



INNOVATIVE APPROACHES TO TRANSPORTATION SERVICE PROCUREMENT

Aiming for extensive buyer-supplier
collaboration

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Bachelor's thesis
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International Business
Green Supply Chain Management



ABSTRACT

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The purpose of this thesis was to research innovative approaches to tendering in the field of transportation service procurement and find out if they would be viable to replace or supplement traditional ones.

Data was gathered from books, research papers and articles written by industry experts. Semi-structured interviews were conducted with professionals of the field. The data was analysed and processed by using qualitative methods such as identifying reoccurring themes.

Research indicates that new innovative methodologies have emerged to challenge the status quo of transportation service procurement. They take a more collaborative and solution based approach to the entire process, emphasizing the importance of the buyer and the supplier working together rather than being adversaries. However, they are currently only on an experimental level and further investigation and testing should be conducted to determine their viability in practice.

The findings suggest that the innovative procurement approaches presented should be considered as strong candidates to supplement current ones, but not necessarily in transportation procurement. Although some aspects of the new methodologies should be implemented to enhance current processes, in a heavily commoditised field like transportation, taking completely new approaches is just not necessary. In addition, there are no clear guidelines as to how to execute procurement with the new methodologies and enough proof does not exist to show whether or not they actually work as promoted.

Key words: logistics, transportation, procurement, innovation

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1 INTRODUCTION

Getting the best price-service ratio for logistics services is crucial for the success of a company. Every cent saved directly affects the bottom line, which highlights the importance of the work done behind the scenes. As companies pursue higher savings, the same old methods used time and time again might not be enough anymore. Progress is impossible without change. The time has come for transportation service procurement to consider taking a leap of faith into the unknown and think about adopting new, innovative aspects. This thesis will research the possibilities of using new methods for procuring transportation services and whether they are viable or not.

Transportation procurement is the act of acquiring transportation services for a company from outside of the company. To get the best outcome, companies do a tender, a process in which suppliers are selected on a competitive basis. Different strategic approaches can be taken in tenders and these approaches will be the main focus of the research. The thesis takes a deep dive into the most innovative methodologies developed. They are compared to the traditional ones currently used and assessed for their advantages and disadvantages. Recommendations of which methods are most viable to use are based on the data gathered.

The first half of the thesis establishes a knowledge base of what transportation procurement actually is and why it is necessary for a company. Then, a general tender process is explained followed by the traditional tendering methods. The second half presents the what the future of transportation procurement might look like, from new transportation methods to the future of tendering.

This research was commissioned by the Global Logistics Procurement team at adidas. To protect the internal processes of the company, no specifics of them will be shared.

2 TRANSPORTATION PROCUREMENT TODAY

Transportation procurement is the act of acquiring transportation services for a company from outside of the company. Depending on scope and scale, the process can be either simple and straightforward or extremely complicated and time consuming. This chapter goes through the need for transportation procurement, the general process of it and different strategies on how to approach it.

2.1 Outsourcing transportation services

The need for transportation procurement comes from the decision to outsource transportation services, a crucial business decision for companies to make. The most common reason for outsourcing is that logistics is not a core competency of the company. This is also the case for adidas, operating in the sportswear industry. Most supply chains are the result of development over time, expanding as the company is growing and in large companies could encompass billions of dollars in assets and be enormously complex (Llamasoft 2017, 1). The complexity and infrastructure investments needed to establish a transportation network, organizing transportation and managing a fleet in-house is not a simple task and could prove to be too much to handle for companies whose main focus is something else than logistics. Transportation service providers already have a network in place and through economies of scale can offer better pricing and speed compared to organizing transportation in-house. Having an effective supply chain is essential for high level business performance and the way it is managed has a large impact on the company's competitiveness in areas such as working capital requirements, product cost, speed to market and service reliability (Stockhammer 2017, 32).

There are several factors influencing the decision of which suppliers to partner with. Companies might prefer to work with suppliers they have positive past experiences with or have heard positive external opinions about. Then again, from an operational capability point of view, things such as geographical coverage or value-added services provided might be the deciding factor.

Stockhammer (2017, 32) argues that "establishing an effective supplier base is crucial for the success of a company." Having ineffective suppliers affect the rest of the business in

a negative way. If goods are not delivered on time, it causes lost revenue and bad public image. Stockhammer (2017) would mitigate this risk of service failure by doing multiple service sourcing, which means having more than one logistics service provider shipping the goods. The volumes shipped would be split thus improving assurance of supply and service reliability. (Stockhammer 2017, 33-34.)

Having a diverse portfolio of suppliers not only helps mitigating risks, but also opens up access to more networks. On a global scale, companies need to have a sufficient mix of carriers that cover all of their transportation needs reliably. Furthermore, operating with multiple carriers encourages competition amongst them which drives down pricing, boosts performance motivation and promotes innovation. All of which become a benefit to the buyer. However, transportation outsourcing is becoming more about quality and scope of service, efficient internal processes and partner collaboration rather than just driving costs down (Groenendijk 2016).

2.2 Freight Forwarders and 3rd Party Logistics providers

Freight forwarders and 3rd Party Logistics (3PL) Providers are the companies logistics are outsourced to. Freight forwarders act as middle men between the shipper and the actual carrier. They handle all the processes related to transporting goods, whereas 3PL providers can take care of the entire supply chain. A great advantage of using freight forwarders and 3PL providers instead of the carrier directly, is that they handle all the paperwork related, which can be difficult for companies with limited experience in transport (Finch 2017). Freight forwarders and 3PL providers usually have long established relationship with carriers and can in some cases get better rates compared to negotiating directly with carriers. Figure 1 shows the top six global freight forwarders and how much they transported via ocean freight and air freight in 2016.

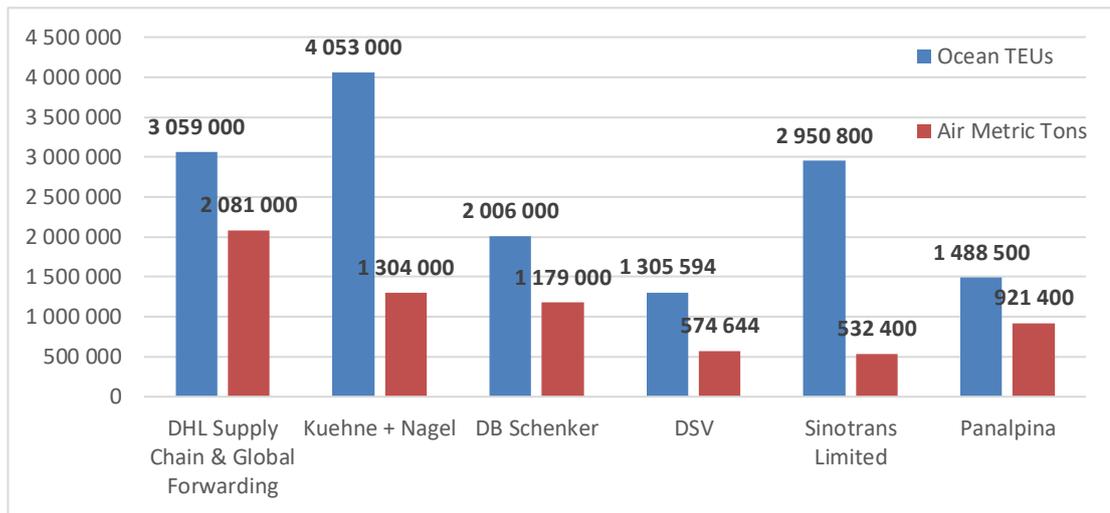


FIGURE 1. Top 6 Global Freight Forwarders 2016 (Armstrong & Associates, Inc. 2017)

On the flipside, using freight forwarders and 3PL providers also has some disadvantages and Finch (2017) points out two major ones. They don't actually move the goods, they use subcontractors, which may lead to transparency issues. There might also be problems with space availability, since actual carriers put priority on goods shipped directly with them. (Finch 2017.) Once you give a freight forwarder or a 3PL provider your cargo, it's out of your hands and you might not have a clue as to which carriers are being used in transporting your cargo. This is an important point for companies, in case there are carriers they would rather not work with for reliability, environmental, ethical or other reasons. When it comes to space availability, you might have a demanding customer or an urgent shipment and want to make sure that your shipment will be delivered at a specific time. In these cases, handling the shipment directly with the carrier could be the better option.

2.3 The general transportation procurement process

Procurement is the overarching function that describes the activities and processes to acquire goods and services (Purchasing insight). Procurement revolves around a bidding process called tendering. A tender, as defined by Obenaus and Weidacher (2006), is a process in which suppliers are selected on a competitive basis. As a whole, it consists of an invitation to tender, the submission of offers and the award of contracts. (Obenaus & Weidacher 2006, 675.) The tender process can be looked at from two different

perspectives, the company's side which organizes the tender or from the carriers' side who participate in it. Figure 2 illustrates the general process of a tender as outlined by Groenendijk (2016). The point of view taken in the paper will be the buyer's, the company managing the tender.

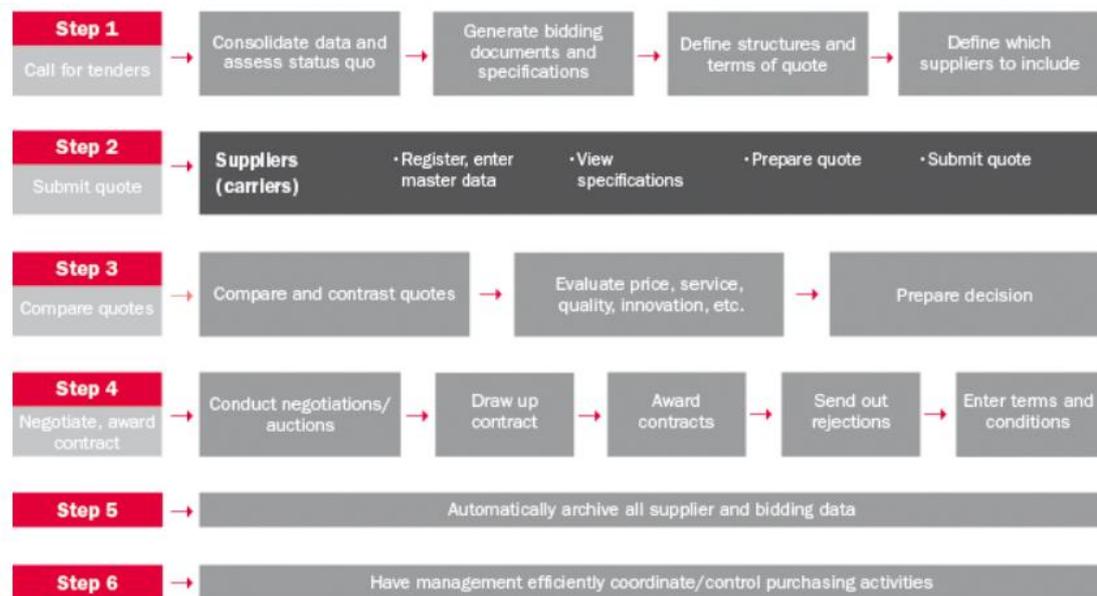


FIGURE 2. Six steps to successful transport tenders (Groenendijk 2016)

Big, international companies like adidas usually already have a procurement team in place, especially if they do tenders frequently. Usually one person in the team takes the lead in the tender and other members adopt a supporting role (Wachtendorf 2011, 11). A clear structure of who is responsible of what is good to have to avoid possible clashes during the project, which multiple leaders might cause.

Tenders are done to achieve cost savings for the company so the right people are needed for the job. A Procurement Manager is expected to have a proactive mindset and the ability to think end-to-end in a fast-paced environment under tight deadlines. On top of that, project management as well as analytical skills are needed to be successful in the job. (adidas, 2017.)

Before going in more detail of the steps, it should be mentioned that this is only a general guideline, other authors or sources may define the procurement process differently and companies who do and have done lots of tenders have their own processes in place. The steps may be structured and named differently, some steps might have been added or

skipped altogether compared to the ones illustrated in Figure 2. It all comes down to experiences and what has been noticed to work. That being said, the whole process starts with identifying a need to procure, which might be an end of a contract phase, insufficient capacity of a current supplier or expanding into new markets (Stockhammer 2017, 32-33). Once a need has been identified, the first step is to call for the tender.

