology. There are only 5 out of 50 companies who do not mention the information technology emphasis on their websites.

There is a wide range of competitive technology tools, to name a few: tracking, real-time, satellite, communication , reporting, onboard technologies and so on. On one hand, customers want to know which truck their order is on in real-time and where every order is located and when it was or will be delivered to the final destination. All of these tools, which include GPS, RF or RFID, barcode system, online services, etc., can provide extensive visibility to their customers and make the customers' wishes come true. On the other hand, companies in this industry want to monitor their own business activities for their own interest too. Some IT systems (Information Technology systems), such as TMS (Transportation Management System), WMS (Warehouse Management System), are put in place by most of them. For example, orders can be processed through the EDI (Electronic Data Interchange), which is one of the TMS. Functions, such as load tendering, shipment status, and invoicing are all performed through this highly effective and secure feature.

We do not think that it might be necessary to differentiate those technology tools for customers or for the operations of the provider, because a majority of these tools are provided by companies and aimed at streaming the product and the information flows at the same time. With the help of all these computerized services, smart solutions can be provided, freight can be fully monitored, and other logistics related services could be well organized. Therefore it is beneficial for both companies themselves and their customers, and the whole supply chain can be thus organized smoothly.

4.3.2.2. Cross-border related certificates or programs

As mentioned earlier, some large cities in Canada are located not far away from the Canada-USA frontier, and therefore, some carriers have cross-border related services. Because of the regulations assigned by the Canadian and the American governments, companies should arm themselves with specific certifications, if they want to conduct their business between these two countries. Therefore, we think that it is necessary to create a family just for the cross-border related certificates (Table 21).

While conducting their business abroad, it is important for customers to source help from the proper companies, which can provide customs bonded services, in order to deal with customs documentation, duties and taxes, and so on. For the companies that are active in

the trans-border businesses, some certificates, such as the C-TPAT, FAST, PIP, CSA, ACE, etc. are vital for their operations.

Table 21: Codes under cross-border related certificates and programs

Codes	Frequency	Number of companies
Custom-Trade Partnership Against Terrorism	43	26
Free and Secure Trade	40	23
Partners in Protection	33	22
Customs Self-Assessment Program	24	14
Automated Commercial Environment	18	12
Other codes (Frequency: 26 in total): EXPRES card, Pre-Arrival Review System, Pre-Arrival Processing System		

C-TPAT refers to the Custom-Trade Partnership Against Terrorism, which is a voluntary program with Customs and Border Protection, ensuring that commercial activity do not shield potential terrorist threats and to put procedures in place to facilitate the trade during times of potential threats. FAST refers to the Free and Secure Trade, promoting more secure transactions between Canada and the USA and allowing its members to benefit from simplified custom clearance procedures. PIP refers to the Partners in Protection, which is designed to streamline and make border processes more efficient for low-risk, preapproved businesses recognized as trusted traders. CSA refers to the Customs Self-Assessment Program, granting approved importers, approved freight carriers and registered drivers advantages of a simplified customs clearance option for CSA-eligible merchandise. CE refers to the Automated Commercial Environment, which is the commercial trade

processing system developed by U.S. Customs and Border Protection to facilitate legitimate trade and strengthen border security, requiring all freight carriers inbound the USA to send data on their cargo electronically using an automated manifest.

The other cross-border related programs include the Pre-Arrival Review System (PARS), the Pre-Arrival Processing System (PAPS), the Advance Commercial Information (ACI), etc.

There are 28 out of 50 companies which have the cross-border related certificates shown on their websites.

4.3.2.3. *Other intangible assets, capabilities, and resulting company performances*

Specific sets of capabilities contribute to the overall organizational performance. While analyzing the web content, it is sometimes hard to tell whether it is the capability or whether it is the outcome of the performance derived from the capability. Thus, after having explained the information technology and the cross-border related certificates or programs, we created another family to discuss all other codes (Table 22) related to the intangible assets, capabilities and the resulting company performance.

Table 22: Codes under other intangible assets, capabilities and resulting company performance

Codes	Frequency	Number of companies
Professionals	163	45
Employee education and training	107	35
Expertise	98	30
Continuous improvements	91	36
Experienced company	72	31
Experienced employees	63	28
Dedicated employees	51	24
Mutual trust and respect relationships	40	26
Capabilities	37	18
Streamline flows	34	16
Employee base	32	20
Loyal customers	30	19
Optimal operating performance	29	15
Knowledgeable employees	27	18
Driver force	25	17
Lean	25	3
Expert team	24	12
Relationships with other parties involved	24	16
Cost control	22	8
Performance improvement	21	11
Loyal employees	20	12
Just-in-time	20	10
In-house cost-effective	16	6
Innovative team	16	10
Leadership	15	10
Regular reviews	15	12
Risk management	14	11
Acquisition	14	8
Multidisciplinary team	11	7
Share services	11	6
Equipment efficiencies	10	7
Employee respond with actions	10	7

Other codes (Frequency: 141 in total): licensed employees, overcome changing circumstances, reporting technique, employee eager to listen, analysis of situation, kaizen, integrated supply chain management, provider base, coordinated performance, friendly employees, performance measurement, expanding scientific knowledge, profitability, entrepreneurial spirit, member of some associations, maximize profit, multi-client solutions, revenue, scorecard, purchasing power, preferential treatment, maximize value, multi-backgrounds employees, organizational performance standards, back force, driver productivity, Kanban technique, benchmarking

Companies' intangible assets and capabilities are essential to the overall business performance. There are several kinds of intangible assets that a company may have. On one hand, it is the people within the organization that help the business to grow. Thus, the employee base, such as the driver force, is one of those most valuable assets. Some beautiful words have been used to describe them, such as knowledgeable, experienced, dedicated, responsive, loyal, expert, and professionals. Besides, some companies are also committed to build a pleasant atmosphere of teamwork in the workplace. They want the teams to be multidisciplinary, innovative, and to have the effective leadership, all of which are the crucial elements of driving the best operating performances. Additionally, based on the continuous improvements philosophy, companies put emphasis on their employees' education and training. Lastly, it is interesting to find out that, from the company strategy point of view, some companies steadily develop their businesses on their own, while others ones expand and grow through the acquisition of other companies. For example, companies such as the *Mullen Group* and *Groupe Boutin* are expanding and developing by acquiring other companies, which has been the foundation of their strategy for growth and improvement of customer services. No matter which way the companies choose to develop and no matter how they gain their expertise, the acquired company experience contributes to the optimal operation performances, the future growth of the companies, as well as a strong and deep understanding of the whole industry in which they operate.

On the other hand, some intangible assets are regarded as related to the third parties. For example, some companies strive to build mutually respectful and trustworthy relationships with their suppliers and partners. The long-standing and well-maintained relationships with them are very important for companies to stand up out from their competitors. Besides, the service is ultimately provided to the customers and therefore, the main goal of the company should be to satisfy them. Thus, there is no doubt that the loyal customer is definitely precious to the company and that the customers' loyalty would make a difference for the companies' future financial health.

In terms of the companies' capabilities that are shown on their websites, it is difficult to assemble them into groups. In order to have a better understating of them, we will name a few here. For example, some companies are able to be and remain lean by eliminating wasteful activities and thus creating a smooth product and process flow. There is a wide range of tools, such as just in time, which is an inventory control method that brings stock into a production process, warehouse, or customer right before it is needed or "just in time". By employing this revolutionary method, the excess inventory is reduced, the in-house cost-effectiveness can be achieved, and both information and freight flows can be streamlined. In addition, the sharing and leveraging of resources, is another capability that can make companies operate more effectively and efficiently, because it acts like a mediation to manage the business as a whole and to maintain the balance between the needs

among several departments within the same organization. The other capabilities may include controlling cost, managing risks, optimizing equipment efficiencies, and so on.

As mentioned earlier, there are three types of business capabilities, which are core capabilities, enabling capabilities, and supplemental capabilities (Leonard, 1995). We think that, employees' knowledge and companies' expertise should be in the group of core capabilities, because both are the main ways of differentiating one company from the others. Besides, these two kinds of capabilities are achieved steadily with the development of the companies and they are not easy for competitors to imitate. In terms of the supplemental capabilities, they may include operational techniques, such as lean, service sharing, cost control, etc., because the other companies can easily learn or copy them from the first mover if they want to. However, we do not put these operational technics into the group of enabling capabilities because they should be able to add value to the companies' customers and provide the companies with sustainable competitive advantages. We do not identify any capabilities which should go into the group of the enabling capabilities. We assume that these capabilities are not discussed on the websites since they do not add value to the customers. After all, the website is the main way for companies to convince their customers that all their capabilities should be able to benefit both of themselves and their customers in the short- and long-term.

All the intangible assets and capabilities would contribute to the improvements of companies' operations in general.

After analyzing both main types of assets, we made a chart (Figure 17) to show which of them are the most popular. The detailed data about how many times each type of assets show up on the websites of all the 50 companies is shown in the Exhibit 7.

Figure 17: The percentages of two types of assets
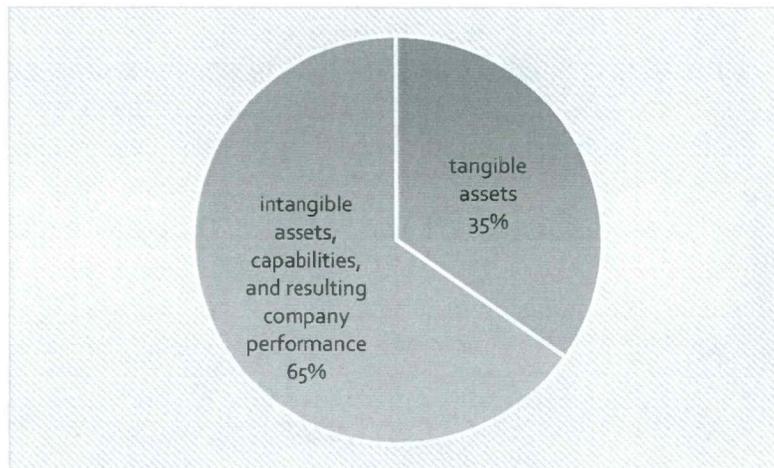
*the percentages indicate the proportion of total frequency

According to the Figure 17 it seems that companies are more interested in letting their customers know about their intangible assets, capabilities and the resulting company's performances, instead of their tangible assets. The percentages of the tangible assets, and the intangible assets, capabilities, and the resulting company performances are 35% and 65%, respectively. It is true that companies' tangible assets are also important for the companies' development. However, tangible assets are more easily achieved with

sufficient funds and may not provide sustainable competitive advantages to their customers, compared to the intangible assets and capabilities.

