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Calculative devices: Accounting in its social context

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Abstract

Customer accounting (CA) is associated with the financial measurement of customers (Lind & Strömsten, 2006). However the techniques have been criticized for not being involved in a dialogue with customers but instead *”the customer is taken into account on terms determined by an accountant qua storyteller”* (Roslender & Hart, 2010). The intention of this paper is to explore if CA can be expanded from the passive role of storytelling to take an active role to influence the value of the customer relationship. We explore the creation of value argumentation material as calculative devices (Callon & Muniesa, 2005) and investigate how these devices are adjusted and used in the customer interface through the theoretical lens of marketing theory (Kjellberg & Helgesson, 2007). We have conducted a case study in a global IT company and focused on six different customer deals. Our findings suggest that a calculative device will be coloured by the context in which it is created. The empirical data further suggest that calculative devices are embedded in a social context. Thus, (i) different market configurations will affect the content that is included in a device and (ii) the timing of the sales cycle will affect the potential influencing power a calculative device can have on a customer. Our conclusions stress that the potential of using calculative devices as tools to influence the value of a relationship hinges on factors in the social context.

Keywords: Customer accounting, Calculative devices, Total cost of ownership, Total value of ownership, Market-making

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1. Introduction

The dynamics of the IT industry is currently experiencing heavy influences from more than one source: the regulators are becoming more active in the market, the technological platform is changing, and price pressure is increasing. All aspects directly affect the customers in the market, but they also have implications for the vendors. The head of marketing of one product area (HM) illustrates the impact on vendors by saying that “*If the customers are not increasing their revenues, then we will neither increase our revenues*”. The changing market conditions have required the case company to develop a financially oriented, customer-focused argumentation.

Companies today are adopting customer-focused strategies in order to remain competitive (Guilding & McManus, 2002) and satisfying the needs of the customer has become an axiom commonly understood as essential for a firm’s long-term success (Roslender & Hart, 2010). In management accounting, customer focused measures are receiving more and more attention (Lind & Strömsten, 2006), reflected in the growing field of customer accounting. Customer accounting is geared towards measuring customers in financial terms – either through profitability or valuation analysis (Boyce, 2000). Different customers require different amount of attention and thus the nature of a relationship should determine which customer accounting technique should be used to evaluate the value of the relationship (Lind & Strömsten, 2006).

Customer accounting (CA) is a field with limited research (McManus, 2012) and the field has been criticised to be inwardly oriented (Guilding et al, 2000). Roslender & Hart (2010) criticise the techniques on the grounds that “*the customer is taken into account on terms determined by an accountant qua storyteller... rather than the customer, the ultimate driver of continued commercial success*”. This implies that although constituting the counterpart in the relationship, the customer is actually not providing the input in the calculations. Consequently, the traditional customer accounting techniques can be perceived as passive instruments designed to monitor customers. Thus, we recognise a theoretical gap in the customer accounting literature of techniques that actively could influence the value of the relationship.

The interface between customers and suppliers in business-to-business settings naturally include prices. If the settings include prices, then they must also include processes of calculations to arrive at these prices. Calculation has been described by Callon & Muniesa (2005) as “*isolating objects from their context, grouping them in the same frame, establishing original relations between them, classifying them and summing them up*”. The authors describe the processes of producing a result as a *calculative device*, which can for instance be a spreadsheet or a presentation. The calculative device includes rules that determine how to evaluate the objects of interest. The creator of the calculative device determines these rules, and thus the price that is produced is contingent on the values of the creator. We argue that the calculative devices can be brought into the field of CA as they are

currently involved in the customer interface: the case company is employing total value of ownership (TVO) as a sales engagement tool, and the customer is employing total cost of ownership (TCO) as a supplier selection tool. We aim to investigate if the calculative devices can add to the identified gap in CA. We want to understand how a device is created, to understand what market configurations look like in which the devices are used, and understand how the devices are affected by the context in which they are used.

For this purpose, we employ the domain and method-theory approach in our investigation. Lukka & Vinnari (2008) suggest that one research approach used to expand a theoretical field is to investigate a domain theory (ours being customer accounting) through the *theoretical lens* of a method theory. The method theory provides a new perspective and syntax that can generate new insights in the domain theory, and the research thus adopts an interdisciplinary approach. Our chosen method theory is market-making by Kjellberg & Helgesson (2007), which is a conceptual framework used to explore the dynamics of markets. Market-making is connected to marketing theory and has been adopted several times in the field of marketing. We aim to investigate settings in which human involvement and action is actively involved, and we argue that traditional customer accounting theory is not sufficient in explaining phenomenon in these settings. Therefore we include market-making as our method theory. In our thesis, we investigate the research questions:

- >> How is a calculative device developed and framed as a global practice?
- >> What are the actual practices in different market constitutions?
- >> How is the calculative device affected by the context in which it is used?

1.1 Scope

We have decided to investigate our research questions through a case study in a multinational IT company. The company operates in more than 150 countries, which makes its global presence very substantial. We have employed a single case study with an embedded design where the cases were chosen through theoretical sampling. As we aim to understand how calculative devices are used in different market configurations, we decided to use more than one case. Although losing the opportunity to do an in-depth investigation, the design allows for more breadth.

1.2 Outline

The following section (section 2) reviews previous literature that has been relevant to our study. The starting point is a review of the customer accounting literature with an identification of a theoretical gap, followed by a discussion around calculative devices, value, total value of ownership (TVO) and total cost of ownership (TCO). Afterwards, we explain our choice of *method theory*, namely market-making and describe the conceptual

framework. We then end the section with an outline of our theoretical framework. In section 3, the design of our study is described and the section explains how we collected the data in the case study and also discusses the methodological implications of our case study design. Section 4 presents all our empirical findings throughout the case study. It begins with an explanation of different actors involved in the value argumentation process. Then we present the findings from the three different cases we investigated, which are: (i) two customers in one region, (ii) one customer in two regions, and (iii) one customer in a mature market and one customer in a developing market. In section 5, we present the analysis of our empirical investigation, and in the last section (section 6) we summarize our key findings in the conclusion.

2 Previous Research

2.1 Customer Accounting: How much is a customer worth?

The argument that companies can gain a competitive advantage with customer-focused strategies is not a new phenomenon. Kaplan & Norton (1992) presented this view two decades ago by claiming that many companies of that time had a corporate mission with a direct focus on customers. This does not necessarily imply that focus is on all customers in the market, illustrated by the following quote: “*The customer is no longer the person we serve, but the person we choose to serve*” (Boyce, 2000). There is therefore room for companies to selectively address those customers that provide higher value to the company.

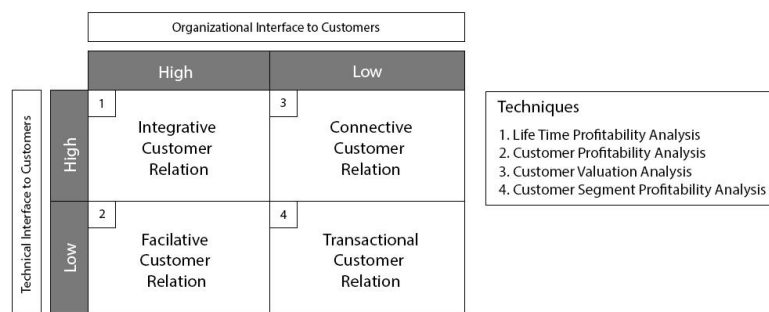
This customer-centric focus has spread into academic fields with varying success. In marketing, research with a customer focus is very prominent. In the field of accounting, however, prior research with a customer focus is limited. (Guilding & McManus, 2002) The field in management accounting that takes a focus on the customer is – as the name implies – customer accounting. In 2002, two authors mentioned that although contributions to the field had started to increase, customer accounting was not widely researched (Guilding & McManus, 2002). A decade later, one of the authors still claimed that only a modest amount of accounting research with a customer focus had been done (McManus, 2012).