2.3.1 Call for tenders

Tender preparations usually start with gathering historical transport data. Groenendijk (2016) suggests consolidating this data and assessing the status quo. Historical data is essential to gather, because it provides information such as volumes, routes, transport modes and service levels which form the basis for soliciting quotes. (Groenendijk 2016.) It is also good to find out if the company is going to expand into new markets during the next contract period to make sure that any new origins or destinations will be included in the tender. Both Informant A (2018) and Informant B (2018) emphasize the importance of proper preparations. As a rule of thumb, the whole procurement process should be 80% of preparations and 20% of execution. (Informant A 2018; Informant B 2018.)

Objectives and schedule of the tender should also be clearly defined so everyone in the team is on the same page and works towards those goals within the agreed timeframe. The main objective of tenders is to save money, so the procurement team needs to be aware of the company's cost savings targets. If transportation is inefficient and expensive, it will have an effect on other parts of the business.

To help in the decision of which carriers to invite to the tender, the buyer can gather information from the market and downselect suppliers by conducting a Request for Information (RFI) exercise. More about RFIs in chapter 3.5.1. A good strategy to have is to invite as many carriers as viable to submit an initial quote to gauge the price level in the market. Even if the plan is to just continue business with incumbent suppliers, having knowledge of other offers might drive prices down.

Before a tender is launched, a bid sheet needs to be created to which the suppliers fill their offers in. The bid sheet contains transportation lanes, origin-destination pairs that tell the suppliers from where to where the buyer transports goods and needs a quote on. The type

of bidding document depends on the RFX method the buyer uses. RFX is a catch all term for all the different “Request for...” methods, which are presented more in detail in chapter 3.5 and 4.2.

2.3.2 Submit quote

Once all tender preparations are complete and the participants are narrowed down to suitable ones, it is time to launch the tender. At this point, the suppliers go through their internal processes and fill out the bid sheet, which the buyer has provided them. The role of the managing company during this step is to support the suppliers in case of any questions to ensure a smooth process. A delay in submitting a quote delays the whole process. A tender briefing meeting can be held before or after the launch of the tender to address frequently asked questions based on experiences from previous tenders and provide support in filling the bidding document. The meeting or meetings can be done individually or for everyone together depending on the number of participants and the available resources. There should always be at least one contact person within the procurement team to clarify urgent questions that may come up after the briefing meeting. It is important to keep a level playing among the suppliers during the submission period. If one supplier has a question regarding submissions, or anything else for that matter, the answer should also be communicated to everyone else as well. This way nobody gets an unfair advantage.

2.3.3 Compare quotes

The offers received will be evaluated based on the company’s evaluation criteria. After comparing the quotes, there can either be another bidding round or the process moves straight on to negotiations. Multiple rounds naturally mean more work, but may be beneficial in order to receive better final offers. In the case of multiple rounds, feedback should be provided to the participants to let them know where their offer stands compared to the other offers. This steers their next offers to a more suitable direction.

Stockhammer (2017, 32) suggests that one method alone, like cost comparison, is not enough to evaluate suppliers, but it would be better to rely on a method mix. Basing

allocation decisions on just cost is very one dimensional, but it is still the number one driver behind decision making. Experienced procurement teams will also take factors like transit times, operational set ups and business continuity in consideration. It's all about matching internal requirements to external offers.

After all the bidding rounds are over, the suppliers will be further shortlisted. These suppliers will be participating in the negotiation phase of the tender.

2.3.4 Negotiations and contract awards

Actual negotiations with the remaining suppliers are usually conducted face to face. They take significant time and money investments to pull off, so all the parties included should prepare adequately. The negotiating time is limited making things difficult to begin with, so if the other party just shows up without any preparations, everyone's time is wasted. Preparations should not only be done from a data/information point of view, but also from a mental point of view. Negotiating face to face puts pressure on both sides and sometimes business decisions have to be made on the spot. There's also a scientific aspect in face to face negotiations. Since human communication consist of not just words, but body language and tone of voice as well, negotiating face to face brings another level of depth to the whole process. Expert negotiators can notice subtle signs and adjust their style accordingly. Negotiating in person and in the same room is also more efficient and builds more rapport than email exchanges or skype calls. Informant B (2018) adds that the roles and responsibilities of the participants should also be defined. Countless negotiation tactics exist and the negotiators should align on the tactics to be used.

Another aspect to consider when preparing for negotiations is the strategy. Wachtendorf (2011) suggests setting up three parameters when preparing for the negotiations: the most desired outcome, the least acceptable alternative and the best alternative to a negotiated agreement. The most desired outcome is the opening proposal and should be independent of what the other party is willing to accept. It should be ambitious, but also be rationally defensible. The least acceptable alternative is the minimum acceptable improvement of the current situation, settling for anything less is not an option. The best alternative to a negotiated agreement is the course of action to take if negotiations come to a deadlock. It is essentially a unilateral plan of action designed to protect against agreements that should

be rejected. (Wachtendorf 2011, 65.) Having a strategy and plan when engaging in negotiations boosts confidence and offers a sense of security.

During preparations, the initial offers of the suppliers should be ranked to see how they are currently positioned and to which direction they should be driven during the negotiations. Due to the limited time available in the actual negotiation situation, the buyer should figure out in advance which topics to discuss with each supplier. If the supplier is simply not competitive in some aspects, the focus should be somewhere the supplier is competitive. (Informant A 2018.)

Once all the negotiations are over and common ground has been found, contracts will be awarded to the selected suppliers for the agreed contract period. Contracts are drawn up in co-operation with legal teams from both parties to ensure everything is in order also from a legal point of view.

2.3.5 After-tender activities

Tenders, especially large-scale ones, produce a lot of data. It's simple to just end a tender after the contract signings, but Groenendijk (2016) suggests archiving all the data generated during the process. This may prove to be useful in the next tender, when historical data is needed again. In addition to that, it's also good to have a "you never know" attitude and save all the data for future reference. Organized data can easily be referenced in case of mix-ups or misunderstandings.

In the case of brand new suppliers, or incumbent suppliers starting to operate on new areas, an implementation plan is needed. The plan should include in detail all the necessary steps to take for a smooth transition.

The most important thing after successfully completing a tender exercise is Supplier Relationship Management. Especially with new suppliers, it's crucial to establish and maintain a transparent business relationship to ensure success.

2.4 Modes of transport

Transportation services can be procured for all modes of transport; ocean freight, air freight, road freight, rail freight and pipeline. The decision of which mode of transport to use is based on the requirements for the cargo. Several factors such as the nature of the goods, access to carriers, price you're willing to pay and transit time required need to be taken into account when selecting the most suitable mode of transport. For example, if you have a large amount of cargo to get from one side of the world to another, you would pick ocean freight as a mode of transport due to it being the most economic choice. Then again, if you have a spare part that your company urgently needs, you would pick air freight for its unbeatable port to port time. Figure 3 displays an overview of the key differences between all modes of transport as outlined by Ballou (2004, 176).

PERFORMANCE CHARACTERISTICS ^a					
Mode of Transportation	Cost ^b 1 = Highest	Average Delivery Time ^c 1 = Fastest	Delivery-Time Variability		Loss and Damage 1 = Least
			Absolute 1 = Least	Percent ^d 1 = Least	
Rail	3	3	4	3	5
Road	2	2	3	2	4
Water	5	5	5	4	2
Pipe	4	4	2	1	1
Air	1	1	1	5	3

^a Service is assumed to be available

^b Cost per ton-mile

^c Door-to-door speed

^d Ratio of absolute variation in delivery time to average delivery time

FIGURE 3. Relative Rankings of Transportation Mode by Cost and Operating Performance Characteristics^a (Ballou 2004, 176)

Most of the time, just one mode of transport is not enough. Companies don't usually have their warehouses or distribution centres near a sea port or an airport, so in these cases there's a need for another mode of transport for the same shipment. This is called intermodal transport, when two or more modes of transport are combined. Imagine shipping a container as ocean freight from Asia to Europe, unloading the container from the vessel at a port and loading it onto a truck which then takes it to inland Europe. This would be considered intermodal transport.

To give a general idea about how big the industry actually is, just within the EU-28, the 28 members stated of the European union, transport activities in 2015 were estimated to be around 3 516 billion tkm (tonne kilometres; 1 tonne transported a distance of 1 kilometre). Out of this total, almost half, 49 % to be exact, was road transport. (European Commission, 2017.) Figure 4 is based on these statistics from the European Commission (2017) and shows a comparison of modal splits over time.

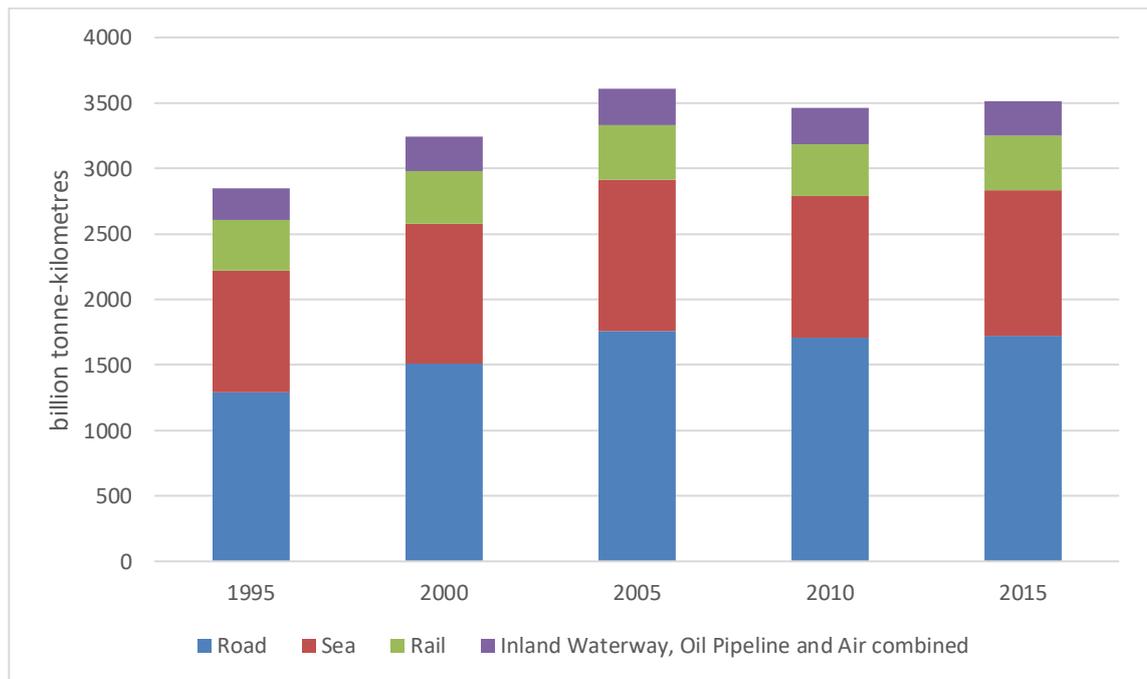


FIGURE 4. EU-28 Performance by Mode for Freight Transport (European Commission, 2017)

2.4.1 Ocean freight

As briefly mentioned in the last chapter, ocean freight is the most economic mode of transport for most products. Ocean freight carriers can load thousands of containers on a single vessel, which brings down the price of shipping an individual container. The largest container ship in the world, the OOCL Hong Kong has a maximum capacity of 21 413 TEUs (Twenty-foot Equivalent Unit, one TEU equals one standard 20 foot container) (OOCL 2017).

Price and availability of service are perhaps the biggest advantages of ocean freight. Services are available all over the world and most cargo can be placed in ISO (International Organization for Standardization) containers (Picture 1) (Rushton et al. 2014, 375). On the other hand, ocean freight is very slow and always needs to be paired with another mode of transport. Pre-carriage has to be done to get the goods first to the port of loading and then on-carriage from the port of discharge to the final destination (Rushton et al. 2014, 375). Having cargo in containers makes the whole process convenient since they can be easily loaded onto trucks or train wagons.



PICTURE 1. Standardized ISO shipping container (Tom 2017)

The sizes of shipping containers are most commonly 20-foot, 40-foot and 40-foot High Cube. Different sizes naturally take a different amount of space on the ships, so the bid sheet in tenders should ask a different rate for all the container sizes. It may also be beneficial to provide the participants a forecast of volumes on a particular lane to make sure that they have access to sufficient capacity before they submit their offer. The actual rate that the carriers can offer consists of transport equipment investments and terminal handling charges (Ballou, 2004, 188).