4.4. Results of services offered

Doing business can also be seen as an approach related to dealing with customers. Customers do matter. Thus, companies have always been striving to maintain an excellent customer service. Many companies set certain pre-established guidelines and principles for various fields of business operations. These guidelines of principles are the performance expectations or standards, demonstrating the ways in which the best practices should be taken into places and in which customers should be treated. Different companies may put emphasis on different aspects of customer service.

4.4.1. Service cost

There have been three identified ways that logistics create customer value, namely effectiveness, efficiency, and differentiation (Langley and Holcomb, 1992). Here, providing cost-based strategies or services to customers is one of the most important ways to show the service efficiency. Over the past decades, the economic environment was constantly changing and the transportation industry has gone through a significant consolidation. As a result, there is a demand for greater efficiency. We know for sure that some companies have cost-based strategies and the competitive advantages of price over

the others, while other ones try to differentiate themselves through other value propositions

(Porter 1980). Therefore, it is important to analyze these carriers' cost strategies, shown in

the Table 23 , to check how much attention is paid to the service costs.

Table 23: Codes under service cost

Codes	Frequency	Number of companies
Customers cost-effective	133	31
Efficient performance	104	27
Competitive rates	52	25
Efficiencies optimization	28	11
Other codes (Frequency: 23 in total): economical services, affordable price, heavily discounted prices, on budget.		

Some companies put tremendous efforts on maintaining the performance of their services,

meaning to provide cost-effective solutions to their customers. They claim that they are

able to give rate-competitive and economical services to their customers. In order to do so,

they need to be committed to identifying potential efficiencies by using their expertise and

capabilities. They continuously look at a cost-saving analysis to ensure optimal efficiencies

to their customers throughout the transportation process.

4.4.2. Service quality

Service quality can be defined and measured by comparing the delivered service

performance and the expectations of customers. According to Lewis and Booms (1983),

there is an equivalence stating the relation between these three factors, which is SQ (service

quality) = P (performance) − E (expectation). In order to quickly identify problems and discrepancies, to better serve their customers' interests, and to improve their services and customer's satisfactions, companies often assess the quality of their delivered services. According to Parasuraman, Zeithaml and Berry (1988), there are five determinants for the service quality, namely tangibles, reliability, responsiveness, service assurance and empathy in the so-called RATER model. Measuring the service quality can involve both objective and subjective aspects. No matter what the case is, some aspects of customer satisfaction are often assessed. Some studies have indicated that the service quality is positively correlated to customer satisfaction and that a rise in one will likely lead to an increase in the other aspect, even though they are indeed independent (Sureshchandar, Rajendran, and Anantharaman, 2002).

4.4.2.1. Service reliability

One extremely important quality to have within the customer service industry, is reliability. Companies need to prove to their customers that they are reliable by keeping their promises and being honest about what they are capable of doing and what lies outside of their power. All companies need to remember that the more they are unreliable, the more customers will give them up easily against their competition. In the transportation industry, freight delivery is a main business activity and thus, it is important for companies to clearly understand what is delivery reliability. According to The Business Dictionary (2015), it

refers to the ratio of the number of deliveries made without any error to the number of deliveries in a certain period. The error could happen with regards to time, place, price, quantity, and quality. The Table 24 shows the phrases that were used to describe the service reliability on the 50 companies' websites.

Table 24: Codes under service reliability

Codes	Frequency	Number of companies
On-time services	119	30
Reliable services	71	30
Reliable equipment	57	22
Guaranteed performance for services	38	11
Time-definite	31	10
Reliable facilities	27	19
Ensure accuracy	25	9
Other codes (Frequency: 8 in total): error-free delivery		

The aim of the reliable services is to deliver the right product to the right place at the right time. Companies should offer a guaranteed performance for their customers, meaning keeping their promises. In order to do so, they need to use reliable equipment and reliable facilities.

One of the most important aspects of service reliability is the on-time service performance. On-time service does not necessarily mean a speedy service. However, if the service is time-definite, it should be delivered as promised.

Another aspect of service reliability is to ensure the accuracy of services and to have an "error-free" delivery. Currently, companies are using various IT systems to facilitate the accurate information. For example, DART is the handheld technology that enables an accurate scan of on- and off-load information in real time.

4.4.2.2. Service securement

Another criterion for the service quality is the service securement. In the trucking industry, the service should be secured, and the products should be free of damage from the time they are received until reaching their final destination.

4.4.2.2.1. Safety and security of products and services

Products operated through logistic services, such as transporting and warehousing, are vulnerable to theft. Even with proper surveillance and advanced technology, theft might still happen, bringing up a lot of issues to service providers.

Moreover, safety and security of products are not just concerned with theft, but also with the integrity of products. Taking food and beverages as an example, a large amount of them is temperature sensitive. Consumers may unknowingly buy goods from retailers who procure food or beverage products from the market where manufacturers improperly process those products or where carriers unsafely handle them.

From the perspective of carriers, in order to provide their customers with a better service experience, they need to ensure a damage-free and error-free service. A lot of risks may be avoided if companies adopt the desired measures, which are shown in Table 25.

Table 25: Codes under safety and security of products and services

Codes	Frequency	Number of companies
Cargo securement	68	26
Supply chain security service	18	11
Damage-free delivery	14	6
Safety on road	11	10
Product integrity	11	6

Other codes (Frequency: 38 in total): Hazard Analysis Critical Control Point, prevent loss, control of hazards, Food and Drug Administration, policies regarding to drugs and alcohol products, USA Hazardous Materials Certificate, Workplace Hazardous Materials Information System, Firearms Permit, food quality system.

In terms of the safety and security of products and services, there are two main sub-categories. On one hand, companies always try to keep the product's integrity intact and the cargo as secure as possible to their customers. On the other hand, companies need to make sure that the product or the services are under control and safe or harmless to people, the environment, and society as a whole, etc. For example, while transporting drugs and alcohol, companies must obey the relevant policies. Besides, some companies claim that they have the Workplace Hazardous Materials Information System (WHMIS), which is the

Canada's hazard communication standard. The key element of the system is hazard classification, cautious labeling of containers, a provision of material safety data sheets and worker education as well as training programs.

4.4.2.2.2. National security

Since the September 11 tragedy, every aspect of life has been transformed and changed, including the concerns with regards to security while importing and exporting goods. Especially under globalization, tremendous numbers of cargos are shipped cross-borders, especially between the Canada and U.S. Not only are transportation facilities tempting targets to terrorists, but transportation vehicles can also be used as weapons (Szyliowicz, 2004). Therefore, the national security issues have brought lot of attention.

Knowing that the cooperation of carriers is essential to achieve the national and cross-border security, some of the security programs or the cross-border initiatives have been designed to facilitate the cooperation between those private operators and the government. These initiatives are provided to a lot of parties involved in the supply chain, such as importers, manufacturers, and warehouse operators. However, being the bridge of the trans-businesses, carriers are the most important and active party throughout the whole supply chain. Thus, it is extremely important to make those carriers actively involved in these security programs (Table 26).

Table 26: Codes under national security

Codes	Frequency	Number of companies
Custom-Trade Partnership Against Terrorism	43	26
Free and Secure Trade	40	23
Partners in Transportation	33	22
Customs Self-Assessment program	24	14
Automated Commercial environment	18	12
Security programs	13	10

Other codes (Frequency: 39 in total): public safety, Pre-Arrival Review System, Pre-Arrival Processing System, Advance Commercial Information Program, EXPRES card, security of borders, customs initiatives.

The codes under the group of cross-border related certificates, which belong to the family of intangible assets, capabilities and the resulting company performance, are also given under the group of national security (Table 26). These codes not only are the certificates that can differentiate one company from another, but also the way that shows the company focus of the national security.

Because a large amount of services is conducted across borders, governments must pay much attention to the security of borders. Thus, some security programs have been invented, requiring companies to take part in them. these customs' initiatives include C-TPAT, FAST, PIP, CSA, ACE, PARS, PAPS, EXPRES card, ACI, etc. The detailed explanations of each certificates and programs are given in subsection 4.3.2.2.

4.4.2.3. Other service quality

Except for the service reliability and safety and security of products and services, there is some other service quality (Table 27).

Table 27: Codes under other service quality

Codes	Frequency	Number of companies
High quality customer services	123	37
Best customer services	105	36
Efficient performance	104	27
Effective performance	45	21
High customer satisfaction	32	20
Right solutions	31	15
Provide services with care	30	17
Responsive customer services	28	19
Innovative solutions	27	17
Unparalleled solutions	25	11
Hassle-free services	20	12
Customer awards	17	8
Seamless services	17	9
Reduce customers' assets deployment	14	7
Reducing cycle/lead time	13	6
Complete services	12	7
Service optimization	12	6
Customers' Key Performance Indicators focus	11	6

Other codes (Frequency: 61 in total): profitable solutions, reducing inventory, accident-free services, sophisticated services, reduce mileage, scalable, productivity, claim-free, repeat business, outperform, customer testimonials, exemplary service, good ROI.

Service quality is the key to any successful company, because success is measured not only by profit, dedication and the commitment of employees, but also by the quality of service. Sometimes, it is true that we are confused about what can the best quality and what can be great quality. That is why we think that some companies come up with some terms to describe it, including right, innovative, unparalleled, seamless, complete, and so on. Here, we believe that there is two ways to judge the service quality.

On one hand, we should look at it from the perspective of customers. After all, it is to them that the services are provided. Some companies think that keeping a great service quality is to meet or exceed customers' key performance indicators, including on-time performance, quality of equipment and operation, information technology, competitive pricing, customer services, leadership in problem solving, value added services, and sustainable transportation. The other ones think that providing hassle-free services and making their customers highly satisfied is the way to provide quality. In addition, there is no doubt that companies would only receive customers' awards if their customers value their services. Thus, customers' awards could be another tool to measure service quality.

On the other hand, it is also necessary to look at the service quality from the point of view of companies themselves. If companies regard their services as efficient and effective, the service should be, to some extent, seen of high quality. Keeping service efficiency means reducing customer assets' deployment, decreasing cycle and lead time, and eliminating

unproductive costs, while keeping service effectiveness means the commitment to getting the job done and done right. No matter how companies are currently doing, they are constantly optimizing their service by the input of all their working elements.

4.4.3. Service flexibility

Because today's business environment is complex and volatile, service flexibility becomes a critical priority for service providers to improve customer service performance (Aranda, 2003). In general, it is taken seriously from two points of views and the phrases used on the websites are given in the Table 28.

Table 28: Codes under service flexibility

Codes	Frequency	Number of companies
Customized	117	34
Flexibility to customers	83	29
Meet volume surge requirements	27	13
Unique solutions	21	8
Other codes (Frequency: 1 in total): Unplanned order program		

On one hand, from the perspective of the whole company, service flexibility shows the companies' capability to respond to changes of services demanded by customers in two aspects, both before the transaction occurs and while the transaction is currently taken into

place. The company should create some procedures or approaches for their employees to take while customers ask the companies to change their service requirements.