Customer accounting is concerned with the financial measurement of customers (Lind & Strömsten, 2006). The exact techniques that these financial measurements refer to are, however, not universally agreed upon. As two authors found no commonly accepted categorization, Guilding & McManus (2002) made an attempt to delineate what practices can be categorized in customer accounting. Five dimensions were identified: (1) *Customer profitability analysis*, (2) *Customer segment profitability analysis*, (3) *Lifetime customer profitability analysis*, (4) *Valuation of customers or customer groups as assets*, and (5) *Customer accounting*. The last dimension is said to be the holistic notion that includes “*all accounting practices directed towards appraising profit, sales, or present value of earnings relating to a customer or group of customers*”. The first three techniques relate to profitability and its link to accrued profits and costs, while the two latter techniques introduce the aspect of time value of money (Boyce, 2000). McManus (2012) interprets her results of customer accounting in her paper from 2002 as “*the process of identifying, measuring, communicating and reporting economic information relating to a customer or customer group*”. The ambition of the practices is, thus, to identify which customers contribute to a company’s profits (Lind & Strömsten, 2006). Such accounting techniques can help to determine what customers to focus attention and resources on. Boyce (2000) claims that customer valuation techniques aims to determine which customers the business should value, then determine what the customers themselves value, and then deliver that value to them. The techniques can also assist in investigating if an unprofitable customer should be eliminated or if it is possible to turn that unprofitable customer profitable (Helgesen, 2006).

In the customer accounting literature, customer profitability analysis (CPA) is the most investigated technique (Guilding & McManus, 2002). CPA is calculated by deducting costs associated with a customer from the revenues earned from that customer (Boyce, 2000). Customer lifetime value, however, has been suggested as the technique with greatest promise for performance evaluation (McManus, 2008). The technique projects costs and revenues for future years to estimate the net present value for a customer or group of customers (Boyce, 2000). Customer lifetime value thus extends the time horizon in the calculation, which is one reason why the technique has been said to be more powerful than CPA (Boyce, 2000). If the time horizon is extended, then the relationship aspect between supplier and customer realistically has to be included in the calculation. Customer valuation has, thus, been said to combine accounting and contemporary themes from marketing, where the marketing themes proposed are for instance market segmentation and relationship marketing (Boyce, 2000).

Lind & Strömsten (2006) includes the dimensions that Guilding & McManus (2002) identified, but extends the discussion of customer accounting to introduce a new aspect: the interface between company and customers. When customers are divided into groups, then naturally those groups will have varying characteristics and needs, and thus the customer relationship should determine what customer accounting technique is used. The relationship is proposed to have two types of resource interfaces: technical and organizational as illustrated in figure 1. These interfaces are particularly interesting in business-to-business environments, because sales in these settings are rarely a one-off event. Rather, interactions between buyer and vendor are long and complex, involving discussions, adaptations, and negotiations.

Figure 1: Organizational interfaces: Technical and Organizational



Source: Adaptation from Lind & Strömsten (2006)

Customer accounting is still a field with limited research, as previously mentioned. The majority of the previous research has had a normative approach – providing descriptions and illustrating the potential that customer accounting may have (McManus, 2012). Further, although the field obviously is relevant in

business-to-business settings, the majority of empirical work in is done in mass-market retail industry (Boyce, 2000). Boyce is also critical towards the specific techniques used, as he describes them as “*calculations based on numerous allocations, estimates, and assumptions, with almost no measures, in any meaningful sense of the word, involved*”. The author elaborates and says that the result from the techniques is portrayed as objective images of reality although they are based on many assumptions. The calculations, in addition, do not incorporate all the important dimensions in making decisions. For instance, Helgesen (2006) stresses that externalities have to be taken into account, exemplifying that it would be “*rather unwise to exclude the customer that is the daughter company of the most profitable customer in the business unit*”. The techniques are thus criticized for not incorporating all relevant parameters of value.

The customer accounting techniques (such as CPA) have still today been suggested to mainly serve the business itself rather than the customers (Roslender & Hart, 2010). Conventional management accounting has been characterized as inwardly oriented rather than using market information (Guilding et al, 2000). Although customers have been claimed to be the “*the ultimate driver of continued commercial success*”, the information used in the various calculations are those determined by an accountant in the company rather than determined by the customer (Roslender & Hart, 2010). Customer accounting thus seem to have much room to incorporate philosophies from marketing in order to become more customer oriented (McManus & Guilding, 2008).

We share the view that customer accounting could become more customer oriented. The traditional techniques to evaluate and control resource allocation to customers are passive and do not in itself influence the value of the relationship. We therefore want to investigate the potential role of accounting not as a monitoring instrument, but as an instrument that is active in the customer interface.

2.2 Calculative devices

Calculations are today no longer limited to accounting experts within a company. Miller (2001) claims that calculative practices and language of accountancy have spread to become part of a vast amount of roles within companies and society as a whole and that “*accounting affects the type of social reality we inhabit, the way we understand the choices open to individuals and business undertaking*”. With the statement, the author suggests that calculative practices have a very prominent role in today’s society and market environments.

Markets are effective because they have the potential to make complicated calculation possible (Callon & Muniesa, 2005). With that statement, the authors imply that markets have the power to assign values to things that can be perceives as impossible to value. If markets do calculate, then it should be possible to identify the

market elements that are responsible for these calculations. The authors claim that “*calculation is possible only if goods can be calculated by calculative agencies whose encounters are organized and stabilized to a greater or lesser degree*”. This implies that the markets at least comprise three elements: goods, agent, and exchanges. With calculate, the authors suggest that it is the practice of “*isolating objects from their context, grouping them in the same frame, establishing original relations between them, classifying them and summing them up*”.

Callon & Muniesa (2005) propose a three-step process of calculation. We describe the three-step process using a specific product as an example to simplify the understanding. In order to be calculated, a product first needs to be detached, which means that what constitutes a product has to be clearly defined. This product should be moved into a single space, for example a spreadsheet, in which the product can be compared to other products on the basis of a common operating principle. The common operating principle implies that the space use a set of rules to evaluate the products. Once done, the products considered in the space are subjected to each other and relations between the products are established. This leads up to the final step, in which a result is extracted from the process. The result does, however, does not necessarily imply that the outcome is a numerical operation – it can be a sum, a list, or an evaluation.

The method implies that a calculative device is governed by rules. The actor who defines the calculative device therefore determines these rules. Callon & Muniesa (2005) highlight that there are multiple ways of calculating values of goods, and that different methods of calculation can lead to a discussion in which the seller wants to enforce his method onto the buyers, or vice versa. The differences in calculation can also highlight different views of what the actors perceive as important and thus what they value. This illustrates that calculation is involved in a social setting in which different views of value can generate debate. Therefore, it is important to understand what the counter-part in the social setting values.

2.3 What does “value” actually mean?

Value and value creation are two words that appear frequently in today’s business articles. Focus on these concepts are said to be essential to compete in today’s business world (Woodruff, 1997). Suppliers provide it and customers want it. However, the concept of value is not without problems, as Ramsay (2005) says: “*On one hand, some writers argue that its [value] meaning is difficult to pin down...on the other hand, some authors regard its meaning as self-evident*”. The views illustrate that if people see value as self-evident, the concept can very well be used in practice without a clear definition of what value actually is.

The problem of having an unspecific understanding of value can be disastrous for companies. It may lead companies to develop offerings that have the potential to improve functionality for target customers, but that

customers are not willing to pay for it (Anderson & Narus, 1998). Alternatively, without a clear understanding of value, managers could have difficulties to demonstrate and quantify a claim, and “*if the supplier doesn’t demonstrate and document that claim, a customer manager will likely dismiss it as marketing puffery*” (Anderson, Narus, & Wouter, 2006). Also, because higher value is often realized in other functional areas, the purchasing manager might not get credit for this additional value and thus decide to purchase on price instead of value (Anderson, Thomson & Wynstra, 2000).