The ocean freight business is dominated by Maersk Line, the largest container shipping company in the world, a part of the Danish A.P. Moller–Maersk Group (Maersk 2017). Maersk Line ships on an annual basis around 12 million containers worldwide to 343 different ports (Maersk Line 2017). Figure 5 illustrates the capacities of the five biggest operators (subsidiaries consolidated) in terms of TEUs as well as the percentage share of

the total TEUs available in the market (Alphaliner 2017). It is worthwhile to note that the four biggest operators and their subsidiaries account for over half of available capacity.

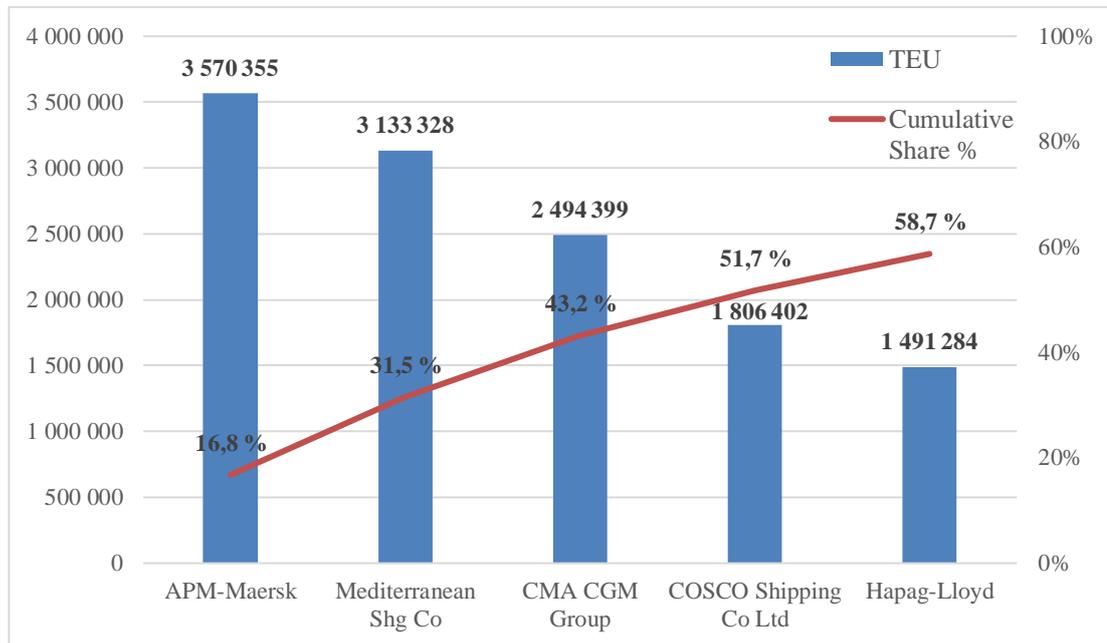


FIGURE 5. Five biggest operators, their capacities and cumulative shares (Alphaliner 2017)

2.4.2 Air freight

Air freight is the complete opposite of ocean freight when it comes to costs and transit time, ocean freight being low cost – high transit time and air freight having high costs and low transit time. Thus, the nature of the goods that are economically viable to transport are different. Air freight is best used with high value – low volume products due to limited space availability in aircrafts. When transporting high value cargo, the expensive transport costs of air freight do not play a big part. Air freighting brings a significant amount of market flexibility, since virtually any country can be reached just in a matter of a few days (Rushton et al. 2014, 377). This enables companies to use air freight as an option if products are needed to be transported quickly, like perishable goods or emergency supplies.

The rate structure in air freight also differs from ocean freight. The rate can be asked to be provided in two ways, a base rate with a fuel surcharge and security surcharge all

outlined separately or an all-in rate with everything combined, the latter becoming increasingly popular and sometimes even a requirement (Air Cargo News 2015).

Cost characteristics for air freight are similar to those of ocean freight, terminal and equipment costs form the bulk of total costs. With aircrafts suffering great inefficiency during take-off and landing, variable costs associated are lowered when the distance of the haul increases. (Ballou 2004, 188-189.) This is a way to justify providing a higher rate for a shorter trade lane.

Air freight is charged differently than ocean freight. Whereas ocean freight is charged by container, whether a 20', 40' or a 40' High Cube one, chargeable weight is used in air freight instead. The airline industry has a standard of calculating 1 cubic metre of cargo as 166.67 kilogrammes of volumetric weight. When compared to the volumetric weight to the actual gross weight, the chargeable weight is the greater of the two. This is done due to limited space inside cargo holds but also due to the high volume to weight ratio of the goods usually transport via air freight. (Rushton et al. 2014, 411-413.) This system makes it profitable for airlines to also transport high volume – low weight cargo as opposed to just charging by weight.

2.4.3 Road freight

Road freight is the most flexible form of transport. The extent and coverage of the road network compared to other modes of transport is unbeatable. Door-to-door speed and convenience are its greatest advantages (Ballou 2004, 172). If needed, road freight can also be planned to fit ferry or tunnel schedules to enable a quicker service and a broader network (Rushton et al. 2014, 376). Road freight is in most cases the mode paired with ocean, air and sometimes rail freight to get goods to the final destination. Road freight is especially convenient used in conjunction with ocean freight since shipping containers can easily be loaded onto trucks straight from the vessel, as seen in Picture 2.



PICTURE 2. Containers being loaded from a container ship on to a truck (Jew 2014)

Road freight can be used for long haul inland transport or for medium-short haul last mile deliveries. Long haul is usually done with semi-trailers from ports to warehouses, like in Picture 2, or from a warehouse to retail or wholesale customers. Last mile delivery commonly refers to parcel shipments from distribution hubs to end customers. Since most last mile deliveries occur in urban areas, a more agile delivery vehicle such as a van is used.

Other than containers, goods can also be unitized on pallets for easier handling and transportation. This is especially convenient, if one truck delivers shipments to multiple customers. Manual labour is avoided altogether, since forklifts can be used to unload the required pallets in a matter of minutes, saving both time and money.

Rates offered in road freight tenders follow the general rule of the more you ship, the cheaper it is. An exaggerated example would be shipping one parcel from point A to point B versus shipping a full truck load of parcels the same route. The cost of driving the truck from A to B won't drastically change, but the cost of it is divided among a full truck load of parcels bringing down the cost of shipping a single parcel. Normally of course, no delivery company would ship one parcel from one customer separately, but rather consolidate it with parcels or pallets from other customers.

2.4.4 Rail freight

Rail freight was revolutionized after the introduction of unitized loads, ISO containers. (Rushton et al. 2014, 417). This gives rail freight the same advantage as road freight, being able to transport containers easily onward. However, double-handling is still often needed and the last leg to be done with road freight (Rushton et al. 2014, 376). This is due to the fact that the rail network is not as flexible and encompassing as the road network. Direct journeys from origin to destination are rare, since there are a limited number of railheads at factories and depots (Rushton et al. 2014, 376).

Rail freight costs are characterized by high fixed costs and relatively low variable costs. Fixed costs being loading, unloading and terminal costs among others and variable costs fuel, oil, wages and maintenance. The net effect of this is to create economies of scale to distribute fixed costs over greater volume to reduce per-unit costs. (Ballou 2004, 187.)

2.4.5 Pipeline

Pipeline is the most limited mode of transport, since only crude oil and refined petroleum products are economically feasible to transport. The transport is, however, very reliable, operates 24/7 and has high capacity. (Ballou 2004, 175.) Even though pipeline won't be given a lot of attention in this work, it should still be mentioned as it is a common mode of transport.

2.5 Traditional RFX tendering methodologies

Like already briefly mentioned, RFX is a catch all term for the different "Request for..." methods, which are presented in detail in this chapter. Commonly, the whole procurement process is called by the RFX method used, which is not entirely correct. The transportation procurement process in chapter 2.3 is the "what" of tendering and the RFX methods are the "how". They are the strategic approach taken to tenders.

2.5.1 Request for Information & Request for Qualification

A Request for Information is commonly used to down select the number of suppliers to work with and is used in combination with another RFX method. (Vitasek, Keith, van de Rijt, Massari, Easterwood, Järleskog, Downard & Kling 2017a, 12.) A small online market research can be conducted to find out potential participants to the tender and to whom to send a Request for Information to. The RFI adds more time to the overall process, but allows for easy access to basic market intelligence about supply base capabilities and to identify capable suppliers (Vitasek, Kling, Keith, Handley & van de Rijt 2017b, 13). An RFI is a standardized questionnaire that allows for easy comparison of key data across all suppliers. It should contain questions designed to narrow down suppliers based on if they are able to complete all market requirements. (Vitasek et al. 2017a, 13.) This is important to do since a company might have “make or break” - requirements in the questionnaire and cutting out carriers who won’t accept these requirements early saves everyone’s time. These requirements might include things such as adhering to the company code of conduct, ISO quality certificates or some other legal requirements. Nowadays with the environment being so important to consumers and companies alike, it might be wise to only include offers from carriers who have a proven track record of being environmentally friendly and who are actively working towards a greener future.

A step further in down-selecting suppliers before the actual RFX method used would be to send the suppliers a Request for Qualification. It can follow or be combined with an RFI and is a more formal step in the process (Vitasek et al. 2017a, 16). Requests for Qualification are evaluated more critically than their informal counterpart. They make sure that the suppliers are capable of performing exactly in the required level. It should be noted that the term RFQ can refer to both a Request for Qualification or a Request for Quotation. In this paper, all further mention of an RFQ refer to a Request for Quotation, if not mentioned separately.

Both methods are used for initial down-selection of suppliers. They are great tools to thin out a massive herd of suppliers. On the other hand, they add another step and therefore stretch the timeline of the overall process, especially if both methods are used. The optimal way would be to use one or the other, to maximize the benefits they offer.

2.5.2 Online reverse auctions

Even though reverse auctions are not an RFX method per se, they should still be mentioned. An online reverse auction is an auction where the roles of the buyer and the seller are reversed from a traditional auction. It's a process where "multiple prospective suppliers bid against each other to see who is willing to offer the lowest price point for their good or service to the auction holder." (Reverse Auction Guide). In transportation procurement, lanes are up for bid and are usually bundled together based on the buyer's preferences. In e-auctions, the price is displayed to the buyer and the bidders in real or near real time, making them an extremely transparent process. Since the suppliers can see each other's bids, lower prices are usually achieved. (Vitasek et al. 2017a, 18-19.) It's argued that other benefits of reverse auctioning include validating competitive pricing from the current supplier and identifying alternate low-cost options (Reverse Auction Guide).

However, according to Sandholm (2007), reverse auctions are not economically efficient and don't yield good allocation decisions, since optimal item bundling depends on the preferences of the supplier and not those of the buyer. He also adds that due to the bundling of items, reverse auctions get rid of complexity instead of embracing it as a driver of opportunity. (Sandholm 2007, 46.)

Reverse auctions were a popular choice in the 1990s, but have lost popularity ever since. Buyers have moved away from reverse auctions since suppliers would usually bid too low in order to win and then negotiate post-contract award. So, savings projected during the auctions were not the actual savings achieved. (Vitasek et al. 2017a, 19.)

2.5.3 Request for Quotation

A Request for Quotation (also called Request for Price) is one of the most common RFX methods of today. It's a highly competitive process where buyers seek the most competitive pricing for a good or a service. Therefore, the buyer sets up the bid sheet exactly how they want their suppliers to operate, clearly defining everything that is required from the suppliers. The suppliers find out the price of how much they need in order to perform in the required way. In an RFQ, price is the key evaluation criteria.

George (2011) characterises an RFQ model to have rigorous discussions to define the required service, the usage of detailed and reliable data during the evaluation phase and establishing a structured decision process.

An RFQ is usually used in conjunction with an RFI to pre-qualify suppliers. Tomingas (2015) divides the process into four steps, as seen in Figure 6. He stresses the importance of preparing properly and suggest using at least 50% of the time of the entire process in the preparation phase. (Tomingas 2015, 4.) The steps that Tomingas outlines are in line with the ones from Groenjenjik in Chapter 3.3 so the model can in such be used as a general guide for tenders as well. As the process was already explained in Chapter 3.3, it won't be explained again. Instead, parts where the RFQ methodology has an effect will be expanded.