On the other hand, in order to make the service flexibility come true, individuals need to act in a responsive and flexible manner. Here, service flexibility reflects employees' ability to quickly and economically adapt to the company processes in order to satisfy customers' demands (Lin and Lee, 2009; Zhang et al., 2012).

Being flexible is the way to meet or exceed customers' objectives and requirements and is one necessary element of great service quality. There are several different ways for companies to provide flexibility to customers.

Providing unique solutions or the customized service plans to their customers at the very beginning may help. *Rosedale* provides personalized LTL and truckload service throughout North America, while *Day & Ross* has the custom-tailored transportation and distribution solutions as well as a unique blend of services that are customer specific. Except for flexibly serving customers' day-to-day freight deliveries, some companies also develop their ability to serve their customers while unexpected peaks and seasonal highs occur. For example, *TransPro* has the flexibility of a seasoned logistics' team (e.g. owner operators and alliance companies) that can call on to handle the surplus requirements at a

moment's notice, meeting volume surge requirements. This group of companies has built

themselves on their commitment to industries with volume fluctuations.

4.4.4. Service visibility

In order to assure their customers and provide a better customer service, many companies

pay attention to developing their tracking capabilities and to offer maximum visibility of

cargo to their customers' supply chain (Table 29). Service tracking capabilities can be

achieved by the assistance of leading-edge technologies.

Table 29: Codes under service visibility

Codes	Frequency	Number of companies
Tracking technology	90	30
Real-time technology	57	24
Visibility to customers	57	23
Traceable	25	15
Detailed documents	19	9
Other codes (Frequency: 4 in total): Quick trace		

Companies can maintain the level of service quality, to some extent, by offering customers

the maximum visibility in terms of their supply chain. The real-time information analysis

tools, and the ability to forecast and report on any aspect of the operation provide the

increased visibility. Usually, the detailed shipping documents, which include invoices and

waybills, are provided by companies in order to make their customers track their cargos easily. The freight is traceable largely thanks to the extensive leading-edge technology, such as the tracking technology and the real-time technology.

4.4.5. *Service timeliness*

In the transportation industry, time utility is the ability to get the customer's freight from the point of origin to the point of destination within a definite time window or at a specific time (Drucker, 1954; Langley, 1983). Different carriers may vary in terms of the time-specific options, including expedited, overnight, time-definite delivery etc. No matter what option the carrier chooses, it is always true that those carriers with the strongest capability to control, schedule, and expedite the delivery can achieve great competitiveness over other carriers and it is significantly easier for them to increase their revenue. In our research, we found that transportation is not the only service that these companies offer. A variety of value-added services are also provided to their customers. Thus, the time utility (Table 30) will be discussed in a broader sense. For example, customers get fast quotes through their online services.

In this high-speed business world, saving time is equivalent to saving money. Thus, many companies suggest that they can provide their customers with the most time effective service and deliver their customers' freight in a timely manner. No matter what kinds of

services they offer, they often use terms such as "expedited" or "speedy". In terms of fast delivery, they try to reduce processing and transit time, and have diversified programs, such as overnight delivery, same-day delivery, next day delivery, two-day delivery or hourly services. In the other aspects of businesses, they also try to be fast. For example, they ensure that their employees respond to their customers in a timely and appropriate manner. Besides, they make sure that their customers can get quotes fast and trace their freight quickly and easily.

Table 30: Codes under service timeliness

Codes	Frequency	Number of companies
Expedited services	47	20
Time-definite	31	10
Speedy services	30	17
Responsive customer services	28	19
Overnight delivery	20	8
Reduce transit time	18	8
Fast delivery	17	6
Sameday delivery	16	7
Save time	12	5
Next day delivery	12	8
Other codes (Frequency: 17 in total): fast quote, quick trace, reduce processing time, hourly services, next flight out. Two-day delivery		

Different companies may focus on different aspects of service results. However, we think

it is necessary to look at the service results in general. Thus, we came up with Figure 18 to

show which service result has drawn the most attention. The detailed data of how many

times each criterion of service results shows up in given in the Exhibit 8.

Figure 18: The percentages of each criterion of service results
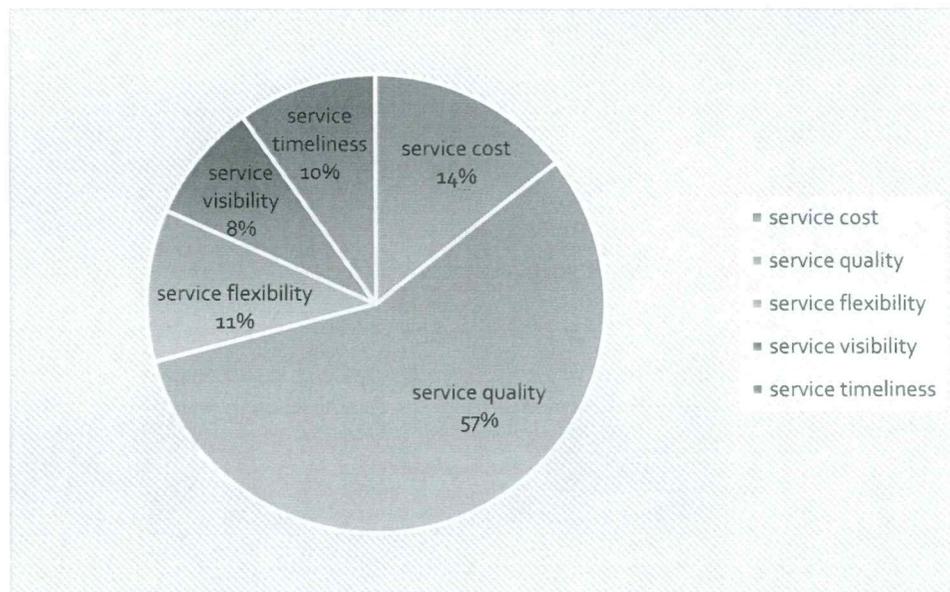
*the percentages indicate the proportion of total frequency

As shown in the Figure 18, the majority of criterion of service results goes into the family

of service quality, accounting for 57%. The other parts of service results are service cost

(14%), service timeliness (10%), service flexibility (11%), and service visibility (8%).

As we discussed in this section, we have known that there are four main aspects where

Canadian trucking carriers have emphasis, namely characteristics of the company, services

offered, assets and capabilities, and results of services. The relations among these four main

aspects will be discussed in the next section. At the end of this section, we also want to

show a general picture about the frequency of each category shown on all the 50 companies'

websites (Figure 19). It should be an easy way to understand which category of company

emphasis is more deployed than the others. The detailed data is given in the Exhibit 9.

Figure 19: The frequency of four main aspects of company emphasis
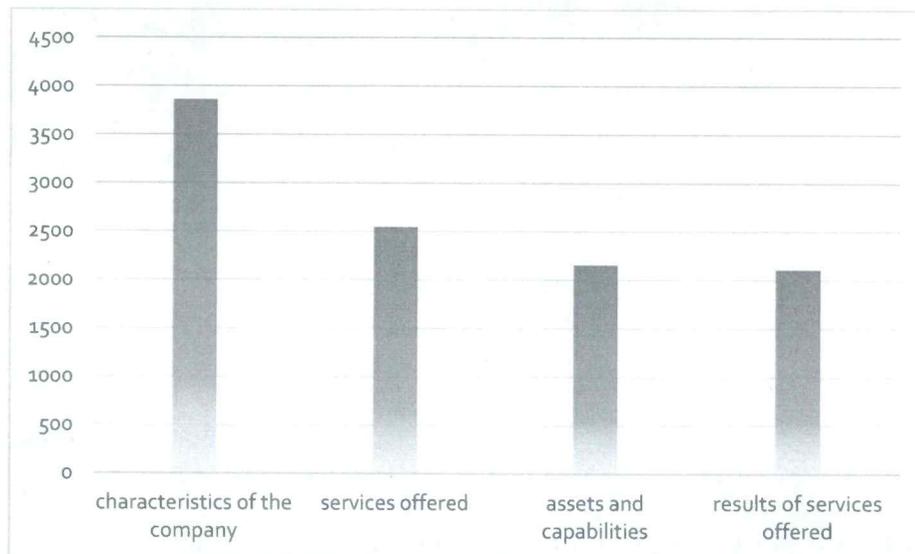
As shown in the Figure 19, we can conclude that companies discussed more on the

characteristics of the company.

5. Research implications

5.1. Results discussion from a theoretical point of view

In this chapter, we will discuss the research results. To be specific, we explain what are the value propositions in the Canadian trucking industry and what are the relations between the value propositions and the other elements we identified during the research. Before presenting our research results, we will first explain a service classification we used to structure our findings.

5.1.1. The classification of services

According to Baudry modified by Giroux (2016), there are two main types of services, namely primary service and secondary service. The primary service defines the company profession. In the absence of the primary service, the company changes its profession. In the case of the trucking carriers, the primary service is trucking transportation. We can distinguish three major categories of trucking transportation: truckload, less-than-truckload, and courier. Each category can be considered a different profession in the trucking industry since the equipment, infrastructure, and capabilities are different. In our research, we also use the characteristics of services related to trucking industry, which are the mode, place, type of cargo, and type of industry, to further characterize the primary services offered by

a carrier. Thus, we also include mode, place, type of cargo, and type of industry to characterize the different types of primary services offered by trucking companies.

While providing primary services to their customers, companies also offer some peripheral services, which adds value and facilitates access to the primary services. The peripheral services do not make sense without the realization of the primary services. The peripheral services can be distinguished in two types, namely, the peripheral service and the complementary service. The main difference between these two types of peripheral services is that customers do not need to pay for the former one, while they need to pay for the latter one. However, in our research, we think it is difficult to distinguish between those two peripheral services, given the data we have. For example, some companies offer scheduled home delivery services to their customers. Some of them give it for free, while the others demand customers to pay extra money for it. All the trucking related services, presented in Table 17, such as cross-border related services, container loads, scheduled services, etc., should go into the classification of the peripheral services.

The secondary services are other services that can be performed separately from the primary services. They are at the origin of a consumption that can be autonomous. The secondary services are also capable of detecting the arrival of the customer. However, the change of secondary services will not change the profession of the companies, compared to the primary services. In the case of the trucking carriers, these secondary services refer

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to the logistics related services, such as the warehousing, cross-docking, inventory

management, handling, dispatching, etc. presented in Table 18. In Figure 20, it shows the

different types of services, which are mentioned on companies' websites.