“Value in business markets is the worth in monetary terms of the technical, economic, service, and social benefits a customer company receives in exchange for the price it pays” (Anderson & Narus, 1998). The statement illustrates the critique that Raval & Grönroos (1996) highlighted about value, namely that it is multifaceted and complicated. Value has, in addition, been described as subjective (Raval & Grönroos, 1996), and based on individual judgements (Zeitham, 1988) and dependent on its contextual setting (Anderson, Thomson & Wynstra, 2000). This stresses the need for companies to have an accurate understanding of what the customer itself actually value (Anderson & Narus, 1998) and then quantify that value in a persuasive manner in order to persuade customers to focus less on acquisition price (Morssinkhof, Wouters & Warlop, 2011). This is especially important in business-to-business setting as value in business markets is predominantly translated in monetary terms (Anderson, Thomson & Wynstra, 2000). If a supplier can prove its worth in hard monetary terms, the customer can see the price premium as an investment and thus it can be worth the price (Snelgrove, 2013).

If something is translated into hard monetary terms then some kind of quantification has happened. In Callon & Muniesca’s (2005) word, that quantification will be dependent on the rules that define the calculative device that produce the monetary term. The device that is used in the customer interface will therefore determine how the value will be defined in the customer interface.

2.4 A vendor’s calculative device: *Total Value of Ownership*

In order to address the increasing focus on costs and importance of creating value, a new concept has been developed: *Total Value of Ownership* (TVO). The model is in its early stages and a search on Google scholar generates only 148 hits at this time of writing. TVO is in essence an extension of the older and established total cost of ownership (TCO) method. The linkage to TCO has been clearly stated as TVO “*captures total cost considerations in ownership of an acquired offering as well as any performance advantages the customer firm gains*” (Wouters, Anderson, & Wynstra, 2005). With “performance advantages” the concept aims to quantify any additional revenues that a company would not be able to generate without the product or service. Tesch & Zeng (2012) provides a more financially concrete definition of TVO as “*an accounting concept, which quantifies and incorporates*

all revenue and cost effects over the life-time of an offering". The TVO concept is not only relevant to compare a company's offer to competitors, but the method is also relevant for negotiating prices with the customer (Wouters, Anderson & Wynstra, 2005). Thus, the concept is a method used to influence how the customer evaluates different suppliers.

2.5 A costumer's calculative device: *Total Cost of Ownership*

TCO is a philosophy that tries to encapsulate the "true cost" of doing business with a particular supplier (Ellram, 1994). In today's global business world, cost management has become a strategic weapon as external purchases can amount to more than 60% of total costs for most companies (Degraeve, Roodhofs & Dierckx, 2005). TCO is thus a method that takes a holistic approach to quantify all costs of owning a product (Snelgrove, 2012) and is used as a supplier selection tool (Ellram & Siferd, 1993).

TCO carries several advantages besides being a holistic method of calculating costs. A decade ago, managers generally preferred to acquire products based on lowest acquisition price (Anderson, 2000). Although price is still important, managers nowadays tend to focus less on acquisition price and instead focus on life-cycle costs (Zachariassen & Stentoft, 2010). Customers do not need to know the lowest acquisition cost. What customers need to understand is the lowest TCO (Snelgrove, 2012).

TCO is more than just a mere a cost tool. TCO has been claimed to improve communication between internal and external parties (Ellram, 1993), to be a negotiation tool (Degraeve, 2005) and to increase information sharing (Wouter, Anderson, & Wynstra, 2005). TCO has also been claimed to be a good tool to document value creation objectively (Piscopo, Johnston, and Bellenger, 2008). All of these aspects suggest that TCO have the potential to take a strategic role and that it has an active role in shaping communication and the relationship between vendor and buyer.

Although TCO is easy to understand, the method does not seem to be applied widely (Ferrin & Frank, 2002; Hurkens, Van der Valk, & Wynstra, 2006). A couple of reasons are mentioned repeatedly in literature. Common critique is that the method is time consuming or does not match corporate culture (Ellram, 1993) or it is too complex in practice (Wouters, Anderson, & Wynstra, 2005). *No one model fits all purchase situation*" (Ellram & Siferd, 1998) shows that models need to be adapted to the specific situations, further highlighting that TCO is time consuming and complex. The biggest reason, however, is the issue of access to data (Ellram, 1993; Ellram & Siferd, 1998; Wouters, Anderson, & Wynstra, 2005). In order to effectively use the method,

quality data from the vendor is essential. Snelgrove (2013) suggest that without financial models, backed by data, procurement has no other option than to discuss price.

2.6 Going forward: *Market-making as a method theory*

The intention of this thesis is to investigate how the current concept of customer accounting can be expanded. Lukka & Vinnari (2008) suggest that one possible approach for generating new insights in a field is through the concept of using domain and method theories. The domain theory refers to the area of focus (in this paper: customer accounting) and the method theory is used as a “theoretical lens” through which the domain theory is investigated. The benefit of this approach is that the method theory provides a different perspective and a new syntax to investigate the domain theory, which can generate new insights to the field. We have chosen to use the conceptual model of Kjellberg & Helgesson (2007) as our method theory. We will first describe the theory and afterwards describe why we decided to use this theory as our method theory.

Markets can be thought of as a phenomenon that is stable but naturally this is not the case: people’s preferences change over time and market reforms occur. Markets are, as a consequence, dynamic in nature. In line with this train of thought, Kjellberg and Helgesson (2007) states that one should perceive the market as an on-going process that is constantly changing and that market constitutes of three practices: normalizing, representational, & exchange practices. The practices have been described as “*a way of doing which is embedded in a context of interlinked subjective and objective elements*” (Storbacka & Nenonen, 2011). Therefore, practices can be perceived as activities performed by different actors in the market. An activity can, however, relate to more than one practice; it can potentially be categorised into all three practices depending on the context (Chakrabarti, Ramos & Henneberg, 2013).

The practices should thus not be seen as disconnected spheres; neither should the practices be viewed as linked through linear connections. The idea is that the practices are entangled with each other and influence each other dynamically with varying influence. The authors propose different methods of how the practices influence each other. For example, normalising practices is suggested to influence exchange practices through providing rules and tools that guide exchange behaviour in the market (Kjellberg and Helgesson, 2007). The theory is heavily influenced by philosophical science and can be hard to conceptualize; therefore we will describe each practice separately and afterwards continue to describe how the practices are interconnected through what the authors call *translations* in detail.

2.6.1 The practices of the market: Normalizing, Representational, and Exchange

Normalizing practices establish guidelines of how a market should work. The practices refer to the general rules of competition in a market and the application of such rules. These rules are, however, not constant. As an example, a market reform would generate new rules on the market and companies would have to adjust to these rules in order to operate on the “new market” (Kjellberg & Helgesson, 2007). Several authors agree that the practices set the rules as well as the tools that the actors in the market are to obey, follow, and use (Chakrabarti, Ramos & Henneberg, 2013; Kjellberg & Helgesson, 2006; Kjellberg & Helgesson 2007; Veal & Mouzas, 2012). Rules and tools can be seen both from an external and internal perspective as illustrated in table 1. Internally a company decides its own strategic planning, visions, and establishment of objectives. Regulations, technological standards, and industry norms can be seen as external normalizing practices that influence the market (Kjellberg & Helgesson, 2007).

The representational practices, as the name suggests, attempt to create a representation of what constitutes a market. Kjellberg & Helgesson (2006) describes representational practices as follows: *“These activities contribute to present something (economic exchanges) as something else (markets)”*. The representation is an effort to create an aggregated view of the market activities. The representations are a method to make business models visible, and a method to create shared images of the market (Storbacka & Nenonen, 2011). Representational practices can, similar to normalizing practice, be seen with an internal and external perspective. Examples of representational practices can be firm presentations, market research, or media coverage of the market (Storbacka & Nenonen, 2011). Firm presentations can be viewed as internal representations while market research and media coverage suggest an external view. Representational practices can potentially be perceived as an inactive practice, but so is not the case. To represent something is not only a passive activity, but is an active part of shaping markets. (Chakrabarti, Ramos & Henneberg, 2013). The mere production of an image of a market will alter the market it tries to portray. Lindeman (2012) suggests that *“the essence of representational practices is that they make possible a discussion or expression of what the market is or should be”*. The statement illustrates that if you describe something, then that description can highlight certain opportunities or potential errors, which can create common ground for debate.