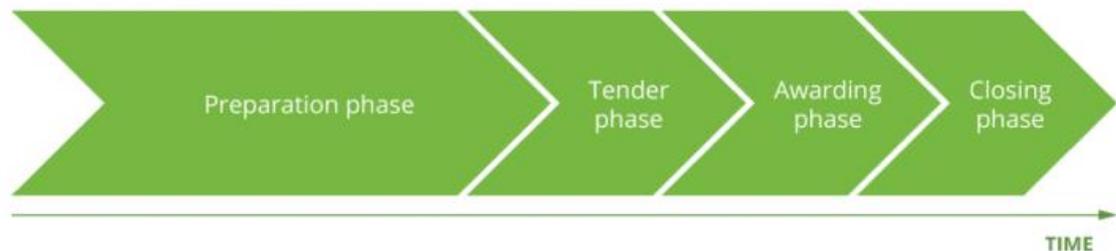


FIGURE 6. The RFQ Process (Tomingas 2015, 4)

The RFQ methodology impacts in the preparation and the tender phase. During preparations when the procurement team creates the bidding sheet, they create it in a way that specifically outlines everything that is required of the supplier. The RFQ bidding sheet must be clear enough for the suppliers to understand exactly what is needed from them and to minimise easily avoidable questions. Standardization is the key word when it comes to the bid sheet. It is designed to contain all the requirements and specifications the buyer has. (Vitasek et al. 2017a, 21.) This creates easy apples to apples comparisons between the suppliers, where the only differentiating factor is price.

In the Tender phase when bids are being evaluated and compared, the procurement team has an easy job to rank the suppliers. This gives the team information on which to base their negotiation strategy on.

2.5.4 Request for Proposal

A Request for Proposal is a more flexible version of a Request for Quotation. It is used in larger and more complex initiatives, when the buyer needs more input from the suppliers than just the price (Vitasek et al. 2017b, 10). In transportation procurement, this would mean transit times, cut off times, service levels etc. Depending on each supplier's capabilities, these details are different. For that reason, transportation procurement can rarely be standardized in an RFQ format and why RFP's are the usual method of choice.

The bid sheet in an RFP is set up similarly to an RFQ, but with a key difference. Whereas in an RFQ all the requirements are clearly stated for the suppliers, an RFP is a bit more open-ended and requires the suppliers to provide a proposal in certain aspects of the bid for the buyer to consider. An example would be transit times. The suppliers state how much time it takes for them to deliver goods from the origin to the destination. The buyer will then take this, along with other information, in consideration when evaluating the suppliers. One supplier might be more expensive than another, but manages to have a shorter transit time. The buyer must decide if it is worth it to sacrifice time for a lower price or have their goods delivered faster and pay a little extra. Usually there are parameters set up by the buyer to guide the offers, if there is a minimum requirement from an operational point of view. Transit times is just one example, the same logic would apply to other factors as well.

A whole new dimension is added when evaluating RFPs, since price is not the only evaluation criteria. Wachtendorf (2011) suggests considering price and non-price criteria separately when evaluating offers, as illustrated in Figure 7. Evaluation should be split into a quantitative analysis (costs) and qualitative analysis (additional criteria). Recording the lowest prices and best service levels serve as benchmarks for negotiations. (Wachtendorf 2011, 54-56.)

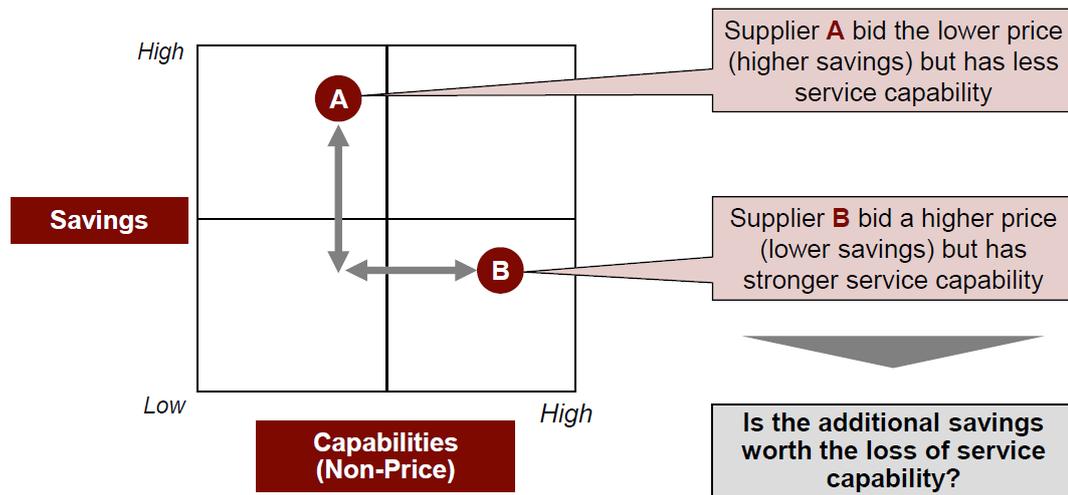


FIGURE 7. RFP Competitive Positioning Matrix (Wachtendorf 2011, 56)

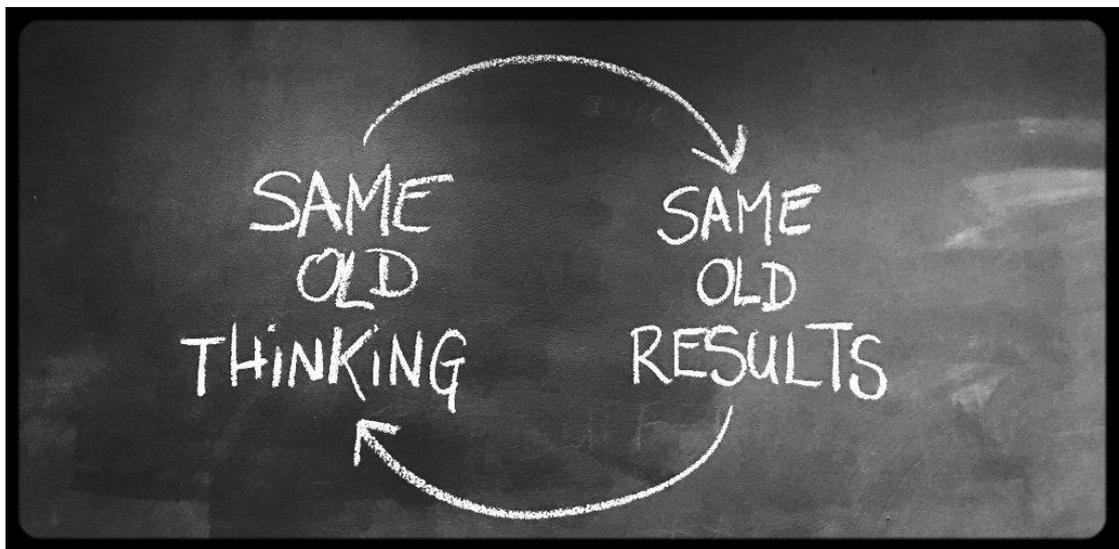
The RFP is designed to enable an apples-to-apples comparison between bids, but instead of the apple representing just the price, it represents all the criteria based on which the buyer evaluates offers. In RFPs, the buyer is not looking for the cheapest apple, they're looking for the best one.

2.6 The current landscape of procurement

Traditionally savings are driven by leverage and supply base rationalization (Wachtendorf 2011, 57). After a bidding round (or rounds) and comparing quotes, face to face negotiations follow. During negotiations, focus is put on high volume lanes, which have the most impact on business (Informant A 2018; Informant B 2018). According to Sandholm (2007, 45), face to face negotiations enable an expressive and open engagement between the buyer and the supplier, but on the other hand are slow, unstructured and non-transparent. Wachtendorf (2011) adds that the preparations for face to face negotiations usually just focus on lane prices. Furthermore, the amount of time needed to evaluate offers limits analytical power. (Wachtendorf 2011, 79.) If the only goal of a tender is to get rates lower than previous ones, it is easy to get tunnel vision and only focus on that one thing, disregarding other factors that might have to be considered. Sandholm (2007) brings up another problem of sequential negotiations and how they lead to suboptimal decisions, "because what the buyer should agree to with a supplier depends on what other suppliers would have been willing to agree to in later negotiations."

Sandholm (2007, 45.) Indeed, suppliers who come last in negotiations have an advantage since at that point the buyer has knowledge of other suppliers' offers and can have them as a hidden benchmark during the last negotiations, effectively creating an unfair playing field.

The traditional haggling approach encourages an adversarial mindset during negotiations. Instead of working together to find a solution that benefits both parties, the negotiation situation becomes a tug of war on the price with the other party eventually winning and the other losing one way or another. That being said, operating the traditional way does work and will produce reliable and easy to track savings. However, there comes a point when following the same tender process again and again is not enough to generate adequate savings anymore. Picture 3 illustrates this vicious circle. Market situation or a supplier's internal situation might cause them to not be able to offer lower prices tender after tender. There's a limit somewhere and at some point, the limit is reached, not generating savings for the buyer anymore. That is one of the major problems with a tunnel vision approach like this.



PICTURE 3. Same old thinking, same old results (Green Rocks Fitness 2017)

Another characteristic of traditional tendering according to Wachtendorf (2011, 77) is having rigid bid structures and lane level bidding. In practice, this means outlining specific requirements to each lane, having suppliers just quote a rate. This way the only thing that will differentiate the suppliers from each other is the rate they bid for each lane. Although this enables simple apples-to-apples comparisons and makes allocation decision easier since all other variables are the same, price is not always a key decision

criterion. A more expensive supplier might have better transit times or an incumbent supplier is a better option due to high implementation costs of a new supplier. All of this is more work for the procurement team to find the best supplier for every lane. Because of these rigid bid structures, collaborative elements such as alternate scenarios, routing and conditional offers are not collected (Wachtendorf 2011, 77). Having a standardized process may be effective in terms of helping an organization get through the supplier selection process faster, but the lack of flexibility can be frustrating (Vitasek et al. 2017b, 3). The rigid bid structures make it difficult to align requirements with supplier capabilities (Wachtendorf 2011, 57).

Many large enterprises still carry out procurement activities the old-fashioned way with a combination of legacy systems, spreadsheets, email and manual processes. This is becoming ever more worrying given the fact that companies are facing increasing pressure of running the business more proficiently. What they should do is to make use of digital advancements to maximize efficiency and to respond more flexibly to market demands. (Harvard Business Review 2017, 1.)

2.7 Interview insights

Informant A works as Senior Manager of Procurement and Contracts at adidas and is an expert on inbound related matters. He had the following insight to provide on the respective modes of transport, from the point of view of the buyer of the services.

Ocean freight is the mode of transport adidas moves most of its goods with. Due to the amount of volume adidas ships worldwide yearly, it would not be financially feasible to have another mode of transport as the main one. Ocean freight also fits the company culture from a sustainability perspective. We tender ocean freight every year to ensure we have the best possible pricing and services to deliver our products on time in full, from our factories to our distribution centers. (Informant A 2018.)

Air freight is, on average, six times more expensive than ocean freight and should be used with that aspect in mind. Despite ocean freight is the main mode of transport adidas uses, a fair bit of cargo is transported via air. One of the most common reasons to use an air freight service is time urgent deliveries like a new product launch. (Informant A 2018.)

In general, companies usually tender air freight with freight forwarders, since they can get better rates from carriers when compared to negotiating directly with said carriers. Another reason for this is that one freight forwarder has multiple airlines already as a partner so there's also a significant time save when you don't have to involve numerous airlines in the tender, but rather freight forwarders who already do business with many of them. Furthermore, attention should be directed to the amount of uplifts that can be provided and the airlines used. The amount of uplifts is especially important for companies who use air freight as a backup option. Monitoring the airlines used by the freight forwarders is important for security reasons, since some of the airlines may not be reliable enough for company standards (Informant A 2018.)

Informant C, also a Senior Manager of Procurement and Contracts at adidas, gave her take on tendering outbound road transport. According to her, one of the most important things to consider is to be clear on what you want, due to the complexity of tendering road freight. Just the number of lanes to consider is enough to complicate the process. Suppliers usually price road freight based on zip code areas and depending on how specifically the bid areas in the bid document are outlined, one country can have up to a hundred different zip codes. Then factor in a few different distribution centres as origin points, different channels (ecommerce, retail and wholesale customers) and different shipping types (parcels, pallets, full truck loads) and you've got your work cut out for you. Informant C also stresses the fact that operational requirements of the company heavily direct the tender process, so requirement collection in the preparation phase is key. If the business requires things to be done in a certain way, it must be considered in the tender. (Informant C 2017.)