Figure 20: The different types of services

Primary service

- Mode
- Place
- Type of cargo
- Type of industry
- Truckload
- Less-than-truckload
- Courier

Peripheral service
&
Complimentary service

- Canada/USA cross-border services
- Container loads
- Heavy haul services
- Trans-border business
- Customs bonded services
- Long haul services
- Scheduled services
- Daily services
- Delivery service
- Home delivery
- Pickup and delivery service
- Specialized delivery services
- Office delivery
- short haul service
- Store-site delivery

Secondary service

- Logistics services
- Warehousing
- Distribution
- Trans-load and intermodal services
- Storage
- Cross-docking
- Inventory management
- Consolidation and deconsolidation services
- Online services
- Handling
- Pick and pack
- Consulting
- Dispatch
- Supply chain security service
- Brokerage business
- Reverse logistics
- Direct services
- Freight loading and unloading
- Insurance coverage service
- Computerized services
- Assembly
- Freight management services
- Labelling
- Stuffing and de-stuffing services
- Order management
- Packaging
- Emergency freight services
- Etc. (shown in Table 18)

5.1.2. *The value propositions and their relations with other company emphasis*

As aforementioned, we discussed about four main aspects where the Canadian trucking carriers put emphasis on. We think that the terms described in the set of codes identified as *services offered* and the terms described in the set of codes identified as *results of services offered* are value propositions. The services offered are the bundle of services carriers can offer to their customers, while the results of services offered are the benefits carriers can deliver to their customers. We think that the value propositions in the Canadian trucking industry are the combination of the services themselves and their resulting benefits. For the other two set of codes, i.e. characteristics of the company, they are the basis from which the propositions are emerging. The relations among the four aspects are given in Figure 21.

Figure 21: The relations among the four main aspects of company emphasis
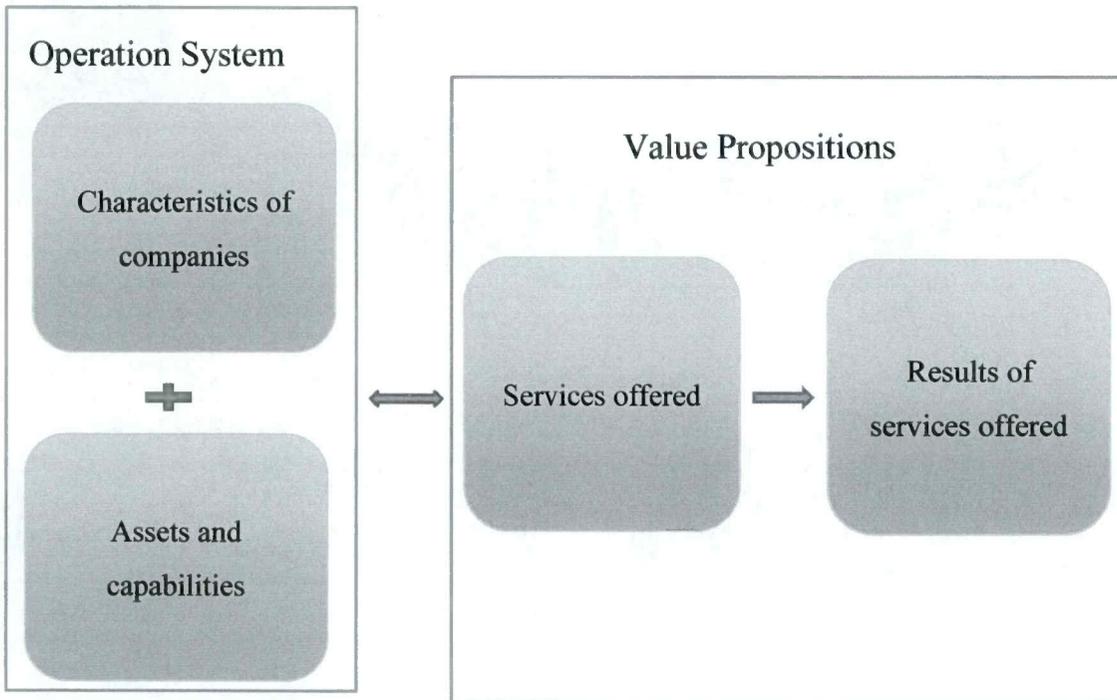
In the set of codes called *characteristics of the company,* company cultures, such as employee focus, customer focus, social focus, health and safety focus, etc., outline the aspects that companies care about the ways they achieve their goals. These company cultures will have impact on the services offered. To be specific, the companies with employee focus are interested in providing education and training programs to their employees and upgrading their employees' skills continuously. By doing so, companies can keep up with today's challenges and tomorrow's needs, and provide needed services to their customers. The companies with customer focus always want to meet their customers' demands and bring them convenience. Therefore, some value-added services are offered to their customers, taking pressure off their customers' shoulders and allowing customers to focus on their own core activities. The companies with social focus may prefer rail transportation to road transportation if possible, because rail transportation is more environmental-friendly than the road transportation. The companies with health and safety focus say that they equip themselves with safe and reliable equipment or facilities for their services, especially when transporting specialized freight. For example, the hazardous and dangerous products need specialized equipment for the good of employees' and the public health and safety.

The other characteristics of the company, including company structure, company governance, and company reputation, can also affect the services offered. In terms of the company structure, if the companies develop strategic alliance with other partners, their

transportation mode can be diversified, instead of road only. It is difficult for one company to own the rail and ocean transportation equipment and facilities by itself. In terms of company governance, it rules the services offered from a top-down point of view. In order to provide services to their customers, companies have to be committed to deliver business governance practices. In terms of company reputation, those companies with long history and extensive experiences may have better knowledge of their customers and have time to develop their capabilities accordingly. All this information is provided by the carriers on their websites probably because they perceive it add value for their customers.

Assets and capabilities, including tangible and intangible assets, also contribute to the value propositions of carriers and have an effect on the services offered. In terms of tangible assets, companies offering services in specific industries for specific types of cargo need specialized, supportive, and reliable equipment or facilities. For example, the companies of the perishable food industry and that transport temperature-sensitive cargo should have the temperature-control equipment. In terms of intangible assets, some value-added services cannot be fulfilled without these capabilities. Knowledgeable, skilled, and experienced people make it possible for companies to offer proper and high quality services to their customers; required business certificates are necessary for certain business fields, such as the cross-border related certification for the trans-border businesses. Technology is another important intangible asset companies should have. For example, if companies want to offer freight visibility to their customers, they need to have the real-time technology

and tracking technology in place, such as Global Position System (GPS), Satellite technology, etc. Characteristics of companies, assets, and capabilities constitute the operation system, which are the foundation for the companies' value propositions.

In the set of codes named *services offered*, we include the characteristics of services offered, the trucking related services, and the logistics related services. The services offered are one aspect of the value propositions, showing what companies can do to their customers. In terms of characteristics of services offered, companies propose values on time, place, type of cargo, and type of industry. In terms of specific services offered, companies propose values on what primary services, peripheral services, and secondary services they can offer. In the trucking industry, the primary services in the trucking transportation and the peripheral services are the other trucking related services. The secondary services are mainly the other logistics related services.

In the set of codes named *results of services offered*, five aspects, including service cost, service quality, service flexibility, service visibility, and service timeliness, are what companies can deliver to their customers, or to say, the benefits customers can expect from carriers. Therefore, we think that the results of services offered are the other one aspect of value propositions. In terms of the service cost, some companies have complimentary services, which require customers to pay for them, while the others give customers these kinds of services for free. In terms of the service quality, customers' satisfaction is another

aspect to consider. Some value-added services can enhance the customers' experiences, leading to higher customer satisfaction. These value-added services may include the online customer services, which let customers get quote and tracking information easily by themselves. In terms of the service flexibility, some companies offer the start-to-end solutions, which may contain the unique blend of services, to their customers. These solutions are tailored to their customers' specific demands and, therefore, are able to offer higher flexibility. In terms of the service visibility, as mentioned earlier, some value-added services, such as tracking and online services, are able to let customers be aware of where their cargo is and when their cargo can be shipped to its destination. In terms of the service timeliness, some companies also give customers the choice of air transportation, resulting in shorter transit time.

We can conclude that all these aspects are interrelated. On the one hand, the value propositions consist of the bundle of services and the set of benefits. The benefits customer can expect from the carriers are the consequences of the services companies choose. On the other hand, the operation system includes the characteristics of the company and their assets and capabilities. These two blocks interact with each other. The current operation system has impacts on the value propositions. For example, customer focus, which is one of the company cultures, can lead carriers to value their service quality and service flexibility in order to meet their customers' demand. In turn, the strategically determined value propositions can also lead to the change of the operation system. For example, if

companies choose to provide transportation for the specialized freight or to provide other logistics services, such as consolidation and deconsolidation, they should have the auxiliary equipment and facilities at use.

5.2. Our research results compared with results from Randall (2010)

Randall et al. (2010) have identified twelve categories where representative words have been aggregated, namely time, price, place, place-type of cargo, place-mode, vehicle assets, transaction risk management – documentation, transaction risk management – guarantee, transaction risk management – flexibility, transaction risk management – technology, service extension, and company culture/ management. In our research, we get four main aggregated categories and have some sub-categories under each of them. Some of the categories are similar, as shown in Table 31.

The only category that is included in Randall et al. (2010) and that is not included in our research is the transaction risk management – documentation, while the categories that are included in our research and that are not included in Randall et al. (2010) are intangible assets and service visibility. The category of transaction risk management – documentation, which includes codes, such as document, bill of laden, online reports, report, billing, and claims, was not clearly found in our analysis. The codes related to the documentation of transaction risk management like document, billing, and claims were not identified in our

sampled companies. Besides, we think the other codes related to documentation of transaction risk management can be included in some other categories. Taking online reports as an example, it can be seen as one of the online services that belongs to the peripheral services. Besides, online reports can offer visibilities to customers and enhance the customers' experiences, as well as the service quality, are expected to add value to customers. As such, our results differ on this point from those of Randall et al (2010).

Table 31: Categories comparison between Randall et al. (2010) and our research

Categories in Randall (2010)	Correspondent sub-categories in our research	Correspondent main categories cover correspondent sub-categories in our research
Time	Service timeliness	Results of services offered
Price	Service cost	Results of services offered
Place	Place	Services offered
Place-type of cargo	Type of cargo Type of industry	Services offered
Place-mode	Mode	Services offered
Vehicle assets	Tangible assets	Assets and capabilities
Transaction risk mgt – guarantee	Service quality	Results of services offered
Transaction risk mgt – flexibility``	Service flexibility	Results of services offered
Transaction risk mgt – technology	Technology	Assets and capabilities
Service extension	Services related logistics	Services offered
Firm culture/ management	Company cultures Company governance Company structure Company reputation	Characteristics of companies

Randall et al. (2010) conclude that the carrier-customer value propositions are location, time, cost, documentation, and impact on brand. However, we think that the carrier-customer value propositions in company both the service concept (services offered) and the benefit concept (the results of services offered.)