The exchange practices are the specific activities involved in the individual economic exchanges in the market. The activities explain how business is conducted in a market and how exchanges take place; that is, the practices are the on-going activities in the market. (Kjellberg & Helgesson, 2007). One proposed definition of exchange practices is that they are actions related to how propositions are communicated, refined and agreed on, which potentially leads to a financial transaction (Storbacka & Nenonen, 2011). The authors highlight the important aspect of communication and claims that market actors need to share a

common language in the market. Kjellberg & Helgesson (2007) state that the exchange is not exclusive to the buyer and seller only, but also includes those actors who take an interest in the exchange. The practices not only describe the exchange of goods or services, but also include social contact, information exchanges, and other interaction between actors (Chakrabarti, Ramos, Henneberg, 2013).

Table 1: Making-Markets

Normalising Practices		Representational Practices		Exchange Practices
<i>The practices set the rules and tools that actors in the market should obey, follow, and use</i>		<i>The practices are an attempt to create a shared image of what constitutes a market</i>		<i>The practices are the on-going activities in the market</i>
Internal	External	Internal	External	
Strategic planning	Rules and regulations	Company presentations	Market research	Transactions
Company visions	Technological standards		Media Coverage	Product presentations
Objectives	Industry norms			Price negotiation
	Voluntary guidelines			Information exchange

Source: Visual representation of content from Kjellberg & Helgesson (2007), Storbacka & Nenonen, (2011) & Chakrabarti, et al (2013)

2.6.2 Translations

As earlier introduced, the three practices influence and impact each other through what Kjellberg and Helgesson (2007) labels *translations*. By translations, the authors suggest “*the basic social process through which something – an idea, a rule, a text, a product, a technology, a claim – spreads across time and space*”. The authors continue to state that those who pick something up, for example an idea, will make an essential contribution to it and in some way alter its composition. Hence, what is suggested is that an idea from normalising practices can possibly be incorporated in exchange practices, but that idea will to some extent be altered along the way.

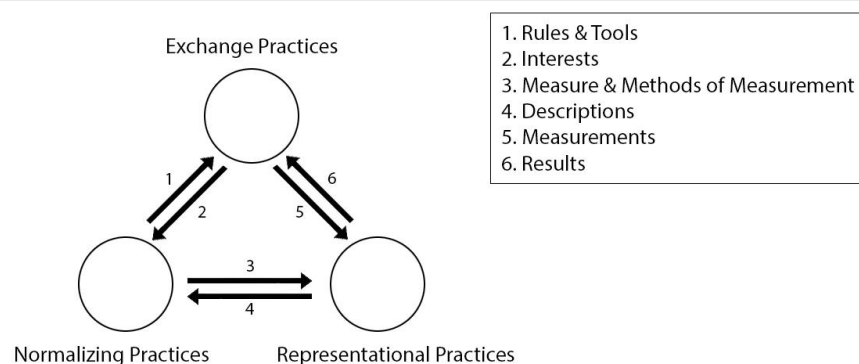
This view implies that actors themselves have power to influence the direction of the market. Chandler and Vargo (2011) suggest that a specific context will be influenced by the actors that are engaged in the context, but the actors in turn will also be influenced in some way by the context in which they operate. The idea suggests that actors are affected by the context whilst the actors themselves also affect the context. Kjellberg & Helgesson (2010) states that actors can engage in shaping the way a market is organized. The authors further claim that this engagement will most likely be value-driven, meaning that actors will try to include one or several specific values that they perceive as important. The inclusion of new values can be done through adding an additional dimension to the existing ways exchanges currently are carried out. The authors state that this is a common method to introduce new values because if a method would differ significantly from how other market actors engage in the market, the new method would likely be unsuccessful (Kjellberg & Helgesson, 2010).

The normalizing practices influence the other two practices through providing **rules and tools** to actors engaged in the market, and through **measures and methods of measurements** to the representational practices, as illustrated in figure 2. If a company change strategy or if new legislation is introduced, this can obviously have a strong influence on how the on-going exchange activities are conducted. The change will also have implication of how markets are represented. Shared images of markets should be based on measures that are provided through the normalizing practices (Kjellberg & Helgesson 2007).

The representational practices influences the normalizing practices through **descriptions**, and influence the exchange practices through **results**. Representational practices essential contribution is that they promote an image around which a discussion can be formed. If certain elements of a market are highlighted, that image can spawn a public debate and thus lead to a change in legislation or in other normalizing practices. The image will also reveal how the market works, and can thus illustrate opportunities or threats to actors, which very well can alter their activities (Kjellberg & Helgesson 2007).

Exchange practices promote different **interests** to normalizing practices and provide **measurement** to representational practices. Common values or characteristics in the exchange practices can indicate certain interests of the market actors. These interests can in turn influence normalizing practices by initiating a reform, changing laws, or generate new business standards. The measurements that are generated in the exchange practices indicates what how actors perceive the market. These measurements can in turn be used to generate new images of the market (Kjellberg & Helgesson 2007).

Figure 2: Translations and Intermediaries in the Market Practice



Source: Adaptation from Kjellberg & Helgesson (2007)

The efficiency of translations is dependent on the configurations of practices in the markets (Kjellberg & Helgesson, 2007). The authors suggest that certain formations can contain highly stabilized chains of translations, distancing the practices from one another. In some formations, norms and representations are created separately from the actual exchanges in the market. The division of labor is also clearly separated in these settings; some people are engaged directly in the exchange practice, some are responsible for objective setting and some are creating images that represent the market. The implication is that normalizing and representational practices are easily viewed as external to the actual market activities, mainly providing assistance as maps or infrastructure.

2.7 How this thesis will contribute to research: Our theoretical framework

First, it is important to mention that Kjellberg & Helgesson's model is a conceptual model, which means that it is not intended to be a model that describes the characteristics of a working market. The model is an analytical tool to explore how markets are shaped and how market practices are interlinked. The practices are thus categorizations that help collect, classify, and analyze empirical data in order to understand the dynamics of specific markets. Accepting our results thus hinges on accepting the model as an appropriate tool to collect relevant market information.

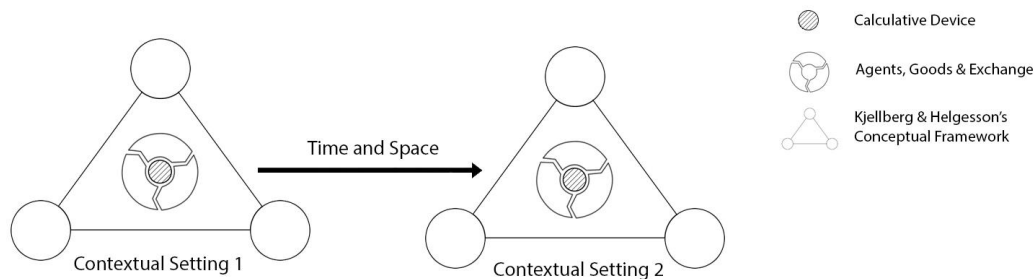
Second, the intention of this paper is to explore the potential of a wider use of customer accounting. Customer accounting techniques have been described as inward looking, serves the business itself, and used for monitoring; they have thus been described as passive instruments. We want to investigate how calculative devices can actively shape the way social and economic exchanges are performed. Miller (2001) said that accounting affects the social reality we inhabit, and therefore we want to see how the calculative device can affect the relation between seller and buyer in the customer interface. The benefit of using a domain and method theory-approach is that it introduces a new perspective and syntax to the investigated field according to Lukka & Vinnari (2008). Kjellberg & Helgesson (2007) is a theory developed in sociological research and has been used in the field of marketing, and McManus & Guilding (2008) have explicitly stated that customer accounting have much room to learn from marketing. Therefore, we find it appropriate to use Kjellberg & Helgesson's conceptual framework as a theoretical lens to investigate how market exchanges are performed. This can allow for greater insight in how a relationship can be influenced by the usage of calculative devices.