The Director of Transport and Logistics Procurement, Informant D, had a few thoughts about the hindrances of traditional procurement. He mentions that a backwards-looking attitude is one of the major obstacles. The fact that the process is more or less set in stone and time consuming, there's limited time to develop any changes and evaluate if the changes would in fact be efficient, effective and applicable. Traditional procurement is never looking into what could be changed and even if suppliers would like to do things somewhat differently, since internal timelines don't allow that. A fresh approach could lead to savings down the line, but currently opportunities to achieve them are rarely grasped. (Informant D 2018.)

3 RESEARCH METHODOLOGY

This chapter summarises how research was conducted in the making of the thesis. It also presents the research questions that helped guide the work.

3.1 Data acquisition and analysis

Two types of research exist, quantitative research and qualitative research. Whereas quantitative research is about collecting large amounts of data in a fixed format (e.g. surveys) to present the data numerically, qualitative research focuses on non-numerical data and the interpretation of it (Crossman, 2017). For qualitative data analysis, Aurini, Heath & Howells (2016, 180) present three different types of data analysis approaches: manual analysis, Microsoft Office (Word and Excel) and Computer-Assisted Qualitative Data Analysis Software, CAQDAS for short. The main benefits of Word and Excel are practical editing features and the possibility to display information in a graphical form. Furthermore, data analysis and storage are great benefits of using Microsoft Office. Good old-fashioned pen and paper on the other hand help in keeping a feet-on-the-ground approach to the analysis process and is the most convenient analysis method of them all. Obviously, manually analysing data may become too labour intensive especially if the amount to be analysed is excessive (Aurini et al. 2016. 185), so it is best kept as a supportive tool and mainly focus on having all data centralized and use the capabilities of Word and Excel to their full potential. For most people it is too complicated, time consuming and even expensive to acquire and learn new software, so the optimal mixture would be Word, Excel and manual analysis.

Sources are also divided into two classes, primary sources and secondary sources. Primary sources provide direct information about the researched subject and can be things such as official documents, interview results or statistical data. Secondary sources consist of things which describe, interpret and analyse primary sources, like books or newspaper articles. In a nutshell, secondary sources are derived from primary sources. (Aurini et al. 2016, 10-11.)

Research conducted in this paper is qualitative by nature. Data is mainly based on books, research papers and articles. Industry experts have also been interviewed and the

interviews were conducted in a semi-structured, conversational way. The interviewees were asked similar questions, which were based on the researched theory. The questions were open ended allowing them to answer in any way they see fit. It brought spontaneity to the interviews while keeping the answers comparable to each other and to the theory. The data analysis approach was inductive in nature, meaning that research findings emerged from reoccurring themes in the raw data as opposed to trying fit the data into a pre-decided mould (Thomas 2006, 238). Interviews conducted were of adidas employees, providing their insights on the topics discussed in the thesis. The identities of the interviewees are kept anonymous as per the request of the commissioner.

3.2 Research questions

The objective of the research was to find out whether or not innovative tendering practices could be used in transportation procurement to achieve better results faster, easier and cheaper than before. To guide the research, a master research question and supporting sub-questions were established. The questions were designed to cover all the aspects necessary for the reader to understand the topic without any previous knowledge of it.

Are innovative tendering methodologies viable to use in transportation procurement?

- What is transportation procurement and tendering?
- What are the traditional tendering techniques?
- What are the innovative tendering techniques?
- How do innovative and traditional tendering techniques differ from each other?

4 THE FUTURE

When business is doing well, it puts more pressure on supply chains to perform better. New and innovative solutions are needed to tackle pain points and to make tendering more effective.

4.1 Future of transportation

In the future, tendering has to be adjusted for potential new transport methods. New and innovative delivery methods are needed to help with, in addition to other things, the increasing volume of ecommerce. Ecommerce in 2017 grew 14 percent to over €600 billion compared to 2016 (Ecommerce News 2017). Companies need to be aware and react to the upward trend to make sure their products get to consumers at the right time, quality and price. As the amount of sales increase, so do deliveries and transportation costs. Companies should make sure they are adequately prepared for the ongoing trend. Traditional delivery methods work and are reliable, but some innovative solutions are also in the works. This chapter presents three of them, giving food for thought as to what the transportation climate might look like in the future.

4.1.1 Drones

Drones are remote controlled unmanned aerial vehicles with roots in the military (Hyde 2014), but in recent years have become more and more common in consumer use. They're mainly used for photographing and filming hard to reach places or getting aerial shots, but recently the technology has been implemented in transportation for last mile deliveries. The first one being the American convenience retailer 7-eleven who made the announcement in July of 2016, stating that they have executed the first fully autonomous drone delivery (Todd 2016a). Since then, many other companies have followed suit and engaged in further testing of the possibilities of delivery drone usage. Not too far behind was the e-commerce giant Amazon, whose first successful Prime Air drone delivery saw the light of day in the beginning of December 2016 (Bezos 2016). Picture 4 shows the kind of drone Amazon used in their trial delivery.



PICTURE 4. Amazon Prime Air Delivery Drone (Amazon)

Whereas Amazon's drones departed from their warehouse, UPS has been working on a different approach. They have tested a solution where a drone is launched from the roof of a modified delivery truck (Picture 5), autonomously drops off a package and then returns to the truck, while the driver of the truck simultaneously delivers packages to other locations (UPS 2017). This of course improves the efficiency of the driver, being able to deliver more packages in the same amount of time as before using a drone.



PICTURE 5. UPS Drone delivery truck (UPS 2017)

4.1.2 Self-driving delivery vehicles

The trucking industry is facing a huge challenge of driver shortages. In the US alone, almost 900 000 more drivers will need to be hired to keep up with industry growth (Costello 2018, 4). There is huge potential to tap to and in fact, it is estimated that 80 percent of all package deliveries will be autonomous in the next decade (Waters 2018).

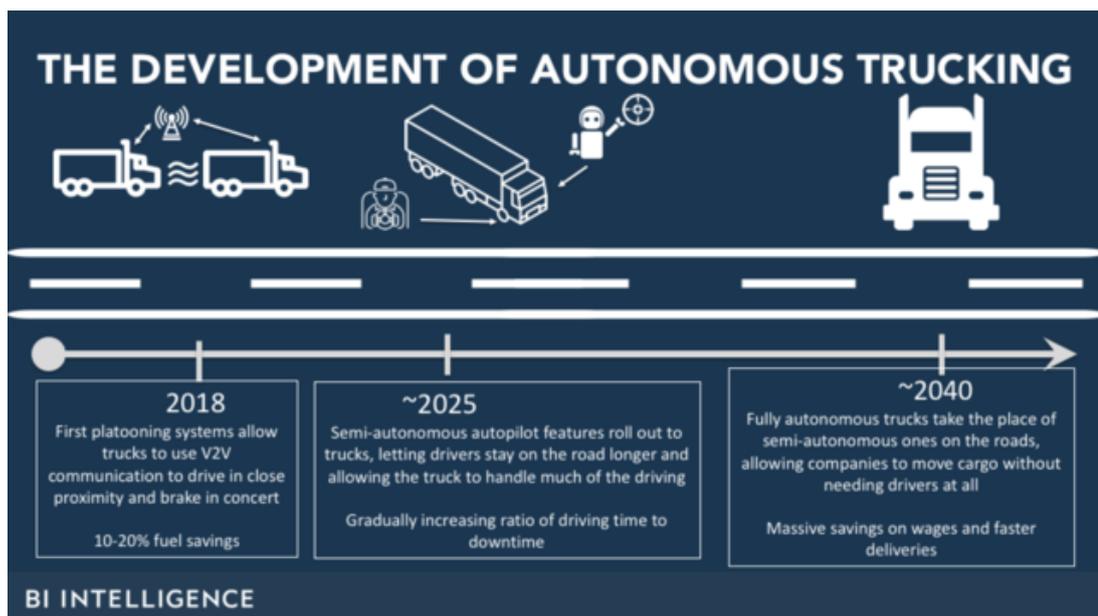
The world's largest mail and logistics company Deutsche Post DHL has partnered with the technology company Nvidia to deploy a test fleet of autonomous delivery vehicles starting in 2018 and perhaps revolutionize last-mile delivery services (Nvidia 2017). As with drones, self-driving cars also face difficulties in implementation. DHL (2014) itself presents three key problems in their Trend Research of self-driving vehicles, which are regulations, public acceptance and liability. The current regulations restrict fully autonomous vehicles on public roads as per the Vienna Convention of Road Traffic, however, "Systems that autonomously steer a car are permissible if they can be stopped by the driver at any time". Public acceptance and liabilities go hand in hand, most people do not trust autonomous vehicles. Who is responsible if an autonomous car makes a decision that results in an accident? (DHL 2014.)

Beating DHL to the punch was a company called udelv, who made the world's first public road test deliveries in San Mateo, California. Their customized fully electric autonomous last-mile delivery vehicle (Picture 6) made a 2.5-mile loop delivering groceries to two customers, supervised by a safety driver in compliance with existing California regulations. "udelv anticipates that its new vehicle will bring forth a dramatic drop in the cost of local deliveries, add delivery window flexibility and significantly reduce carbon footprint." (Waters 2018.)



PICTURE 6. udelv autonomous delivery vehicle (Waters 2018)

A step before going fully autonomous could be truck platooning. It involves a human driver in a leading truck leading a convoy of driverless ones (King 2017). Platooning would surely help ease driver shortages, since one driver could manage multiple vehicles. Fuel consumption is also lower due to the following trucks taking advantage of drafting. Platooning seems to be a logical first on the road to fully autonomous delivery vehicles. Picture 7 is Business Insider’s prediction of how the development of autonomous trucking might look like (Camhi 2017).



PICTURE 7. The Development of Autonomous Trucking (Camhi 2017)

4.1.3 Cargo Sous Terrain

Another innovation that would revolutionize the transportation of goods is being created in Switzerland. Cargo Sous Terrain (French for Cargo Underground), an underground transportation tunnel system is planned to be developed by 2030. Driverless wagons would travel in the tunnel carrying cargo in pallets or containers, around the clock (Todd 2016b). The tunnel would operate between main distribution hubs, like production sites, and sub-distribution hubs with the final leg being made with hybrid vehicles. Their goal of taking goods transportation underground is to guarantee on-time deliveries, ease congestions and release pressure being put on the country's rail and road network. (Cargo Sous Terrain 2016; Todd 2018.) The tunnel would make logistics in Switzerland more efficient and reliable as well as reduce CO2 emissions. The project has received an initial funding of roughly a \$100 million (Todd 2018).

4.2 Future of tendering

Tendering has been stuck in its ways for a long time. Globalization and the increasing complexity of supply chains have had the effect that the methods used traditionally are no longer enough. Fresh ways and innovative solution are needed for ever changing business needs (Harvard Business Review 2017, 5). Companies are looking for value beyond cost savings, like innovation and flexibility, something traditional RFX methods are unable to provide (Vitasek et al. 2017a, 3). There comes a point when doing the same RFQ over and over again doesn't produce enough sustainable savings anymore and a shift in mentality and thinking is in order. New methods to replace Requests for Quotations or Requests for Proposals haven't caught wind until the last couple of years. The world leading academics in the field of supply chain management have begun to promote more progressive and collaborative procurement techniques (Vitasek et al. 2017b, 7). These techniques allow enterprises to yield savings faster and improve overall operational efficiency. Companies are abandoning the old-school transaction based, adversarial approach to suppliers and replacing it with collaborative, constructive and transparent methods. (Harvard Business Review 2017, 0, 11.)

4.2.1 E-tendering

E-procurement as defined by The European Commission (2010, 3) is a catch all term for replacing paper based procedures with electronic processes to support publication of tender notices, provision of tender documents, submission of tenders, evaluation, award, ordering, invoicing and payment. Rushton et al. (2014, 235) see it as the electronic integration and management of all procurement activities. Sandholm (2007, 45) outlines speed of process, structure and transparency as key advantages of an e-procurement approach.

Since E-procurement is procurement done online, then E-tendering must be the right term for tenders done online. One could argue that all tendering done is e-tendering in a way, since everything nowadays is done with computers and not on paper. In this case however, E-tendering refers to specific cloud based online tools and software designed to optimise transport tendering.

Moving tendering to a cloud based service bring several advantages. Running a tender online automates the process, makes it more streamlined and saves time (Nextenders 2013). There's one system to manage all information in one record so everything is conveniently located in one place. Having everything go through a system makes it easy to keep track of who has submitted what and when. The system acts as a neutral party between the buyer and the supplier, so neither party can deny submitting bids, answering questions or other foul play. With the software located in the cloud, users are not restricted to specific computers and system crashes don't have major effects in the overall picture.