In addition, they have proposed that the value propositions are based on four fundamental elements, namely time utility, place utility, transaction value management, and service extension, while we think that the fundamental elements for value propositions are mode, place, type of cargo, type of industry, trucking related services, logistics related services, and results of services offered. Even though we may use different terms from their research to describe the essential elements of value propositions, these elements are similar and overlapped, such as place, logistics related services, and results of services offered. However, some other elements such as mode, type of cargo, type of industry, or trucking related services, are not mentioned in their research.

Moreover, they think that each essential element can generate capabilities. For example, the capabilities generated by the time utility include time-definite, 24-hr coverage, overnight, etc. In our research, we did not follow the same approach to analyze the value-generating capabilities as Randall et al. did. We believe that the characteristics of services and the specific services offered determine what carriers can offer, or to say, what are the

capabilities they have in which they have to offer services. Besides, we also believe that having the right capabilities for services offered should contribute to the benefits delivered.

Last but not least, Randall et al (2010) do not point out what sustain value propositions and what are the interrelations with them. In our research, we conclude that value propositions are sustained by the characteristics of the company, including company cultures, company structure, company governance, and company reputation, and the assets and capabilities, including tangible assets and intangible assets. In turn, the value proposition will lead to the modification of characteristics of the company, as well as the assets and capabilities. In the long term, companies can choose their value propositions with respect to their current business operation systems, but steadily changing their current operation systems in order to achieve newly-defined value propositions.

We conclude that the services offered to customers should have impact on the results of services offered, including service cost, service quality, service flexibility, service visibility, and service timeliness in our research.

5.3. Explanations of results by analyzing three specific companies

In order to explicitly explain what are the value propositions of Canadian trucking carriers, and to help understand how the characteristics of the company and assets and capabilities

sustain the carriers' value propositions and how the value propositions contribute to the results of services offered, we will take three specific companies as examples in this section.

5.3.1. One large company – Mullen Group

Mullen group is a publicly-traded and leading company, based in Alberta, Canada. It has two distinct business segments, namely trucking/logistics and oilfield services. Its trucking/logistics segment provides a wide range of transportation services to their customers. The truckload and less-than-truckload hauling are the two main primary services it offers. The transportation services are conducted within Canada and between Canada and U.S. Because of this, the cross-border related service is also one important aspect of the trucking/logistics services. Its trucking/logistics segments consists of 13 business units, which are self-managed and independently operated. General freight and specialized freight are transported, including cable, pipe and steel, over-dimensional freight, dry bulk freight. Except for the core service - transportation, Mullen Group also provides secondary services, such as, warehousing, distribution, dedicated fleet services, trans-load and intermodal services, as well as production, excavation, etc. Another business segment is the oilfield service, which provides diverse services to upstream, midstream and downstream segments of the oil and natural gas industry.

Mullen Group believes that its success is sustained by the commitment to a set of company cultures. First, its integrity defines how it conducts business. Whatever it says, it will do it. It constantly builds mutually respectful and trustworthy relationships with its employees and customers. Second, it emphasizes on continuous improvements which is accomplished by challenging their employees to improve their skills and overall abilities through diversified training and education programs. It requires all its employees to receive a minimum of 20 hours of education and skills upgrading each year. Third, it has the people focus. It does not only provide its people with competitive tools and supportive environment in which to work, but also empower and support its employees to make decisions, as well as give them responsibilities and challenges to be accountable for the results of their actions. Besides, it also offers several initiatives to its people, including Employee and Family Assistance Program, Roland and Leona Mullen Scholarship, benefit plans, promotions from within the Mullen Group, incentive programs, competitive wage packages, etc. Fourth, customer focus plays a part in its company culture. It believes that focusing on customers and providing them with proper services are key to company success. It subscribes to the principles of Total Quality Management, encourages each employee to strive for quality issue while dealing with customers. Fifth, it establishes the health and safety culture. It demonstrates correct safety behaviors, creates effective HSE (health, safety, and environment) Management System, clearly defines the roles and responsibilities of their people, provides needed resources, and measures, reviews, and

continuously improves safety performances. Sixth, it is committed to environment protection. In order to do so, it integrates environmental policies, programs, and practices at all levels and functions; it requires and educates its employees to conduct activities in an environmentally responsible manner; it works with government, industry groups and the public to understand the relevant environmental issues and to improve and develop environmental standards; it encourages and supports environmental researches to expand scientific knowledge and develop advanced technologies to protect environment. Mullen Group covers all of the aspects that we find in characteristics of the company in terms of company cultures.

In terms of tangible assets, Mullen Group mention neither the specific types of equipment they own, nor the facilities they have. However, we do believe that it should have certain needed tangible assets at hand, because it is a large and publicly-owned company with 13 subsidiaries specialized in the transportation and logistics services as well as 15 business units providing the oilfield services. Without the required equipment, a large amount of services is unable to be fulfilled. In terms of intangible assets, Mullen Group uses some spaces on its website to talk about the leadership, which is deemed as one of the most important intangible assets. From time to time, their employees are challenged to improve their leadership skills and overall abilities. The continuous training and improvement of employees are the foundation of the benefits customers can expect.

Because Mullen Group adheres to its values, it is not difficult to find out that the results of services offered are great and that a set of benefits can be delivered to its customers. The service quality is the one discussed the most on their website. As an example, Mullen Group designs its own quality program, branded "On the Road to Quality", which is a nationally recognized and award-winning program aiming at providing the highest level of services to both their employees and their customers. It also has the Grand Prize Safety Award, which is a rigorous and annual internal audit ensuring the continuously improvement related to the HSE Management System.

In order to have the clear understanding of alignments of Mullen Group's operation system and value propositions, the Figure 22 is given.

Figure 22: Mullen Group's operation system and value propositions

Operation System

Value Propositions

- ♦ Employee focus
- ♦ Customer focus
- ♦ Health and safety focus
- ♦ Social focus

➕

- ♦ Leadership

⟷

- ♦ Truckload
- ♦ LTL
- ♦ Cross-border related services
- ♦ Logistics related service
- ♦ Oilfield service
- ♦ Continent
- ♦ General freight
- ♦ Specialized freight

⟶

- ♦ Service quality
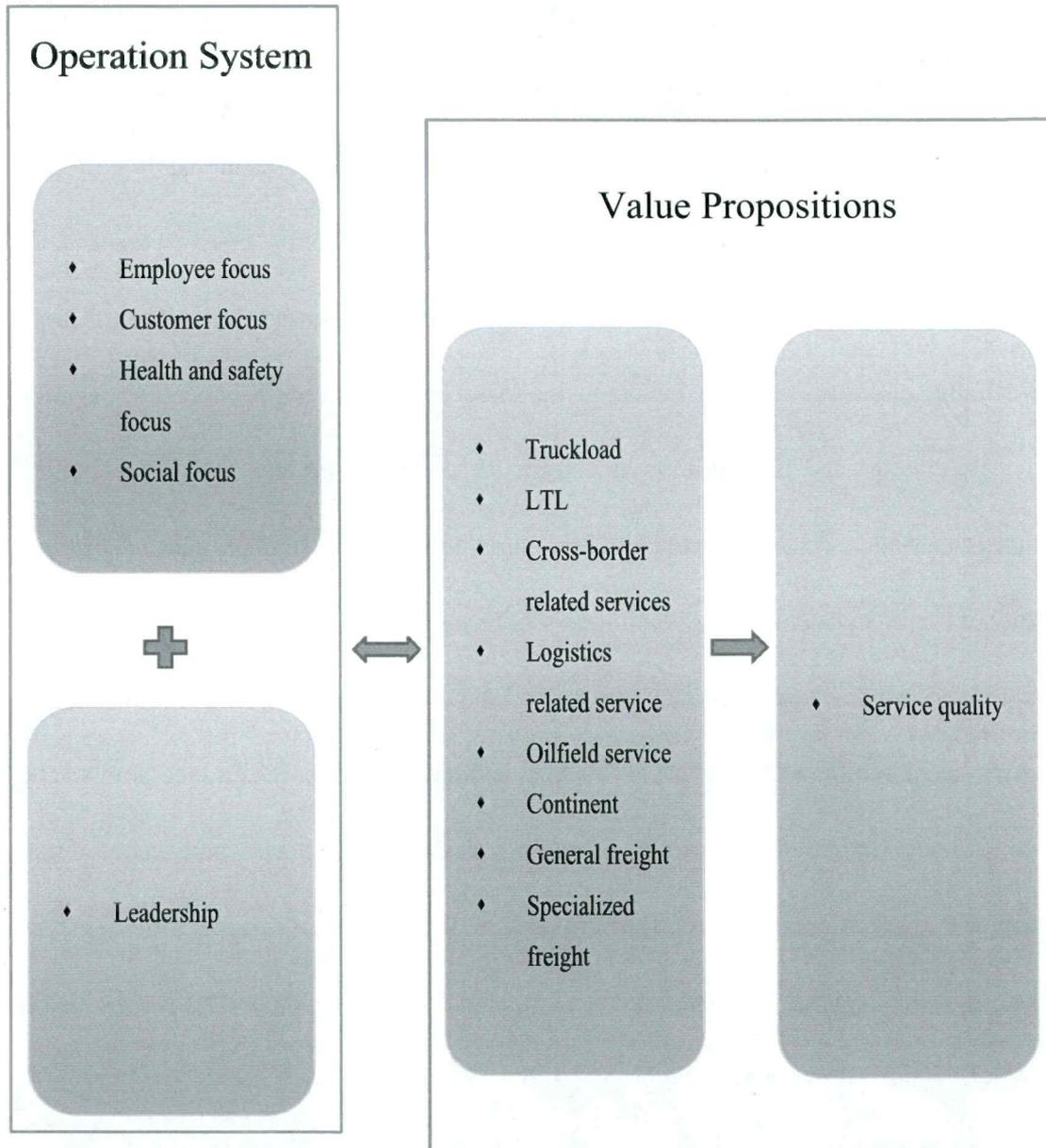
5.3.2. One medium company – Thomson Terminals

Thomson Terminals is an asset-based full logistics service provider. Thomson's core service is the freight and transportation, which deals with the planning of large and small distribution networks and the management of the day-to-day operations. It currently provides services for the retailer industry, receiving products from overseas via container and delivering truckload to over 200 retail stores every day. Besides, the types of cargo they handle include the food and beverage, the forest product (ex. pulp, paper, lumber), the high value goods, and the automotive. Except for the basic services, the correspondent peripheral services are also provided. For example, for the high value products, it offers a variety of high security programs, including secure yards, secure route planning and secure storage of goods. The security features include, but are not limited to, 24-hour security guard, video surveillance, barbwire perimeters, and gated and secure entrance points. The other services include warehousing, consulting, design build, tractor and trailer rental parking, storage trailer rentals, etc. It offers services for a wide range of industries, such as the grocery industry, the food and beverage industry, the pulp, paper, and lumber industry, the retailer industry, the high value product industry.