Finally, Kjellberg & Helgesson (2007) has in previous research been used to investigate effects of changes in market conditions or changes in the market as a result of the introduction of new values (e.g., Chakrabarti, Ramos & Henneberg, 2013; Kjellberg, 2007; Storbacka & Nenonen, 2011). Our case company has traditionally been using technical argumentation towards the customer, but the company is now increasingly

focusing on financial argumentation. The decision to focus on financial argumentation in the case company was taken centrally, and now the new argumentation is to be used in customer engagements around the globe. We thus want to investigate how this change has effected how actual market practices are carried out.

In sum, our intention is to investigate the process of framing a calculative device, investigate what practices are in different market configurations, and investigate the role of a calculative device in the customer interface. We thus want to investigate the calculative device as an active customer accounting technique with the potential to shape the value of the relationship between seller and buyer. Our theoretical approach combines the theories of market-making from Kjellberg & Helgesson (2007) with the calculative devices of Callon & Muniesa (2005). Both papers discuss the role of three elements involved in the shaping of markets and in the configuration of calculative devices: agents, good, and exchanges, which is why we attempt to investigate the role of these elements in the market configurations.

Figure 3: Theoretical Framework



Source: Combination of Kjellberg & Helgesson (2007) and Callon & Muniesa (2005)

3 Methodology

In this section, we present the methodology applied in this thesis in order to demonstrate the validity and reliability of the thesis. First, the empirical and research method is covered with discussions on the type of study we have conducted and motivation for the chosen approach. Second, the selection of case (GlobIT) and the levels of analysis within the case study are motivated (Case A, Case B, Case C). Third, we have a discussion on the methodology for collection and analysis of data. Finally, the quality of the methodology is elaborated upon.

3.1 Empirical Method

3.1.1 Qualitative Study

We have chosen to conduct a qualitative single case study as the research area contains little previous research and has a rather wide scope. The aim of qualitative research is to understand a concept rather than identifying explanatory variables as for quantitative research (Merriam 1994, Anderson 1998). Our research area is rather complex and difficult to decompose into explanatory variables. Thus, adopting a qualitative research approach of an exploratory nature is more appropriate for our thesis and scope. Such an approach will enable us to broaden our understanding of the research area and to more accurately interpret the empirics.

3.1.2 Case Study Research Method

“The essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result” (Schramm, 1971). Based on this quote a case study research method was the natural choice of empirical method for our research topic as we intend to capture how a calculative device is developed and framed as a global practice, what the practices are in different market constitutions and how they affect the calculative device. Previous research shows that case studies are the preferred choice when the authors have little control of events and the focus is on *“a contemporary phenomenon within a real-life context”* (Yin 2002). Further, *“the interaction between a phenomenon and its context is best understood through in-depth case studies”* (Dubois & Gadde 2002). Our research topic is a contemporary phenomenon that is to a significant degree shaped by its context. The boundaries for calculative devices are framed by the actors and the markets in which they are used. Thus, our research questions are best resolved through a single case study of a company where the calculative device is of high relevance.

Customer accounting is an area with limited previous research. According to Yin (2002), a case study method facilitates the process of generating and modifying theory when there is limited research in the area. A case study enables the researchers to get the in-depth understanding of the empirics and their contexts needed to

add to current theory (Eisenhardt 1989, Dubois & Gadde 2002). As we intend to add a new perspective to the field of customer accounting a single case study is an appropriate empirical method to use. Case studies are often under critique of not being generalizable (Yin 2002, Dubois & Gadde 2002). As a response to this critique we have chosen to conduct a case study at a large MNC. The findings from this case will be generalized through an analytical generalization where the results are compared to our theoretical framework (Yin 2002).

We decided to use an embedded qualitative case study, and we defined our three cases through the concept of theoretical sampling. Theoretical sampling, developed by Glaser & Strauss (1967), helps to structure a research approach. The main objective of the concept relates to how the researcher selects multiple comparison groups. The authors describe that minimizing differences among the groups increase the possibility that similar data is collected while potential differences among the groups is easily spotted. Maximizing differences between groups, however, increases the probability that data will be different and varied, while finding strategic similarities among the groups will be possible. Initially, a researcher should minimize differences of what is to be investigated in the groups, for example to decide on what is to be investigated. Afterwards, the researcher should maximize differences between the groups, which can for instance be done by investigating the same phenomenon but in different organizations. The authors suggest that in their research, *“the probability of fruitful comparisons is increased very greatly by choosing different and widely contrasting countries”*.

We have decided to examine one case company and center the focus on the usage of calculative devices in different regions, making an embedded design appropriate. To define our cases we minimized the differences between the groups by anchoring the empirical investigation around a common denominator, namely the calculative device. Afterwards, we grouped the investigation into three cases: one case with two customers in two different regions; one case with two customers a single region; and one case with a single customer in two different regions. We chose to expand or “maximize” the differences between the cases by choosing different regions. Pettigrew (1990) describes that if a phenomenon to be observed is restricted to a small number of cases then it is sensible to go for situations that are extreme or polar. With polar, the author suggests that one can select sites with high and low performance of a phenomenon. In line with Pettigrew’s reasoning, we chose to investigate polar-like situations in one case, meaning we decided to investigate one mature market and one developing market.

Easton (1995) has voiced critique for the multiple case approach by saying that *“researching greater numbers of cases, with the same resources, means more breadth but less depth”*. Dubois & Gadde (2002) supports the view, but stresses that the most significant choice between multiple and single cases should be guided by the research

problem. “*If the research problem is focused on comparison of a few specific variables, the natural choice would be to increase the number of observations compared*”. Two of our paper’s objectives are to investigate the practices in different market configurations and the calculative devices in these configurations through the analytical lens of Kjellberg & Helgesson (2007). As such, we have a limited amount of variables to investigate, and thus we determined that an embedded multiple-case design was appropriate.

3.2 Research Approach

Our empirical and theoretical investigation has followed the process of systematic combining as described by Dubois & Gadde (2002). Three established research approaches are the inductive, the deductive, and the abductive approach, where the systematic combining is associated with the latter approach. The logic behind systematic combining is that research problems and theoretical approaches are continuously evolved as empirical data is collected.

Case studies, according to Dubois & Gadde (2002), provide a unique setting in which in-depth insights of a phenomenon can be produced. In these settings, the authors argue that a standardized research approach limits the potential insights case research can generate. Adjusting the theoretical framework as the empirical data collection progresses therefore provides a better understanding of the investigated phenomenon. The authors argue that the abductive approach is fruitful if the purpose of the research is to discover new insights, and to develop existing theories. The train of thought is well in line with our ambition of the thesis. Our thesis has been an iterative process, in which theories and collection of data has occurred simultaneously. The process of collecting data has been influenced by additional theories, and empirical observations have called for new insights that called for more investigation of theories.

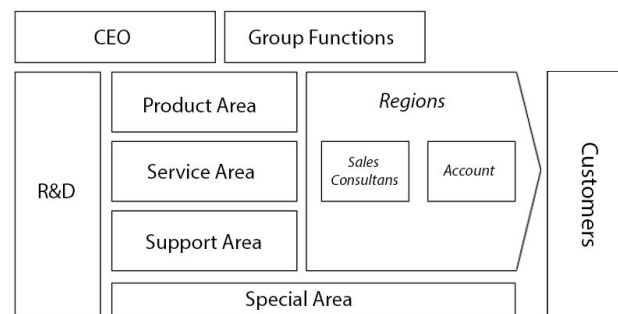
3.3 Selection of Case

3.3.1 Selection of MNC: GlobIT

The case company in this thesis (from now labeled GlobIT) is a multinational company (MNC) in the information technology industry. An overview of the organizational structure of GlobIT is illustrated below in figure 4. There are many reasons of why MNCs are appropriate for case studies. Roth & Kostova (2003) suggest that MNCs provide a heterogeneous and complex context, making MNCs suitable for case studies and suitable for investigating theory development. Our ambition is to investigate practices in different market configurations, and to investigate the potential to expand the current focus of customer accounting, making the setting of a MNC fitting. Roth & Kostova (2003) also stresses that because the MNC is so complex, developing a theory in that context will likely be generalizable to other organizations. GlobIT operates in over

150 countries and is one of the biggest actors in the industry. The size of the company in addition to the obvious global presence makes the company a suitable setting to investigate the relationship between how a global calculative device is created at a local setting and how these devices are used in regions in the customer interfaces. In addition, Yin (2002) stresses the importance of having sufficient access to data sources in the case company, which was one of our criteria when selecting the case company. GlobIT has previous experience in leading thesis writers and provided extensive access to internal documentation.