Speaking of analysis, it is without a doubt the biggest advantage of using an e-tendering software. E-tendering software can produce multiple scenarios based on different criteria in the blink of an eye, something that would take a human a considerable amount of time to achieve. Scenarios help the buyer study various allocation possibilities and their impact on costs and operations. The goal is to maximise the cost versus service ratio. The system can also be set up to gather, track, and analyse data on cost savings to prepare for future tenders.

With all of the advantages a tender tool brings, there are also downsides. With tender tools being software, users are limited by the amount of computing power they have.

Large, multinational companies with hundreds of thousands of lanes might face difficulties using the tools if their computers don't pack enough punch. Even more problems arise if the tool doesn't perform in a desired level. Every company has a different supply chain setup, but the software are designed as a one size fits all solution. Therefore, they might lack some features that a specific company would require in their tender. Workarounds are possible, but take up time and resources, which are of limited quantity especially during tenders. IT security is also worth mentioning even if the chance of anything happening is slim.

E-tendering in itself doesn't exactly encourage innovation (Executive Compass 2010). The buyer sets up the e-tender platform and the software makes sure that everything is filled precisely the way intended. The process is structured and setting up parameters such as word count or minimum and maximum values hinder flexibility. On the other hand, it makes the supplier provide their offer in a compact and concise way, which makes analysing easier for the buyer. An e-tendering tool adds value to the procurement process by eliminating transactional tasks in favour of analytical power.

4.2.2 Collaborative optimization

Collaborative optimization is a strategic sourcing practice that focuses on the what and the how of buying a service instead of just how much is paid of the service. Value is created with a collaborative bidding method called Expressive Bidding and processes relating to Business Award Optimization. (Wachtendorf 2011, 80.) Collaborative optimization combats the traditionally adversary nature of procurement by, just like the name says, collaborating and working together to achieve results that are beneficial for both parties involved, instead of haggling about price.

Expressive bidding differs from traditional bidding in terms of giving more flexibility to the suppliers when submitting a bid, allowing them to focus on their internal capabilities. This permitted flexibility could be manifested as an alternative bid (e.g. lower rate for extra transit time), a conditional discount (e.g. a discount if a certain amount of business is awarded), step pricing (lower rate for more volume on a lane) or bundles (discount if awarded lanes that combined provide operational benefit). (Wachtendorf 2011, 82.)

Alternative bids enable the suppliers to use their creativity to manage total costs. Conditional discounts help with strategic allocation decisions, since having a guarantee of minimum volume incentivises suppliers to align their capacities with the buyer's requirements (Wachtendorf 2011, 85.) Step pricing lets the supplier to take advantage of economies of scale and bundling helps with operational planning.

These expressive bid elements just presented are tools that help identify mutually attractive deals that deliver higher savings (Wachtendorf 2011, 82, 85; Scharlach 2015, 2). After optimizing the offer from all the suppliers, the buyer is ready to begin the process of awarding business.

Business Award Optimization (Figure 8) is done via careful analysis of different scenarios. The scenario analysis takes into account the suppliers' proposals, any business constraints the company might have and baseline data to find out the optimal balance between savings and implementability (Wachtendorf 2011, 83-84).

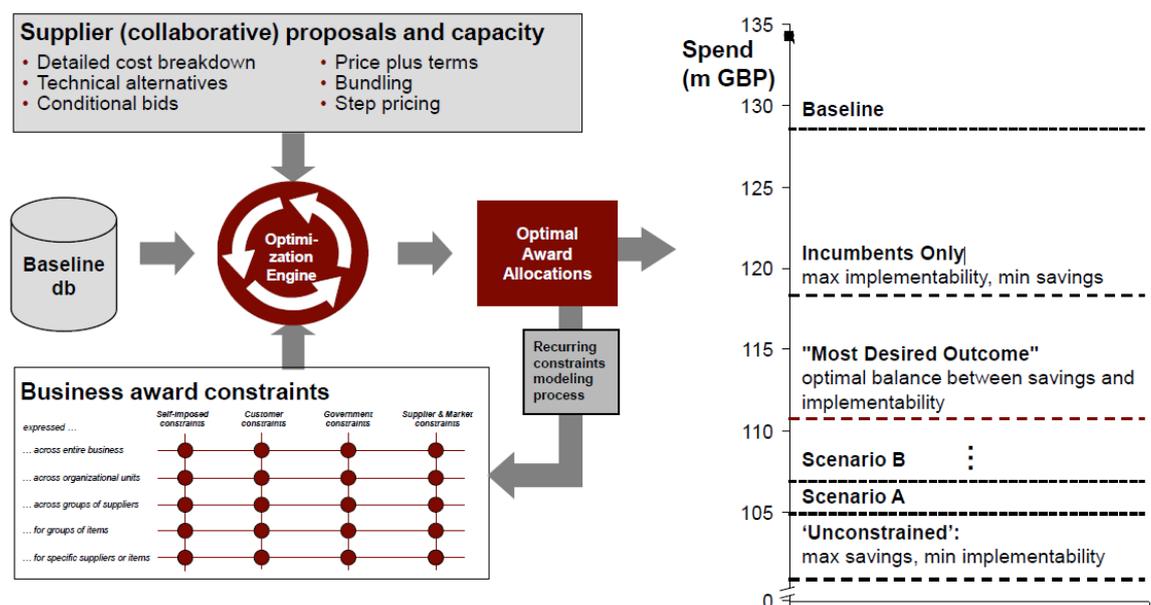


FIGURE 8. Scenario Analysis (Wachtendorf 2011, 84)

One thing to keep in mind when executing a collaborative optimization tender project is to make it clear to the suppliers from the start that collaboration is the goal and explain all the different possibilities they have in terms of expressive bidding. Just like companies hosting the tender, the supplier might also be stuck in a traditional routine when it comes to tenders. Giving them more freedom in their offers, they might come up with a new perspective for cost cutting and could therefore offer cheaper prices for their services.

Ideally there are several expressive bidding rounds with feedback given to the suppliers in between to make sure that they've got the idea behind expressive bidding. The feedback would then enable the suppliers to reassess their bid and optimize it according to the needs of the customer (Scharlach 2015, 6). Expressive bidding is however only one part of the method. Figure 9 shows how savings are achieved using a collaborative optimization technique. The procurement team goes through all requirements and constraint from internal stakeholders, performs an Expressive Bidding exercise with suppliers and then uses collaborative optimization solutions to match the offers with requirements as best as possible. The optimal result being savings, naturally.

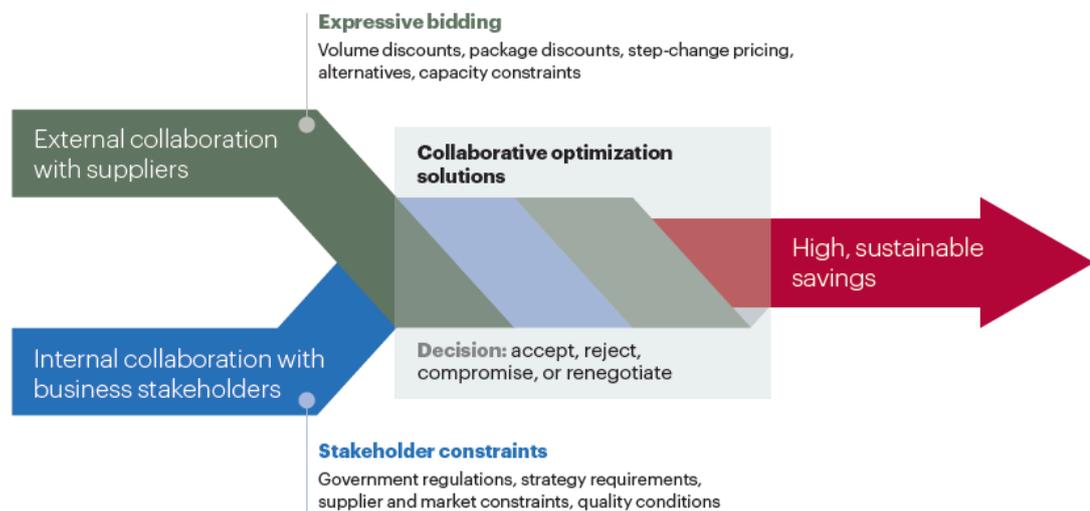


FIGURE 9. Collaborative optimization matches suppliers' bids with business constraints (Scharlach 2015, 2)

Scharlach (2015) suggests that collaborative optimization is best used in sourcing exercises with complex bidding structures and more than one "winner". The complexity is achieved with a combination of multiple suppliers, multiple line items and possibilities for alternative bids and different types of discounts. (Scharlach 2015, 7.) All of the factors listed are present in traditional transportation sourcing making collaborative optimization a viable option to consider when aiming for higher savings. The method has already yielded impressive results. By using expressive bidding, a company spending 300 million dollars yearly on transportation managed to reduce their spend by 18 % (A.T. Kearney).

Scharlach (2015) gives many reasons as to why collaborative optimization is superior to traditional sourcing. Most important one he mentions is higher and more sustainable savings. Scharlach (2015) explains that higher savings using collaborative optimization are achieved because of the increased amount of possibilities available due to expressive bidding. The fact that award decisions are based on matching stakeholder requirements with advanced offers from the suppliers makes the saving achieved more sustainable, which is the most desired outcome. (Scharlach 2015, 8.)

A collaborative optimization exercise can either be driven by external consultants or an e-tendering platform. The main problem with using external consultancy is that the project costs shoot through the roof and to some extent mitigates the financial benefit the result might bring. Cutting out the middle man with a self-service online tool not only help to save money, but also lowers the threshold of adopting a collaborative optimization perspective. One of such tools has been developed by an Irish start-up company Keelvar. Their software uses clever algorithms to evaluate bids and provide optimized allocation proposals (Holland & Gleeson, 1, 11). It essentially is Figure 8 put in software form.

4.2.3 Request for Solution

One of the models to challenge traditional procurement methods is the Request for Solution methodology, RFS for short. In their white paper, ISG (2013) criticizes the traditional Request for Quotation model for constraining innovation by dictating the terms of the solution and having a prescribed end-state. They propose the Request for Solution as an alternative approach, “a collaborative process characterized by broad criteria, assessment of multiple options and open-ended dialogue rather than specific checklists that require precise answer”. (ISG 2013.) The method is very dialogue and collaboration heavy. Therefore, Vitasek et al. (2017a) suggest that the RFS method is best used in a complex sourcing initiative where a single “right” solution is not known. This allows the buyer and supplier to work collaboratively and bring fresh and innovative solutions to the table. (Vitasek et al. 2017a, 31.) There lies the main difference between a traditional Request for Quotation method and the Request for Solution. The buyer doesn't know the “right” solution so the supplier can do whatever they see fit to offer a solution, whereas in an RFQ the solution is already pre-defined and the supplier is only required to fill in their price for the service. Letting the suppliers play to their strengths and expertise makes

their processes more efficient and might also have an effect on costs. Since the suppliers are allowed to operate in a way that is best for them, it could lead to reduced operating costs which would then in turn be reflected on the price offered. Even though predominantly researched with an IT perspective, the fundamental principles can also be applied to other services, such as transportation.

In the world of transportation procurement, having an RFS approach would mean getting rid of strict requirements regarding how the goods get from origin to destination. The carriers would be provided only with critical criteria and let them come up with a solution themselves. This approach would give suppliers more freedom and flexibility in proposing a solution, as they are not being held back by strict requirements like the case would be in a traditional Request for Quotation approach.

ISG (2013) also mentions some challenges that the RFS model may encounter, mainly that a great mindset change is required. Many companies may fundamentally resist change, because they fear the unknown and fail to see the benefits a change might bring. Having a “this is how we’ve always done it” -mentality will not cut it in the super competitive market of the future, where every advantage available should be taken.

An RFS is almost always paired with a Request for Information or a Request for Qualification to gain market insight and down-select suppliers. The selected suppliers will then provide short concept proposals for the buyer. These concept proposals will be used to further narrow and downselect suppliers. The last few remaining suppliers will be asked to develop a comprehensive and customized solution for the buyer’s needs. (Vitasek et al. 2017a, 32-33.) Budget and time constraints affect the evaluation of a large number of solutions so having only a few suppliers provide an extensive solution proposal helps save everyone’s time, money and effort. The evaluation of the proposals to begin with is more difficult since the buyer is not comparing the same solutions to each other (apples to apples), but unique solutions to unique solutions (apples to bananas to oranges) (Vitasek et al. 2017a, 35). This is one of the advantages that a traditional RFQ process has over an RFS. The offers are comparable, since the only factor differentiating them from each other is the price.