The fulfillment of services offered by Thomson largely depends on the assets and capabilities it owns. In terms of the tangible assets, Thomson owns 100% of over 1000 pieces of modern transportation equipment. It develops a niche of the grocery industry,

therefore, it owns the ambient, cooler, and freezer storage facilities, as well as the largest refrigerated trailer fleets in Canada. It also offers services for the forestry industry, therefore, owns multi-axle trailers, roll clamps, heavy tow motors, and pulp clamps. In terms of the intangible assets, its experiences, especially those for certain niche industries, are really important for their businesses. For example, it has over 25 years of experience in handling and transporting forestry products. Many of its employees once worked within the forestry industry and bring a wealth of first-hand knowledge to their operations. Also, the technology is another important aspect of the intangible assets. For example, its tractors and trailers are equipped with the GPS system to track and trace its shipments; the real-time notification of shipment activities are displayed in its state-of-art dispatch system; it integrates EDI transmissions and Electronic ordering systems into its operations while handling and delivering millions of groceries products. Besides, Thomson believes that every partner and customer is unique. It has implemented and maintained automated solutions over 20 years. The third type of intangible assets is the cross-border related certificate, such as C-TPAT, ACE, PIP and FAST, for the safe transportation and storage.

In order to provide unique and mutual beneficial supply chain solutions for industry leaders, not only does Thomson equip itself with assets and capabilities, but also adheres to a set of company values, or to say, company cultures. It believes that it should be responsible for its actions regarding impacts on environment and that it promotes principles of reducing, reusing, and recycling; it continues to provide a safe, supportive, and high quality work

environment for their employees where they can be inspired to be creative and nurtured to grow while working safely; it strives to improve the overall well-beings and community living through contributions to local and international charities; it looks at its customers as partners and concerns what customers concern.

Thomson believes that customers can achieve benefits if the results and performance of services are sound. First of all, the services performance are largely measured by the quality of service. Thus, Thomson deems the service quality as the top priority. Some programs or principles are invented and strictly followed, such as the International Organization for Standardization and the Hazard Analysis and Critical Control Points. It has achieved 18 consecutive safety awards, one national safety award, and ten customer awards. Also, by working with both vendors and retailers, Thomson has achieved economies of scales, increased operations efficiency, and reduced costs for its customers' supply chain. In addition, by owning all the equipment and facilities on its own, Thomson can conduct businesses on the daily basis, as well as meet the unexpected peaks and seasonal highs. Lastly, as aforementioned, Thomson has the GPS and real-time technologies, enabling it to provide service visibilities to its customers which is of utmost importance for its customers in the grocery sector.

We include terms mentioned on Thomson's websites in Figure 23, to develop a clear picture about Thomson's operation system and value propositions.

Figure 23: Thomson's operation system and value propositions

Operation System

- Employee focus;
- Customer focus
- Health and safety focus
- Social focus

+

- Assets-based
- Equipment
- Facilities
- Experience
- People
- Technology
- Cross-border related certificates

Value Propositions

- Freight and transportation
- Security services
- Logistics related services
- Retail industry
- Food and beverage
- Forest product
- High value product
- automotive

- Service quality
- Service cost
- Service flexibility
- Service visibility

5.3.3. One small company – Speedy Transport

Speedy Transport began as a local, same-day parcel pick-up and delivery service provider, but has become one of the Central Canada' premier carriers. Its core service is operated from terminals along the Windsor-Quebec City 401 corridor, which is the most active transportation lane in North America. It offers scheduled less-than-truckload service on an overnight and second-day basis. The northern and remote points within the provinces of Quebec and Ontario can also be served due to its long-standing carrier partnerships. There are also many complementary transportation services available for its customers, such as retail appointment deliveries, expedite service, time-definite and guaranteed services, distribution programs, etc. The distribution programs target two types of clients. On the one hand, it offers distribution services for Canadian clients and has the vendor consolidation. For example, big box retailers manage hundreds of vendors through Speedy's consolidation services in the major Canadian centers of Montreal and Toronto. On the other hand, it performs a vital service for USA manufacturers and carriers who do not have bricks and mortar in Canada but need to distribute products here. It acts on their behalf and either provides the line-haul and distribution from the USA, or simply receives their products in Toronto and acts as the distribution center on their behalf.

Safety and security are always paramount for Speedy. It values its people and has necessary training and safe operating principles in place to make sure that the safe work condition is met in its facilities and during the process of transportation. It is also compliant with

homeland security programs and has all the following certifications, including C-TPAT, FAST, ACI, ACE, PIP, CSA, and Smartway.

Assets and capabilities play an important role in the services offered. In terms of tangible assets, it builds its own facilities with less-than-truckload distribution in mind, because it offers less-than-truckload service. Its head office is located in Toronto, with a 100,000 square foot cross-dock facility acting as the central distribution hub. In terms of intangible assets, it is committed to the state-of-art technology. For example, it emphasizes on the communication technology, incorporating smartphone technology in its freight deliveries and ensuring that its owner-operators are in constant contact with its central dispatch operations. The other technology includes the EDI capabilities, the real-time tracking capabilities, etc. which enables the company to offer on-time deliveries. Besides, it has extensive skilled operators who specialize in the Windsor-Quebec City lane segment and who can deliver multiple levels of service to meet customers' requirements.

As a carrier, which is small but growing fast, Speedy continuously tries to provide effective and efficient services to its customers, brings added convenience to its customers, and satisfies its customers. For example, whether its customers' requirements demand exact timing, it always guarantees a time window or high quality performance. Except for the service quality, Speedy also focuses on the service timeliness by providing the overnight or second-day deliveries. It is not difficult to imagine that service timeliness is an important criterion for Speedy, because it names itself as "Speedy". The last criteria of service results

mentioned by Speedy is the service visibility. It equips itself with the technology of communication, tracking, real-time, etc. On its website, there is a slogan: "If you are looking for start-to-finish shipment visibility, call Speedy!"

We also draw the Figure 24 to show the elements of Speedy's operation system and value propositions.

Figure 24: Speedy's operation system and value propositions

Operation System

- Health and safety focus
- Employee focus

➕

- Facilities
- Technology

Value Propositions

- Delivery service
- LTL
- Trucking related services
- Logistics related services
- Along the Windsor-Quebec corridor
- Northern and remote points
- Between Canada and U.S.

- Service quality
- Service cost
- Service timeliness
- Service visibility
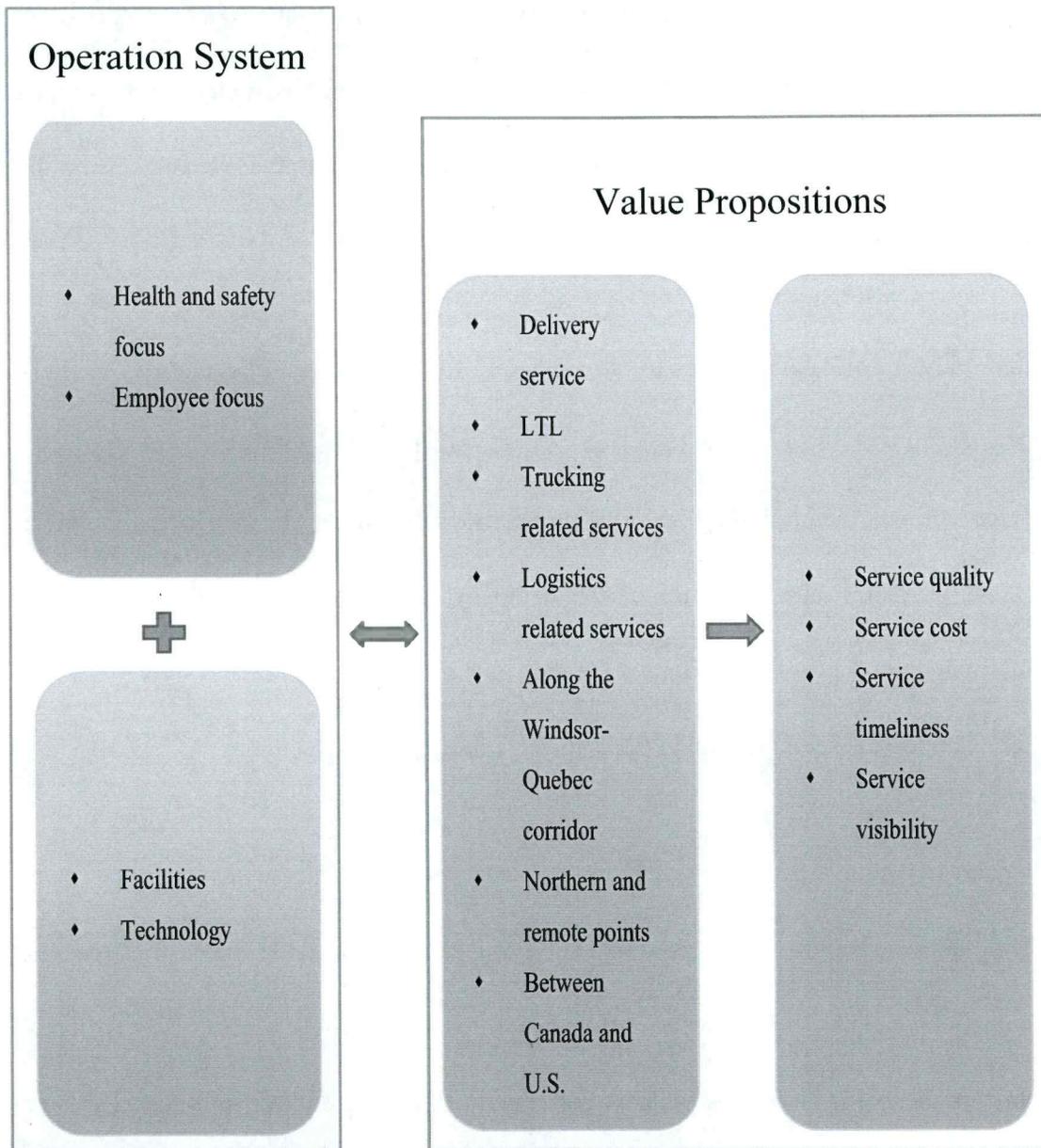
6. Conclusions and limitations

In our research, we conduct an exploratory study to investigate what are the value propositions in the Canadian trucking industry by using a qualitative method. We evaluate the messages of 50 Canadian trucking companies extracted from their websites using the constant comparison process of grounded theory.

After analyzing the data, we group all codes into four main types of categories, namely characteristics of the company, service offered, assets and capabilities, and results of service offered. We think that the value propositions are among the category of services offered, while the characteristics of the company and assets and capabilities are the important elements for the fulfillments of the value propositions and the results of service offered are the consequences and effects of the value propositions.