Figure 4: GlobIT organisational structure



Source: Adaptation from GlobIT webpage

3.3.2 Selection of three cases

We were to a large degree dependent on the availability of people within GlobIT when we selected the cases. Glaser & Strauss (1967) recognizes that structural circumstances can impede the development of theoretically optimal cases. The authors describe that when obtaining data, the researcher works under certain circumstances that hinder the collection of data such as access of documents and possibility to interview people. Thus, the researcher has to be flexible in the method of collecting data. Our main dialogue contact in GlobIT suggested that our thesis would benefit from a wide selection of regions and suggested a sample of potential regions. Further, the contact person stressed that getting access to potential interviewees in regions is challenging, especially if we were to focus on one particular calculative device that has been used in a customer interface. Thus, we had to be flexible and select multiple regions, select regions from the provided sample list, and select regions in which we had access to interviews.

With our initial theoretical approach, we together with GlobIT co-jointly decided to focus the thesis on three cases. With the specific conditions described above, we attempted to select a group of cases that have an academic purpose and relevance for theoretical contributions. The first case concerns two customers in one region. The second case concerns one customer in two different regions, while the last case concerns one customer in a mature market and one customer in a developing market. As we adopt the theories of market

practices of Kjellberg & Helgesson (2007), regions with widely different market configurations are interesting to investigate. We therefore chose five regions, in five different countries, located on three different continents.

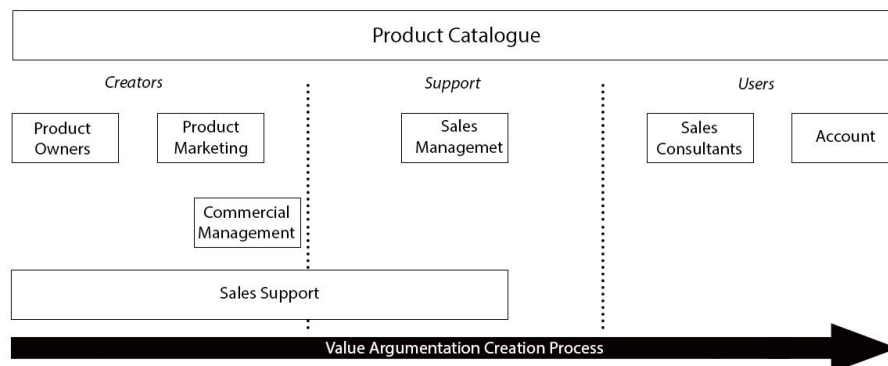
3.4 Collection of Data

The data collection period lasted from August up to the beginning of December during the fall of 2013. To assure the quality of the research we used multiple sources of evidence, i.e. triangulation. Out of the six sources identified sources of evidence by Yin (2002) we have focused on interviews, documentation, direct observations and physical artifacts. Using multiple sources of evidence has enables us to address a broad range of historical and behavioral issues and to corroborate our findings. Furthermore, we have focused on triangulating our data to make our findings more accurate and convincing.

3.4.1 Interviews

Interviews are an essential source of information for case studies as the opinions and experiences of the interviewee are shared directly with the researchers (Patton 2002). As our thesis attempts to map current practices regarding calculative devices, interviews has been a key source of information since they provide information that are not available through any other channel and are highly useful in identifying other useful sources of evidence. In total, we have conducted 18 semi-structured interviews both with people at the HQ of GlobIT illustrated as creators and support in figure 5, and in regional organizations illustrated as users in figure 5. To get an overview of the value argumentation process within GlobIT and to corroborate our findings to date two interviews were made with senior managers. To capture the first step of the value creation process one interview was conducted with a product owner. To map the development of value argumentation at the HQ seven of the interviews were conducted with employees involved in the central development of value argumentation working at Product Marketing, Commercial Management and Business Management. Finally, to capture how the value argumentation was used in practice in different market configurations, six interviews were conducted with employees working in the sales forces in different regions as engagement practitioners.

Figure 5: Actors in the value argumentation process



Source: Visual adaptation from interview material from PM1

The magnitude of the interviews was focused interviews, i.e. prior knowledge about the interviewee existed, an interview guide had been established before the interview and the personal experiences of the interviewee were emphasized (Merton & Kendall 1946). An interview template was established prior to every interview and thus modified continuously throughout the data collection process to fit our theoretical framework that was modified according to systematic combining (Dubois & Gadde 2002). The template ensured that the questions were objectively formulated and did not influence the interviewees. However, as we wanted our interviewees to speak freely we did not exclusively pose questions from the interview template.

The interviews with the senior managers and with the employees working at the HQ of GlobIT were conducted face-to-face. The interviews with the employees working in sales forces in different regions were made by phone. All the interviews were transcribed to ensure our unbiasedness and to be able to quote the exact phrasing of the interviewees. The interviews lasted for 30-90 minutes with an average of 60 minutes. Both authors actively participated in the interviews to capture as many aspects as possible and to increase the confidence in the observations (Eisenhardt 1989).

3.4.2 Documents, direct observation and physical artifacts

Even though interviews made up the most essential source of evidence, this study would not have been able to make without documents, direct observations and physical artefacts. As can be inferred from the wide range of documents we have processed during our data collection, they can take many forms and to avoid collecting irrelevant material it is important to the case study inquiry in mind and only focus on relevant information (Yin 2002). For this study internal GlobIT documents have been used to capture the development of calculative devices at the HQ and through value argumentation presentation view how they have been used in practice. Public documents as annual reports, industry reports and analyst reports have been used in the cases to capture the market configurations, i.e. the dynamics of the markets and the preferences of the customers.

We have spent on average two to three days a week during the data collection period at the HQ of GlobIT. This has enabled us to make direct observations of the working procedures at GlobIT and take part of physical artefacts. Our direct observations have given us an understanding of the importance of the culture and relationships within GlobIT and how this impact their ways of working. Further, from our direct observations we have also gained an understanding of the strong technical orientation of GlobIT, illustrated through physical artefacts, e.g. a showroom of their product portfolio.

3.5 Analysis of Data

Eisenhardt (1989) claimed that the analysis is the core of adding to academic theory from case studies but at the same time one of the main challenges as it can be conducted in such a variety of ways. The analysis should address all the data and cover the research questions of the study (Yin 2002). In order to make sure we covered all the data, we transcribed and coded all our interviews into our case study database structured after our theoretical framework. This enabled us to thoroughly analyze our empirics and identify patterns. As our research was dependent on what evidence we could extract from GlobIT, we stayed flexible throughout the data collection process. However, we developed a structure for our empirics and the analysis of our empirics in line with Yin (2002). This structure relied on our theoretical framework based on Kjellberg and Helgesson (2007). Each case of the empirics has been analyzed on a stand-alone basis through the analytical lens of Kjellberg & Helgesson (2007). The findings from the analyses of the cases have been summarized in a table based on theoretical framework in accordance with Yin (2002). Finally, the findings from these analyses were then compared to each other in order to identify patterns and generalize the findings in line with the methodology presented by Eisenhardt (1989).