Even though Vitasek et al. (2017a, 2017b) outline a general overview of how an RFS process could go, no clear guidelines of the what and the how exist. The method is

relatively new and not formally recognized by procurement associations. The literature related is more geared towards selling it rather than sharing how it works. (Vitasek et al. 2017a 32-33, 35; 2017b, 14.) It might take a few years and some brave early adopters for an RFS to become more popular and for the methodology to be refined. Suppliers might also be hesitant to participate in RFS tenders if they feel like the buyer is just fishing for free consulting services.

4.2.4 Request for Partner

Request for Partner is a collaborative, solution based, innovative bidding method part of a Vested Sourcing business model, developed by researchers at the university of Tennessee. Vitasek et al. (2017b) describe the Request for Partner method as a process “designed to close gaps in existing collaborative bidding processes that fall short when an organization is wanting to explore innovation and transformation through outsourcing.” The Request for Partner bidding method has similar key elements as in a Request for Solution methodology, but formalizes it into an open source methodology. It aims to take a Request for Solution approach a step further and seek a cultural fit from the company who is providing the solution. (Vitasek et al. 2017b, 15.) This means taking the RFS and evolving it a step further to achieve a partnership, instead of having a standard buyer-supplier relationship.

The Request for Partner methodology shares the same quality as other innovative procurement methods, it embraces complexity and an important aspect of the process is to see if the organizations are culturally fit for each other (Vitasek et al. 2017b, 15). Companies have their own mission and vision that they instil in their employees, so even though every company is out there to make money, they are looking to do that according to their own values. The goal when using a Request for Partner approach is to create a highly strategic relationship, and Vitasek et al. (2017b) argue that it’s best used in situations where a buyer is searching for a supplier to drive transformation and innovation (Vitasek et al. 2017b, 15), so what better way to do than with a company that has the same internal mindset.

A major difference between Request for Partner solutions and more conventional approaches is the requirement for significant stakeholder involvement (Vitasek et al.

2017b, 16). This might be a deal breaker for suppliers only looking for a traditional transactional relationship and who are not interested in anything long-term. Then again, those suppliers would be cut down from the process in an early phase. Suppliers should expect to invest time in the process, since site visits and workshops are a stable in the Request for Partner methodology. The time investment might be another reason why suppliers could be hesitant in participating in Request for Partner exercises.

The Request for Partner methodology consist of five key phases, as illustrated in Figure 10. The time frame for the whole project ranges from 11 weeks to 9 months and is customisable according to the needs of a company (Vitasek et al. 2017b, 17). The bid process is very transparent and encourages collaboration through all of the phases. It is designed not only to develop the solution, but also find out how well the organizations work together, since a key intent of the methodology is to create a long-term collaborative relationship. (Vitasek et al. 2017b, 15.)

Phase 1	Phase 2		Phase 3	Phase 4	Phase 5
Qualify Potential Suppliers	Discovery / Concept Solution	Solution Definition	Due Diligence and Validation	Contract Development	Implementation and Ongoing Governance
Many suppliers	2-6 suppliers	2-3 suppliers	1 supplier (2 nd supplier in waiting)	1 supplier	1 supplier
1. Link sourcing initiative to Business Objectives	5. Refine supplier selection criteria and prepare data to share with suppliers	10. Refine supplier selection criteria and prepare data to share with suppliers	15. Due diligence and validation of solution (by both buyer and supplier)	17. Contract drafting (negotiations conducted <i>during</i> drafting)	19. Onboarding of resources
2. Define selection criteria	6. Release Request for Partner to qualified suppliers	11. Supplier Stakeholder Workshops	16. Final solution confirmed	18. Final contract signoff	20. Implementation of solution and governance structure
3. Develop Request for Information and/or Request for Qualification	7. Supplier Discovery - site tours - supplier accesses data - stakeholder workshops	12. Supplier Solution Synthesis Workshops			
4. Qualify potential suppliers for Phase 2	8. Supplier Concept Presentations (1 – 3 iterations)	13. Supplier Solution Proposal and Presentation			
	9. Concept evaluation and supplier down selection	14. Solution evaluation and supplier down selection			
Timeframe	4 weeks to 4 months	6 weeks to 4 months	1 week – 1 month	2 weeks – 6 months	
	13 weeks – 15 months				
	11 weeks – 9 months				

FIGURE 10. Five Phases of Request for Partner Methodology (Vitasek et al. 2017b, 17)

Phase 1 of the methodology is essentially the RFI phase of a traditional procurement process, the main objective is cutting down non-fitting suppliers. Phase 1 is simple and straightforward. It's in phase two when the Request for Partner methodology starts to

differentiate itself from traditional methods. Phase 2 is the solutioning and supplier selection phase, where just like in the RFS method, the short-listed suppliers will provide concept proposals to the buyer (Vitasek et al 2017b, 20). Basically the entire end result, which is the solution itself, is made during the second phase. The partner aspect of the method is also evident, since suppliers are expected to take part in workshops and site tours (Vitasek et al 2017b, 17).

Phase 3 is a short one and consists of due diligence and confirmation of final solution. In the phase, the solution proposal is verified and due diligence is performed to ensure that the financial and operational capacity of both companies are up to par. (Vitasek et al. 2016, 22-23.) Due diligence should be performed properly to make sure neither party has made promises they can't deliver on.

The collaborative nature of the method is continued in Phase 4. Instead of having a pre-written contract, the selected supplier's proposal is used as a foundational building block on top of which the contract will be drafted. Vitasek et al. (2017b) suggest that the contract developed should be done by the same team who were involved in the previous steps. (Vitasek et al. 2017b, 25.) This encourages further rapport building and follows the pattern of trying to establish a cultural fit between the parties.

The fifth and final phase of the methodology is to collaboratively develop and follow a transition and onboarding plan and start implementing the agreed solution (Vitasek et al. 2016, 24).

4.3 The outlook for procurement

Procurement is evolving. Savings opportunities are uncovered through collaboration with both internal stakeholders and external suppliers. Now for the first time, procurement teams have the opportunity to embrace new procurement models and drive enterprise innovation. Business requirements are becoming more complex so the pressure is on them to optimize relationships with suppliers and extract more value from the supply market (Harvard Business Review 2017, 3.) Cost savings from procurement functions show up directly under the bottom line so attention should be directed to the effectiveness of

processes. “The number one procurement metric is cost savings. We frequently hear that this is the only metric every CFO cares about.” (Huber 2017).

Traditionally the primary measure of procurement effectiveness, achieving cost-savings targets, is now a baseline requirement (Harvard Business Review 2017, 3). This means that procurement teams now have added pressure of producing value to the company beyond just cost savings. They are responsible for supplier relationship management, strategic planning and alignment, risk management, business consultation, decision support and the list goes on and on (Harvard Business Review, 3). Procurement is no longer a back-office function, but on the forefront of the business. It is a function that needs to deliver results, reliably.

Constant exchange of knowledge and market evolution are important in procurement, so new methods must be looked into with an open mind. The new and innovative procurement methods presented here have similarities between them. One of the themes emerging frequently is the aim for a win-win situation for both the buyer and the supplier. In traditional procurement tenders, the supplier and the buyer are usually viewed as adversaries with both parties having a “what’s in it for me” mindset. Negotiations focus too much on pricing rather than finding out what would benefit both parties. The new wave of procurement is looking to move past being adversaries and find out a way to cooperate. The new methodologies presented focus on buying solutions or partnerships, rather than just comparing prices for a specified service.

E-tendering, and collaborative optimization to a degree, are not exactly full on new RFX methods, but rather tools to be implemented in other methods to make them more efficient and effective. Companies might not be ready to abandon the tried and tested methods altogether, so implementing parts of these tools to their existing processes would help in updating and upgrading their processes.

Another theme that frequently pops up is complexity and how it is a good thing. The new RFX methods are being sold as methods that can take complex solution proposals, transform them into coherent offers and achieve savings. This might be easier said than done, since there are a lot of moving parts. Time is limited, making it hard to discuss with every supplier on their solution proposal in sufficient detail (Informant C 2017) and it’s important for the buyer to understand what exactly is being offered.

Then there is the problem of comparing the solutions. If the suppliers are given total freedom to offer a solution, trying to compare the solutions to each other will be extremely difficult and time consuming. There are too many factors involved in solutions to build a solid base for comparisons. Furthermore, the supplier offering the solution, must be able to sell their solution to the buyer and convince that their solution is indeed the best one.

The new methods promote a super collaborative mindset and how they can fix all the problems present in today's procurement methods. Sometimes they come across as condescending, as if zero collaboration exists between buyers and suppliers. It should be kept in mind that this exaggeration most likely occurs due to the fact that these new methods come from companies or people who are trying to "sell" these methodologies. So even though procurement is going into a more collaborative direction, it should be noted that these are only experimental methodologies and need further testing to become household methods.

4.4 The traditional and the innovative

There is not a one size fits all method for every company and every tender. Companies have to think about what they want to achieve with the tender exercise, their internal situation and their resources. No matter which method they decide to go with, it should be paired with a Request for Information or a Request for Qualification. Pre-selecting suppliers saves resources and effort in the long run and makes the overall process easier to manage.

A basic transportation tender can be done in a simple manner by just using Microsoft Excel to create a spreadsheet template with lanes that the suppliers should bid for. Then it is just a matter of sending the template to the participating suppliers, getting the offers back, comparing them and selecting the most suitable one(s). The more complex a tender is, the harder it is to pull off with only Excel. Since bid comparisons and other related work require manpower, large scale tenders become difficult to manage. This is where E-tendering comes into play. Due to the unbeatable analytical power E-tendering platforms offer, it is worthwhile to try to incorporate them in the tender process as much as possible.

Collaborative optimization is in many ways great to use in transportation procurement tenders. Even if it is not an entire methodology in the sense that a Request for Solution or a Request for Partner are, it's still something to consider implementing to traditional processes. It is a middle ground solution between the old and the super innovative. Implementing Collaborative Optimization aspects helps move away from the rigid lane by lane, apples to apples approach of the traditional methods, but not too far to completely abandon all that is familiar and safe. The Expressive Bid elements fit well together with transportation procurement characteristics since, for example, countries can be bundled together. Pressure is taken off from negotiating lane by lane and more efficient result can be achieved by looking at a bigger picture.

Especially in larger, complex outsourcing situations, like transportation, all too often buyers become co-dependent on suppliers. Switching costs are high and suppliers develop a "locked-in" position. (Vitasek et al 2017b, 5.) This situation is hard to avoid and where a more collaborative or a partnership approach could prove useful. Figure 11 ranks all the methods based on the most important attributes companies consider when choosing an RFX method.

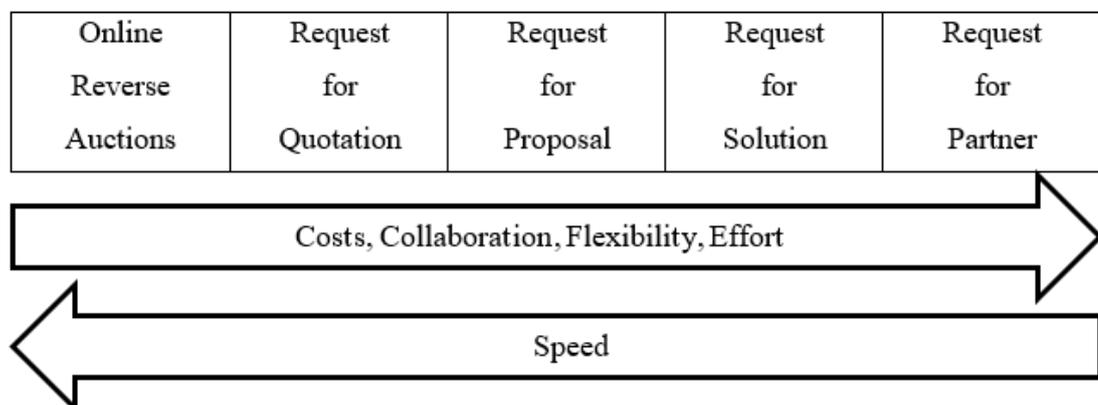


FIGURE 11. Attributes of tendering strategies

Online reverse auctions are for the most part a thing of the past and obsolete. They cannot provide much added value compared to RFQs, and E-tendering tools have flown by any online auction platform. Unless a company is procuring heavily standardized commodities, another method should be chosen.