There are two main aspects of value propositions, including the bundle of services (services offered) and the benefits delivered (results of services offered). While discussing the value propositions related to services offered, companies propose values on different characteristics of services, as well as the specific trucking related or logistics related services. In terms of the characteristics of services, some carriers only use trucks for their transportation, while the others also have transportation modes of rail, water, or air; some carriers offer services all around the world or at least continentally, while the other only

have customers within Canada and conduct businesses domestically, regionally, or even locally; some carriers transport general freight while the others specialize in the niche industries and transport the specialized freight. In terms of the specific services offered, it is no wonder that all the carriers have the core services related to trucking, including truckload, less-than-truckload, courier, etc. Besides, some peripheral services which add value to the core services are also provided to customers, such as the scheduled service, cross-border related services, etc. Except for the core services related to the primary services – trucking transportation, some carriers also offer other core services related to the logistics industry, which are known as the secondary services, such as the warehousing, distribution, packaging, handling, etc. These core services can also bring convenience to customers, let them focus on their own core services, and add value to the customers' supply chain. However, the main difference between the primary service and the secondary service is that the change of the former one can affect the companies' professions.

While talking about the value propositions related to the results of services offered, it consists of five dimensions, namely service cost, service reliability, service flexibility, service visibility, and service timeliness. During the process of fulfillment of services, all of these five dimensions deliver benefits and, therefore, values to customers. Customers can expect more benefits from carriers, if they have lower service cost, higher service reliability, larger service flexibility, more service visibility, and less service timeliness.

The characteristics of the company include the company culture, the company governance, the company structure, and the company reputation. In terms of the company culture, customer focus has drawn the largest attention, while carriers also have the employee focus, health and safety focus, and social focus. The terms categorized in the company governance, company structure, and company reputation are mainly from the general perspective view. Some companies run their businesses by their own independent businesses units, while some other companies have the contract business model. Some companies see themselves as the long-history companies with extensive experiences, while some other companies start from small business with short history and quick growth. No matter what kinds of company structure or reputation they have, all of them adhere to their own set of governance practices which they deem appropriate for their business. The strategically chosen characteristics of the company will finally have impact on their value propositions.

Another aspect which contributes to the establishment of the companies' value propositions is the assets and capabilities, including both tangible and intangible ones. The tangible assets that the companies own or that they have access to, including the fleet, equipment, and facilities, determine what kinds of services they can offer or what kinds of freight they can provide services for. For example, if companies provide distribution or consolidation and deconsolidation services, they should have the distribution center at use. Besides, if companies transport the specialized freight, they need the specialized and auxiliary equipment. The intangible assets, such as the capable people, advanced

technology, useful certificates, etc., also have impacts on what kinds of services companies can offer. For example, if carriers want to develop the businesses in a niche industry, knowledgeable employees should play an important role. Besides, if carriers want to have the cross-border related services, some security certificates should be achieved, such as the C-TPAT, FAST, PIP, etc. In addition, if carriers want to have the online services for customers to track their cargo, the real-time and tracking technology is a necessity.

It is also important to understand that the value propositions can also determine the characteristics of the company as well as the assets and capabilities. After companies have chosen their value proposition, sometimes they need to change their current companies' characteristics and deploy new assets and capabilities accordingly.

In our research, we only investigate the websites-based information. Even though we think that website-based content is resourceful, it would be better if we can also include interviews with experts in our research. The interviews would complement our research and enable the assessment of whether the message delivered by the experts is the same as the one found on the websites. Resources given to the logistics activities within organizations are largely dependent on how senior and logistics executives perceive the importance of the logistical process and functions. Sometimes, the information shown on the websites may be different from the actions companies take in their business operations, i.e. what they deliver. Besides, the perceptions of different executives will

affect the results while accomplishing the organizational goals. Previous studies have

concluded that logistics executives and the CEO/CFO do not, to some extent, share

similar perceptions in terms of the logistics importance and value (Novack, Rinehart,

Langley, 1996). Due to this situation, interviews with both the logistics executives and

their CEO/CFO counterparts from the trucking companies should be conducted

separately, in case that their opinions lead to any discrepancies and affect the comparison

with the results that were obtained from the websites-based analysis.

Appendix

Exhibit 1: The company list of the sample

Sample group#	Sample#: company#	Company name	Size
1	P 1: #2	Mullen Group Ltd.	Large
	P 2: #20	Rosedale Group	
	P 3: #4	Day & Ross Transportation Group	
	P 4: #22	Gibson Energy ULC	Medium
	P 5: #55	Thomson Terminals	
	P 6: #61	Bruce R. Smith Limited	
	P 7: #70	Northern Industrial Carriers	
	P 8: #83	Chester Cartage Ltd.	
	P9: #90	TransPro Freight Systems Inc.	
	P10: #16	Transfreight, Inc.*	Small
2	P11: #41	Normandin Transit Inc.	Large
	P12: #67	Les services logistiques Trans West Inc.	
	P13: #38	Western Canada Express	
	P14: #39	XTL Transport Inc.	Medium
	P15: #54	Travelers Transportation Services	
	P16: #58	Sokil Transportation Group	
	P17: #80	Groupe Jules Savard	
	P18: #92	Transport Bernières	
	P19: #93	Accord Transportation Ltd.	
	P20: #43	Speedy Transport Group, Inc.	Small
3	P21: #10	Groupe Robert	Large
	P22: #25	Rosenau Transport	
	P23: #48	Groupe Boutin	
	P24: #45	Q-Line Trucking Ltd.	Medium
	P25: #53	AYR Motor Express Inc.	
	P26: #63	Paul's Hauling Ltd.	
	P27: #64	Cascades Logistique et Transport	
	P28: #69	Wolverine Freight System	
	P29: #79	Doug Coleman Trucking Ltd.	
	P30: #51	Penner International	Small
4	P31: #24	Purolator	Large
	P32: #42	Consolidated FastFrate	
	P33: #8	Canada Cartage	
	P34: #27	B&R-Eckel's Transport Ltd.	Medium
	P35: #47	V.A. Inc.	
	P36: #56	Musket Melburne	
	P37: #68	Andy Transport	
	P38: #81	Fleetway Transport	
	P39: #86	Fluke Transport	
	P40: #77	System 55 Transport*	Small
5	P41: #12	SLH Transport	Large
	P42: #32	Simard Transport Ltd	
	P43: #37	Groupe Guilbault	
	P44: #35	Schneider National Carriers Canadian Division	Medium
	P45: #49	Caron Transportation Systems	
	P46: #71	Transport Bourassa Inc.	
	P47: #74	Arnold Bros. Transport Ltd.	
	P48: #94	APPS Transport Group	
	P49: #97	Total Logistics Trucking	
	P50: #96	Empire Transportation	Small

Exhibit 2: The frequency of each company culture for 50 companies

	Employee focus	Customers focus	Social focus	General health and safety focus	Other company cultures
P 1: #2	84	5	18	23	22
P 2: #20	17	26	18	6	9
P 3: #4	14	32	33	14	21
P 4: #22	6	4	12	4	3
P 5: #55	27	45	30	18	22
P 6: #61	5	10	13	12	8
P 7: #70	4	9	6	15	2
P 8: #83	3	11	1	1	3
P9: #90	10	27	17	10	16
P10: #16	12	67	18	8	53
P11: #41	3	14	13	6	3
P12: #67	16	2	24	16	10
P13: #38	0	3	0	0	1
P14: #39	13	32	9	11	24
P15: #54	9	15	11	8	9
P16: #58	20	13	17	18	13
P17: #80	7	15	7	10	6
P18: #92	10	3	8	7	3
P19: #93	3	13	0	2	6
P20: #43	2	11	2	1	7
P21: #10	22	30	35	17	20
P22: #25	2	8	6	9	6
P23: #48	5	4	4	6	4
P24: #45	21	9	6	15	12
P25: #53	14	35	14	14	16
P26: #63	27	6	11	27	13
P27: #64	4	0	22	3	1
P28: #69	23	21	7	15	19
P29: #79	2	22	1	7	4
P30: #51	4	7	1	3	5
P31: #24	6	52	9	4	6
P32: #42	14	38	27	7	17
P33: #8	18	43	19	10	14
P34: #27	8	3	5	3	5
P35: #47	10	11	12	3	9
P36: #56	26	14	15	8	12
P37: #68	10	12	13	7	6
P38: #81	3	15	6	12	3
P39: #86	1	9	1	2	2
P40: #77	2	13	1	2	6
P41: #12	9	20	12	9	16
P42: #32	6	31	10	7	11
P43: #37	3	16	4	5	10
P44: #35	25	62	31	38	29
P45: #49	12	9	12	13	9
P46: #71	0	3	0	2	2
P47: #74	19	11	15	8	15
P48: #94	0	13	10	1	12
P49: #97	0	10	2	0	3
P50: #96	0	2	1	2	1
TOTALS	561	886	569	449	529

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Exhibit 3: The Frequency of different geographic coverage

	Internationally	Continentally	Nationally	Provincially	Regionally	Locally
P 1: #2	0	4	4	2	3	0
P 2: #20	0	12	7	1	1	1
P 3: #4	3	11	9	5	2	4
P 4: #22	0	2	0	0	0	0
P 5: #55	0	4	2	4	4	1
P 6: #61	0	12	5	12	7	6
P 7: #70	0	1	1	0	3	2
P 8: #83	0	0	0	1	0	1
P9: #90	0	12	2	1	0	2
P10: #16	1	3	0	2	0	1
P11: #41	1	3	0	0	0	0
P12: #67	0	2	0	0	1	0
P13: #38	0	0	0	0	1	8
P14: #39	1	6	0	3	0	6
P15: #54	0	10	5	4	1	2
P16: #58	1	2	3	0	1	9
P17: #80	2	2	0	2	0	0
P18: #92	1	6	2	3	2	1
P19: #93	4	6	1	3	3	5
P20: #43	0	7	3	5	5	8
P21: #10	0	10	1	3	0	1
P22: #25	0	1	0	2	7	5
P23: #48	0	4	1	5	0	1
P24: #45	1	4	3	1	2	2
P25: #53	0	18	7	1	3	1
P26: #63	0	3	4	3	3	2
P27: #64	0	0	0	0	0	0
P28: #69	0	8	6	5	0	1
P29: #79	0	3	0	3	1	2
P30: #51	1	0	1	0	0	1
P31: #24	9	6	8	1	3	0
P32: #42	2	26	17	11	17	12
P33: #8	0	5	10	1	1	11
P34: #27	0	3	1	0	0	1
P35: #47	1	8	2	8	1	4
P36: #56	2	7	4	5	1	5
P37: #68	1	10	6	0	0	0
P38: #81	0	6	2	0	2	0
P39: #86	0	3	0	4	3	1
P40: #77	1	4	4	1	0	0
P41: #12	1	14	10	3	3	2
P42: #32	1	4	4	0	0	6
P43: #37	0	7	1	4	0	0
P44: #35	7	20	5	0	4	2
P45: #49	0	4	2	0	3	0
P46: #71	0	4	0	2	1	0
P47: #74	2	8	6	5	2	3
P48: #94	0	10	1	5	3	1
P49: #97	0	2	1	0	2	1
P50: #96	0	2	0	2	0	0
TOTALS:	43	309	151	123	96	122