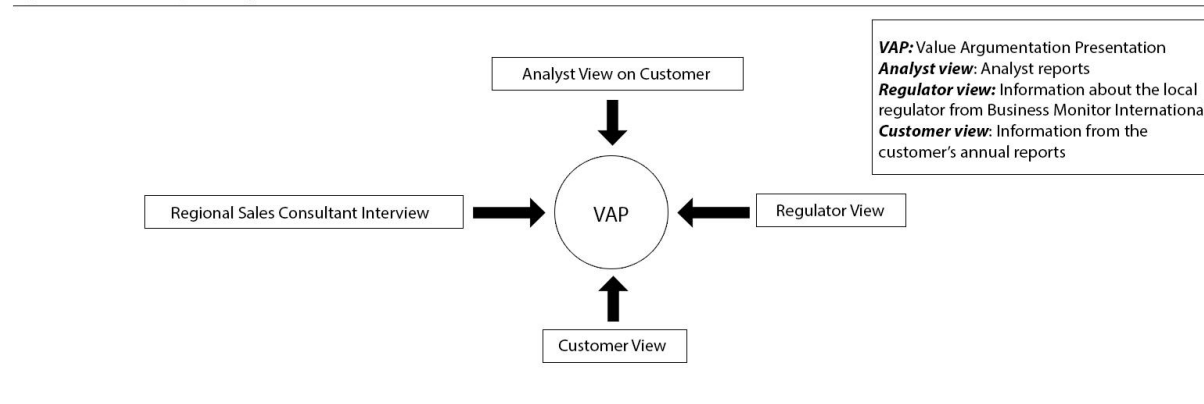
3.6 Quality of Study

Our objective is to understand *how* a calculative practice is developed and used, which makes a case study suitable. However, case studies have been criticised for providing limited basis for generalization of results (Yin, 2002). Therefore the common goal is to expand on existing theories rather than create new theories. The importance of the research design is emphasized by Yin (2002) who highlights that a good case study design is conditioned on validity and reliability. Validity refers to identifying fitting operational measures for the phenomenon studied in the case study (Yin, 2002). Yin suggests that establishing validity can be achieved through three different principles.

Firstly, validity can be achieved by using multiple sources of data collection in order to employ triangulation. We achieved this by depending on data from interviews, but also from multiple data sources such as internal documents, annual reports, and presentations as illustrated in figure 6. Sources should be used until saturation is reached (Eisenhardt, 1989) but Glaser & Strauss (1967) claims that saturation can never be achieving through studying one occurrence in one case. If multiple cases with one occurrence are studied, a few more categories and properties are generated, but the authors claim that it is not sufficient data to develop a theory. In our cases, we centre on one occurrence in the form of one calculative device used in the customer interface. We complement the device with clarifying answers from one interview that was involved in using the calculative device, but is not reaching saturation from one interview is not realistic. Here, we were victims of what Glaser & Strauss (1967) calls *structural conditions*; we only had access to one interview per region. In

order to redeem the lack of interview data, we employed triangulation with other sources. The analysis of the cases thus relies on data from the content of the calculative device, the data from the interview, the annual report of the customer, an analyst view of the customer, the regulatory actions in the market from a strategic report and an index of the regulatory governance in the IT industry (RGI). RGI is an index of 142 countries based on regulatory transparency, the degree of independence of the regulator from the government, GDP, power to penalize actors disobeying the regulations and resource availability. A high overall score indicates a high political transparency and regulatory governance.

Figure 6: Collecting of Empirical Data for the Three Cases



Secondly, validity can be by establishing what Yin (2002) calls *a chain of evidence*. The author uses an analogy of criminological evidence to describe the chain of evidence, and states that the evidence that is presented in court should be the same evidence that was collected at the scene of crime. The author thus means that the case report should contain the data that was collected during the collection phase, and any additional data should be stored for access. In our report, we reference to the sources we have used, and we created a database with the empirical data that states the origin of the information. Much data that has been collected, however, contained sensitive information and thus the source had to be undisclosed in the report, which has an impact on the validity.

Thirdly, Yin (2002) recommends that the researcher should allow key informants to review drafts of the case study report. Through our research phase of the thesis, we have employed this recommendation. The logic behind our research paper has been discussed mainly with our academic instructor, but also with our main dialogue partner at GlobIT. Internal documents in GlobIT, the presentations used in the customer interface, and the content of the interviews contain confidential and sensitive information. Thus, we have had close contact with our main dialogue partner who has reviewed our empirical findings and analysis to ensure that no sensitive information is revealed in the case report and that we have not written incorrect information. Further, all content from interviews have been sent to the interviewees who have approved the content.

Yin (2002) explains that reliability is achieved if the operations of the case study can be repeated with the similar outcome. The interviews in our thesis have been conducted with a semi-structured approach. The nature of this approach depends on the dynamic between the researchers and the interviewee. The social aspect of interviews is problematic in that people change what information is provided considerably dependent on whom they talk to (Glaser & Strauss, 1967). If replication of the interviews thus would be done, the interviews would probable yield different outcome of data, which reduces the reliability of the operations of our case study. Furthermore, as we adopted the systematically combining-approach suggested by Dubois & Gadde (2002), our interview questions have been adjusted throughout the empirical collection. This adjustment is driven by the data, but is inevitably influences by our judgments and perceptions.

Yin (2002) states that the ambition of achieving reliability is to reduce risk of errors and bias in the work by ensuring careful documentation. We therefore systematically asked for approval to record the interviews and we transcribed the recordings directly afterwards. The recordings, our notes, and the transcriptions were documented in a case study database, as in accordance with Yin's recommendations. We also documented all the questionnaires that were used throughout all interviews.

4 Empirics

4.1 *Background to the industry*

4.1.1 The competitive landscape

Low-price competitors have created a strong cost focus in the industry. The actors in the industry capable of competing with these low-price products are those that have the advantage of size and scale effects. PM2 suggest that the actors who neither have price as a differentiator, nor scale to cover high fixed costs, have an increasingly hard time competing in the market. The competition is especially fierce in those markets in which customers never have had much traffic. In these markets, it was suggested that a low-price competitor can paradoxically be rewarded for having less stable equipment; if a customer never experiences high traffic in its services, it is harder to perceive the additional value for more reliable but premium price equipment. If the usage of the service increases, the customer will likely try to solve the problem by purchasing more equipment from the same supplier, rather than switching to another (PM2).

Regulators in the market are, in addition, increasingly forcing customers to lower prices. Traditionally, customers have been able to use discretionary methods to establish prices in many markets. Regulators allowed flexible pricing because the customers provide a socially important function. Nowadays, pricing-methods are to a large extent based on rule-based approaches in order to foster competition and in some instances, customers claim that the regulatory pressure is impeding them to deliver end-users' needs (GlobIT IM).

4.1.2 Fast technology development changing the dynamics of the IT industry

The big trend in the industry is the explosive increases in data traffic. GlobIT claimed that the global data traffic doubled during 2012, and that the trend is likely to grow at this rate in the coming years (GlobIT AR). The increase in data traffic has influenced how costumers today are advertising and differentiating themselves toward end-users. Instead of focus on the traditional services, the customers today differentiate themselves with data traffic (CM1). The intense growth in data usage is largely driven by changes in end-user behavior as a result of the introduction of new technology. This has in turn affected how the quality of services is perceived (GlobIT AR). PM2 suggested that the question today continuously becomes: *“Is the quality of the equipment sufficient to handle the requirement from the traffic? Well the answer to the question changes every day, because the market demands change”*.

The increase in data traffic puts great demand on the equipment of the customer, and thus vendors are affected by the change in end-user behavior. Better equipment is said to become a key differentiator for the

customers (GlobIT AR). Service performance is claimed to be the main driver for end-user satisfaction, followed by value for money (GlobIT IM). The traffic increase can be seen as great challenges, but also as great opportunities. This is illustrated by PM2 who said that *“If we can prove that we have more stable products than the competitors and convince the customer of that, then we have excellent opportunities to sell more”*.

4.1.3 Consolidation of customers

Customers are increasingly consolidating, merging, or joining forces. The customers are (as in any market) highly driven by revenues and costs. On the revenue side, customers are said to offer new value proposition co-jointly, while on the cost side, consolidation and establishment of procurement companies are said to become more common (GlobIT IM). In Europe, in many cases, these procurement companies have been entrusted with much authority (BM2). The decision power in these instances has thus been moved from a technical organization to one that has a cost focus.