The RFQ is designed to enable apples to apples comparisons between bids, having a standardized bid sheet allows for this easy comparison between prices. Vitasek et al.

(2017a, 22) suggest using an RFQ for transactional business models when there's a big number of capable suppliers to keep prices low. RFQs are best used in small value procurement, where unnecessary complexity is easily avoidable. The method is designed for situations where all suppliers can offer the same exact service, making comparisons just by price viable.

RFQs can in theory also be applied to transportation tenders, but they are not optimal to use since they offer zero flexibility. However, if a company's supply chain is standardized and not too complex, an RFQ can be applied due to its simple and straightforward nature. Otherwise, there are too many moving parts to put in a mould. A better application would be using RFQs after tenders for spot shipment quotations with incumbent carriers. If rates are needed for a new lane, quotations can be asked from incumbent carriers in an RFQ fashion, since their service levels are known and satisfactory.

Requests for Proposal are the preferred method of choice when in addition to competitive pricing, the buyer seeks value added capabilities from the suppliers (Vitasek et al. 2017a, 26). They are also the optimal choice when additional input is required from the supplier side, which is usually the case in transportation procurement. RFPs are therefore the most popular methodology used in transportation service procurement, even though they require more manual work than RFQs. Most of the work consists of making the offers comparable to each other, where an E-tender tool would prove useful.

The buyer should choose to use a Request for Solution methodology if they want something tailor made just for them and are prepared to engage in heavy dialogue with the suppliers. It's a great methodology to use if a company is new to the transportation aspect of their business and require extensive consultation from the suppliers. It is also a great way to see the similarities and difference of each supplier's operations. In a Request for Solution, there is not a single "right" answer to the transportation problem, so the request is open ended allowing the suppliers to use their strengths to provide the most optimal solution.

The effort a Request for Partner methodology takes from all sides makes it only viable when the buyer wants to focus on establishing long term business relationships with few core suppliers. It has the same characteristics as a Request for Solution, but takes a larger time investment due to frequent and comprehensive workshops and on-site visits. Despite

the extra effort required, a well-executed Request for Partner method can yield rewarding far-reaching results.

4.5 Interview insights

Informant C (2017) doesn't see drones being relevant anytime soon. Security and privacy issues are her major concerns, since there is no secure way to actually deliver the parcels. In Amazon's trials the parcels were dropped off in people's backyards, but nothing prevents them from being stolen. Not to mention that the drones themselves can be taken down mid-flight. Some practical issues also need solving, like how the customer would sign off the receipt of the parcel. (Informant C 2017.) Informant C is on the right track with her concerns over privacy issues, especially since Amazon has filed for a patent to equip drones with technology to record data while delivering packages, use that data to identify properties of the destination and generate recommendations based on the data (USPTO 2017). To put it simply, the drones would scan your house and recommend you products to buy based on the analysed data. It would ultimately be the consumers' decision of how much of their privacy they want to sacrifice for the sake of convenience. So, the day of actually using drones as an everyday delivery method might still be far in the future.

Informant B, also a Senior Manager of Procurement and Contracts, was a bit more optimistic regarding the emergence of drones as a standard in last mile deliveries. Having lived, studied and worked near Silicon Valley in the United States for a number of years, he has seen first-hand numerous technological advancements in action. He predicts that it will be just a matter of time, maybe as soon as a few years, when drones will be fully operational in the US, with Europe following later. He does mention aviation laws as a major obstacle for drones, but is confident that it is only a speed bump. (Informant B 2018.)

Informant C (2017) sees more potential in self-driving trucks than in drones. The technology, when it gets there, could solve the ever-growing problem of driver availability and shortage. The cost of a self-driving truck can go either way. It's essentially replacing a person which cuts down on personnel costs, but is the technology so expensive that the benefit is negated? Over time the technology would get cheaper and

the longer the distances that the trucks go are, the more the savings of not having a driver accumulates. (Informant C 2017.)

According to Informant B (2018) self-driving cars are already in use in the United States, but Europe is quite far away from the trend. He adds that electronic cars, like the Tesla Semi (Picture 8), will come before. (Informant B 2018.)



PICTURE 8. Tesla Semi, an all-electric truck (Tesla 2018)

The procurement team at adidas has had some experience with an e-tendering tool and have opinions both for and against. Informant C (2017) mentions data checking functionalities as a major advantage of e-tendering. The software can automatically check if the data the suppliers input in the bid sheet is in the correct format and not accept the input if it's incorrect. (Informant C 2017.) This saves time in the analysing phase since data doesn't have to be manually checked to make sure it's inserted correctly. Informant C (2017) along with Informant B (2018), mention tool performance capabilities and system limitations as a downside.

Informant A (2018) has the most experience from the team with an e-tendering tool. According to him, while a tender tool optimises the process, it doesn't significantly affect the timeline of the tender. Even though the turnover time in process is significantly improved, the suppliers still need the same amount of time to prepare and revise their quotes even if the analysis part is done faster on the buyer's end. Administrative topics take the same amount of time as well, but with the turnover time quickened, there's more

time in between to focus on other things such as negotiation strategies. (Informant A 2018.) It also takes time to setup bid sheets within the system properly, especially for unexperienced users who might not yet know of all functions and how to get the most out of them. As with anything new, there's always a learning curve. After a few tenders however, a standard template will be established which then speeds up the setup process for the future (Informant A 2018).

Alternative bids in collaborative optimization offer the option for suppliers to use their creativity, since they understand and manage costs and trade-offs. If an alternative bid is something a supplier offers, Informant B (2018) wouldn't accept anything that directly affects the end customer. He specifically mentions transit times and that, for example, in the ecommerce business, even a day's difference in transit time can be decisive. He would however, consider contract durations or payment terms as something that could be considered. (Informant B 2018.)

Along with step pricing, conditional discounts are commonly used methods in all of procurement (Informant C 2017). Bundling is a powerful technique also commonly used. In inbound transport, according to Informant A (2018), package deals are used to drive efficiencies. From a process perspective, smaller markets can be bundled together, even though it is risky to put all eggs in one basket, but for smaller markets it is controllable. (Informant A 2018.) For outbound transport, Informant B (2018) expects the suppliers themselves to study optimal bundling from a milk run perspective. A milk run is a concept where a truck leaves a distribution centre in the morning, delivers to customers in an area and returns back empty at the end of the day. (Informant B 2018.)

Informant D (2018) addressed a few of the most common gripes with solution based tendering methodologies. He sees a few problems in adopting a completely new approach to tenders. First and foremost, comparability suffers. The jump from a standard RFQ to an RFS process wise is a big one, so changes cannot be accurately pinpointed. Also, comparing to past results is hard, if not impossible. (Informant D 2018.)

If a new method is difficult for a buyer to adopt, then it must be so for the suppliers as well. Suppliers are also stuck in their ways, so an RFS might catch them off guard. They might not be prepared if they are suddenly invited to take part in something completely new. (Informant D 2018.)

When it comes to comparing solutions, in the end, the buyer must thoroughly understand the solution offered, so they are able to explain their choice of supplier internally or in an audit. Especially from a risk management perspective, the buyer has to know if the solution is sustainable (Informant D 2018). Informant E, Director of Transport & Logistics Projects (2018) recommends using an evaluation matrix to compare solutions to one another. In an evaluation matrix, all the necessary points to consider are outlined and a certain weight is assigned to them based on how important the point is to the overall result. Important things like service levels should be evaluated with extra carefulness. (Informant E 2018.)

One or multiple representatives of the buying company would evaluate each supplier based on different pre-determined criteria, ranking them on a scale from worst to best or however decided beforehand. Table 1 visualizes an extremely simplified example of an evaluation matrix. In the table, three suppliers are ranked on a scale of 1 to 5 in terms of cost, service level and IT capabilities, with 1 being the best and closest to the buyer's targets and 5 being the worst and farthest from the buyer's targets. Based on the average scores, Supplier 2 would in this case have the best solution for the buyer.

TABLE 1. Simplified example of an evaluation matrix

	Cost	Service Level	IT Capabilities	Average
Supplier 1	2	4	4	3,33
Supplier 2	5	1	2	2,66
Supplier 3	3	3	3	3

Evaluation matrices can be immensely detailed and complicated. The criteria can be divided into smaller parts or some criteria can matter more or less to the buyer, so a weighted average can be calculated based on this information. Also, if there are multiple evaluators representing different parts of the business, their opinion can weight more on certain criteria than others' (for example, an IT representative's opinion matters more in IT related criteria).

According to Informant D (2018), an RFS would currently offer little to no benefits to transportation service procurement, especially if a company already has an established supply chain in place. Informant B (2018) floats around the idea that if an RFS were to be used, it would be better suited in a situation where a supply chain has to be built from

scratch. Informant B (2018) gives an example of how this would work: You give a supplier a budget and a timeline to establish a supply chain according to the buyer's requirements, maintain the same budget for a few years and then start decrease it. At that point, the responsibility of the supplier is to further optimize the supply chain and produce savings to the buyer against a financial target. Informant B would also use an RFS as a way to gather requirements and operating models and then standardize the processes into an RFQ. (Informant B 2018.)

According to Informant E (2018), changes and innovations in the market indicate that the Request for Solution is definitely a method of the future. However, in a heavily standardized field like transportation procurement, solutions are not necessary. The methodology still has a place though, in other parts of procurement for a supply chain. For example, setting up a distribution center always requires a solution based approach. With the first step being requirements collection where volumes, throughput, capacities, IT interfaces, detailed data and service levels are collected, the 3PL providers are expected to come up with a solution that contains the process, systems and rates. How they exactly propose the solution of setting up a distribution center is up to them. (Informant E 2018.)

5 CONCLUSIONS

These recommendations are based on the researched theory and the interviews conducted. The current situation of adidas is briefly explained and suggestions are given on how to improve existing processes.

5.1 Recommendations

The innovative methodologies are only starting to emerge and become known. They haven't been extensively tested in practise to produce enough data to objectively analyse their feasibility. Therefore, it would be a huge risk to just implement a new RFX method.

As it stands right now, the supply chain of adidas is heavily standardized and therefore, so are the tenders. Depending on the tender, adidas either conducts a Requests for Quotation or Requests for Proposal. To assist in these projects, they are using an e-Tendering tool to gather bids, analyse scenarios and mark allocations. All tender data is kept in a centralized place for easy referral for both the procurement team, as well as the suppliers. Adidas should keep using an e-tendering tool as much as possible, since the analytical capabilities it has heavily outweigh any negative aspects. When used in the right way, it is a powerful tool to manage the complexity of transportation tendering. Being able to build scenarios in a matter of seconds, it provides valuable information to the procurement team on which allocation decisions would be best for business.

Adidas already has a well-established supply chain in place, so a solution based method wouldn't bring any added value to current processes. The scale of the tenders conducted by adidas is huge and they would take a huge chance by trying out a solution based method. The risk-reward ratio is simply not worth it. However, the suppliers should be given the opportunity to provide a solution if they so please. There might be hidden opportunities for savings, which won't be uncovered if they are not asked. The suppliers should be encouraged to be innovative, but given the nature of providing a solution and the fact that solutions are virtually impossible to compare in an apples-to-apples kind of way to "normal" offers, the suppliers should be instructed to present their solution in a way that would highlight the aspects in which their solution would be superior to operating the "normal" way. In the end, the buyer should be able to understand the solution and justify internally why they picked the solution over a "normal" offer.

The main way for adidas to achieve savings is not only by skilfully negotiating rates lower, but also optimizing offers in terms of finding the optimal allocation split between carriers, all the while still keeping the operational side stable. This optimizing occurs after receiving all the offers and negotiating, but adidas should already pursue this optimization during negotiations. Collaborative optimization and especially expressive bidding methods should be used to their full extent. This would enable suppliers to “match tender requirements with their capabilities and/or strategic objectives and, thus, are enabled and motivated to create and share efficiency savings.” (Wachtendorf 2011, 82). Negotiations should concentrate on being conversational and collaborative instead of adversarial to find the most desired outcome. With the use of collaborative optimization techniques, adidas could extract more value from the tender process and further optimize the capabilities of their suppliers. By embracing complexity, they could find mutually beneficial deals and achieve bigger savings.

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