Exhibit 4: The frequency of each type of products

	general freight	specialized freight	TOTALS:
P 1: #2	2	1	3
P 2: #20	0	1	1
P 3: #4	2	2	4
P 4: #22	0	0	0
P 5: #55	0	0	0
P 6: #61	2	14	16
P 7: #70	0	2	2
P 8: #83	0	1	1
P9: #90	2	1	3
P10: #16	0	0	0
P11: #41	1	0	1
P12: #67	1	2	3
P13: #38	0	0	0
P14: #39	2	3	5
P15: #54	0	1	1
P16: #58	1	1	2
P17: #80	2	1	3
P18: #92	1	2	3
P19: #93	0	0	0
P20: #43	1	0	1
P21: #10	5	6	11
P22: #25	6	3	9
P23: #48	3	3	6
P24: #45	1	7	8
P25: #53	0	2	2
P26: #63	2	0	2
P27: #64	0	1	1
P28: #69	0	0	0
P29: #79	0	3	3
P30: #51	0	0	0
P31: #24	3	1	4
P32: #42	3	10	13
P33: #8	4	3	7
P34: #27	2	3	5
P35: #47	0	3	3
P36: #56	0	4	4
P37: #68	0	1	1
P38: #81	0	10	10
P39: #86	0	0	0
P40: #77	0	2	2
P41: #12	2	3	5
P42: #32	1	1	2
P43: #37	0	1	1
P44: #35	10	6	16
P45: #49	5	3	8
P46: #71	1	1	2
P47: #74	3	4	7
P48: #94	1	2	3
P49: #97	0	0	0
P50: #96	1	6	7
TOTALS:	70	121	191

Exhibit 5: The frequency of each type of trucking transportation

	truckload	less-than-truckload	courier
P 1: #2	1	1	0
P 2: #20	4	5	0
P 3: #4	7	8	1
P 4: #22	0	0	0
P 5: #55	4	2	0
P 6: #61	15	0	0
P 7: #70	0	0	0
P 8: #83	2	2	0
P9: #90	10	9	0
P10: #16	1	1	0
P11: #41	3	3	0
P12: #67	0	0	0
P13: #38	0	0	0
P14: #39	2	2	0
P15: #54	3	1	0
P16: #58	1	1	1
P17: #80	0	0	0
P18: #92	2	2	0
P19: #93	5	3	0
P20: #43	3	4	1
P21: #10	2	3	0
P22: #25	3	3	0
P23: #48	2	2	0
P24: #45	2	3	0
P25: #53	20	0	0
P26: #63	0	0	0
P27: #64	0	0	0
P28: #69	2	0	1
P29: #79	6	4	0
P30: #51	1	0	0
P31: #24	10	16	7
P32: #42	5	25	0
P33: #8	3	5	4
P34: #27	1	1	0
P35: #47	4	4	0
P36: #56	2	2	0
P37: #68	3	0	0
P38: #81	3	2	0
P39: #86	4	2	0
P40: #77	1	1	0
P41: #12	10	8	0
P42: #32	2	2	0
P43: #37	3	4	0
P44: #35	12	8	0
P45: #49	0	0	0
P46: #71	1	1	1
P47: #74	4	0	1
P48: #94	8	6	0
P49: #97	2	2	0
P50: #96	1	0	0

Exhibit 6: The frequency of each type of services for all 50 companies

	Trucking related services	Services related to logistics
P 1: #2	9	9
P 2: #20	15	17
P 3: #4	25	22
P 4: #22	2	6
P 5: #55	13	40
P 6: #61	23	8
P 7: #70	5	7
P 8: #83	2	4
P9: #90	14	18
P10: #16	7	39
P11: #41	4	2
P12: #67	2	3
P13: #38	9	2
P14: #39	15	18
P15: #54	11	15
P16: #58	14	18
P17: #80	4	1
P18: #92	9	3
P19: #93	7	9
P20: #43	17	15
P21: #10	14	33
P22: #25	11	17
P23: #48	7	9
P24: #45	7	5
P25: #53	20	12
P26: #63	11	7
P27: #64	0	1
P28: #69	12	22
P29: #79	3	12
P30: #51	2	4
P31: #24	16	54
P32: #42	59	53
P33: #8	21	40
P34: #27	3	4
P35: #47	17	18
P36: #56	11	15
P37: #68	10	5
P38: #81	8	13
P39: #86	5	14
P40: #77	6	8
P41: #12	22	15
P42: #32	11	27
P43: #37	7	8
P44: #35	36	65
P45: #49	7	0
P46: #71	4	5
P47: #74	13	4
P48: #94	14	21
P49: #97	4	17
P50: #96	4	2
TOTALS:	572	766

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Exhibit 7: The frequency of each type of assets for all 50 companies

	Tangible assets	Intangible assets, capabilities, and resulting company performances
P 1: #2	10	48
P 2: #20	26	47
P 3: #4	18	54
P 4: #22	0	7
P 5: #55	31	72
P 6: #61	37	20
P 7: #70	11	12
P 8: #83	7	3
P9: #90	23	30
P10: #16	14	94
P11: #41	12	15
P12: #67	11	19
P13: #38	0	2
P14: #39	14	65
P15: #54	16	19
P16: #58	6	23
P17: #80	17	20
P18: #92	2	11
P19: #93	3	9
P20: #43	7	16
P21: #10	29	47
P22: #25	11	10
P23: #48	17	14
P24: #45	16	16
P25: #53	52	63
P26: #63	15	25
P27: #64	8	6
P28: #69	10	44
P29: #79	3	11
P30: #51	2	7
P31: #24	16	46
P32: #42	57	47
P33: #8	25	64
P34: #27	12	10
P35: #47	4	23
P36: #56	15	28
P37: #68	16	25
P38: #81	12	12
P39: #86	6	13
P40: #77	5	17
P41: #12	17	30
P42: #32	14	39
P43: #37	14	22
P44: #35	53	118
P45: #49	14	17
P46: #71	3	3
P47: #74	13	31
P48: #94	12	20
P49: #97	6	9
P50: #96	7	5
TOTALS:	749	1408

Exhibit 8: The frequency of each criterion of service results for all 50 companies

	Service cost	Service quality	Service flexibility	Service visibility	Service timeliness
P 1: #2	0	19	0	0	0
P 2: #20	2	20	7	11	2
P 3: #4	9	38	8	4	5
P 4: #22	1	4	1	0	1
P 5: #55	16	71	19	15	2
P 6: #61	3	21	0	4	7
P 7: #70	2	15	1	0	0
P 8: #83	1	6	3	0	2
P9: #90	8	27	12	3	2
P10: #16	31	50	27	6	1
P11: #41	0	16	3	0	0
P12: #67	4	14	0	0	2
P13: #38	1	5	0	3	1
P14: #39	13	64	5	15	3
P15: #54	0	19	5	2	3
P16: #58	1	25	5	0	0
P17: #80	2	13	0	2	2
P18: #92	3	14	1	1	2
P19: #93	0	12	1	0	1
P20: #43	4	21	2	3	9
P21: #10	14	40	4	6	6
P22: #25	4	14	2	0	4
P23: #48	2	7	0	1	1
P24: #45	2	8	0	1	1
P25: #53	20	85	5	7	23
P26: #63	3	29	1	1	2
P27: #64	0	0	0	0	0
P28: #69	12	29	5	4	4
P29: #79	4	17	1	3	11
P30: #51	0	9	3	2	1
P31: #24	22	36	15	9	26
P32: #42	10	23	11	1	10
P33: #8	12	34	15	12	6
P34: #27	1	3	1	0	0
P35: #47	5	11	3	3	0
P36: #56	5	16	0	3	3
P37: #68	3	29	4	3	3
P38: #81	5	15	1	3	4
P39: #86	5	11	1	2	3
P40: #77	4	10	5	1	2
P41: #12	11	30	2	9	7
P42: #32	10	34	14	8	0
P43: #37	2	22	5	7	5
P44: #35	30	131	18	17	23
P45: #49	0	9	1	0	1
P46: #71	0	5	3	0	5
P47: #74	5	21	1	5	1
P48: #94	13	33	2	1	8
P49: #97	0	3	3	1	2
P50: #96	0	5	1	0	1
TOTALS:	305	1193	227	179	208

Exhibit 9: The frequency of four main categories of value propositions

	Characteristics of the company	Services offered	Assets and capabilities	Results of services offered
P 1: #2	212	48	58	19
P 2: #20	87	58	73	42
P 3: #4	162	90	72	64
P 4: #22	42	15	7	7
P 5: #55	189	77	103	123
P 6: #61	66	86	57	35
P 7: #70	46	24	23	18
P 8: #83	24	12	10	12
P9: #90	102	62	53	52
P10: #16	193	59	108	115
P11: #41	48	15	27	19
P12: #67	84	19	30	20
P13: #38	4	22	2	10
P14: #39	105	57	79	100
P15: #54	65	51	35	29
P16: #58	96	47	29	31
P17: #80	60	13	37	19
P18: #92	42	32	13	21
P19: #93	39	23	12	14
P20: #43	32	58	23	39
P21: #10	152	96	76	70
P22: #25	48	54	21	24
P23: #48	34	40	31	11
P24: #45	76	32	32	12
P25: #53	119	67	115	140
P26: #63	109	38	40	36
P27: #64	31	2	14	0
P28: #69	114	53	54	54
P29: #79	42	22	14	36
P30: #51	27	9	9	15
P31: #24	91	103	62	108
P32: #42	130	221	104	55
P33: #8	126	107	89	79
P34: #27	30	23	22	5
P35: #47	57	68	27	22
P36: #56	90	58	43	27
P37: #68	66	30	41	42
P38: #81	46	42	24	28
P39: #86	27	25	19	22
P40: #77	31	24	22	22
P41: #12	88	71	47	59
P42: #32	83	57	53	66
P43: #37	48	30	36	41
P44: #35	236	200	171	219
P45: #49	69	31	31	11
P46: #71	12	19	6	13
P47: #74	87	41	44	33
P48: #94	62	67	32	57
P49: #97	20	31	15	9
P50: #96	11	19	12	7
TOTALS:	3860	2548	2157	2112

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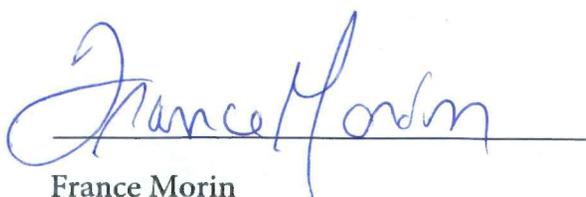
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