4.1.4 Commoditization

Commoditization of products and difficulties in getting paid for higher value has become a reality (GlobIT IM). Low-cost competitors can leverage this trend of commoditization to their benefit. PM2 suggested that a competitor likely would say that *“we have great products, and you could actually get the same quality as GlobIT, but with us you get it for a lower price”*. In procurement driven companies, a vendor will be highly pressured on prices. CM2 stressed this by saying that procurement wants to *“make everything as comparable as possible. The idea is to get all vendors to fulfill minimum criteria, so afterwards price is the only determining factor”*. Further, BM2 proposed that the main decision power has moved from the CTO organization to procurement. As customers perceive the products as commodities, and competitors are exploiting this trend in their favor, it becomes increasingly more important for premium vendors to illustrate and deliver real value (GlobIT IM).

4.2 General value argumentation

In this section, internal documents and presentations are used to develop a general view on value argumentation. As answers from different interviewees will be biased by the role that the person have, we use the answers exclusively from the head of marketing (HM) of one product area in GlobIT for the first to subsections in this section. We also to a large extent use documentation that is posted on the intranet. The material is either from a specific methodology regarding value creation, or from companywide presentation material that has been used exclusively this year in order to ensure that the opinions are up-to-date.

4.2.1 Why does GlobIT use value argumentation?

The importance of using value argumentation in sales engagement is clearly communicated in GlobIT. In today's market environment, pricing has to be based on value and facts rather than on production cost. It is also suggested that there is a trend today that customer's do increasingly procure on value. Thus, the only way to stay competitive is to understand customer needs and wants, and deliver solutions that create value on these needs and wants. Value argumentation is also said to be necessary to follow the industry trend to go from an equipment supplier to a business partner and trusted advisor (GlobIT IM).

The description of value argumentation and value takes many forms within GlobIT. Although there is a strong consensus around the importance of value argumentation, what this concept exactly implies have disparate meanings. One suggestion of value is the theoretical definition that customer value is benefits less price. Another proposal is that *"True value does not depend on money alone. Value is how much something is worth"* and this proposal is concretized in several characteristics, including customer value, speed, simplicity. Yet a third source suggests that *"value creation is a stepwise approach aiming to take a more holistic approach addressing a broader range of customer priorities and concerns based on market and operator understanding"*. What these descriptions share is that they are abstract and exactly how the descriptions should be used into practice is not clear (GlobIT IM).

The philosophy behind the value argumentation is derived from an academic theory according to HM. The theory consists of three components: technical benefits, financial benefits, and emotional benefits. In the value argumentation of GlobIT, the two former benefits are incorporated into the value argumentation material in quantified terms, while the latter is not. HM recognizes that much value is related to emotional benefits such as trust, reliability and associations with the brand and HM argues that the emotional benefits are becoming more important. However, HM explains that it is harder to quantify that value, and this value is relevant on some markets, but in others value for customers is exclusively related to money.

The creation of global material in the form of templates and general argumentation is not only for the customers benefit. HM suggest that by developing global material, internal trust is generated to illustrate that the company is better and can deliver better value than the competitors. *"The carrier of the argumentation and values is the sales force"* (HM) and thus the global material can boost confidence and competence of the sales force in the regions.

4.2.2 Overview of "Value creation methodology"

The value creation team at GlobIT has developed a *value creation methodology* as an attempt to create a proactive and value based sales approach. This approach is intended to guide sales engagements in order to efficiently

use the global value argumentation in practice. The value creation approach is comprised in a four-step process.

Initially, a thorough situation analysis of the customer should be undertaken to understand what drives value in the customer's business. The intention is to create an understanding of what goals and intentions managers are pursuing. Ideally, an outside-in approach should be done to reflect the market's view of what is important, rather than using GlobIT's perception of what is important. This is promoted not only because it gives an unbiased view of the company, but also by generating trust by putting the customer first.

Based on the results from the situation analysis, explicit solutions that create value for the customer should be developed. These solutions should clearly illustrate how they assist in addressing the customer's needs. It is, however, not enough to develop solutions, but it is essential to also create value statements, or quantify the financial impact from the solutions. This methodology should finally lead to engagement with different actors in the customer organization, but mainly the customer's C-suite. The engagement phase is intended to create commitment from C-suite to fully explore the proposals from GlobIT. This phase is important, not only to create a dialogue, but also to convince the key decision makers of the real value of the solutions (GlobIT IM). Traditionally, HM explains that GlobIT has had a good relation with the CTO of customers, but that GlobIT has gradually become better at approaching the marketing departments of customers.

Even though multiple meanings exist, value argumentation propositions tend to largely revolve around three tangible financial influences: CAPEX savings, OPEX savings, and additional benefits in revenue. Two other metrics highlighted as important in the value creation methodology are EBITDA-margin and operating free cash flow. All these aspects are said to be vital to understand what drives a customer's business and should be used as a base-case for illustrating the potential financial impact from GlobIT's solutions (GlobIT IM). HM explains that *"we understand that if the customer is not increasing its sales, then we won't increase our sales. The relationship between CAPEX and sales is relatively constant, which means that if they have a certain level of revenue, we will also have a certain level of revenue"*. According to HM, customers are increasingly looking into tiered pricing and new business models for new services and appreciate when they are approached with that kind of information from GlobIT.

"Value that is not quantifiable, people won't pay for" emphasizes the importance that proposals should be quantified. As the value creation methodology is intended to create dialogue with c-suite, the solutions have to be translated into something that captures their interest. The preferred method is to present quantifications that illustrate the impact on the specific customer's own financials. The important aspect is that the quantification is credible. The idea is that the quantification should be based partly on market information,

and partly on assumptions, making it reasonable that the quantification will deviate from the customer's own calculations. It is absolutely vital to inform the customer of this fact and make them aware that predictions do not translate into guarantees (GlobIT IM).

4.2.3 Product Catalogue

The product catalogue is an internal database in GlobIT that contains technical information regarding its products, but also value argumentation related to these products. Traditionally, the information has been of the qualitative nature, but the information is gradually changing. *"It is a lot of qualitative information on the product catalogue since historically that has been the main focus. However, quantitative value argumentation is receiving more and more focus"* (BM2).

The purpose of the database is to be a channel of information that people in the regions can use in order to get updated guidance in their daily work. People at HQ have the responsibility to upload information, which people in the regions can download and include in their presentations to customers (PM2). The database should contain information regarding value argumentation, and this information should be both qualitative and quantitative (BM2).

4.3 Sales-cycle

The process customers follow for global procurement is a standardized process in the industry. What can vary is how far the process progresses before a purchasing decision is made. BM1 explains that global customers keep themselves informed about new technologies and industry development through dialogue with vendors and by attending forums and presentations. When a customer becomes interested in acquiring a new solution, a global request for information (RFI) is sent to vendors. This RFI should contain formalized information of a specific solution. After information is collected, and the customer still is interested in acquiring the new solution, a request for quotation (RFQ) is initiated. The RFQ, however, should not only include a price, but should also contain a life-cycle cost analysis. The customer will compare the RFQs from the different vendors and then decide on which one to choose. After a vendor is chosen, local procurement is done in each region, where the chosen operator has opportunity to conduct up-selling of other offers.

4.3.1 Request for information (RFI)

The purpose of the RFI is to collect enough information to be able to create a RFQ. The initiative to start acquiring information is proposed by C-level persons, often the CTO or the CMO. The C-suite focus on what end-users value when selecting customers and then focus is put on those suppliers that can provide technologies that meet these end-customer criteria. The focus at this stage is not necessarily on price but

rather on information that the supplier deems important regarding the specific product. The results and information from the RFI should determine which supplier a formalized RFQ should be sent to. (BM1)

As the RFI will be part in shaping the RFQ, a supplier can influence the content of the RFQ. If a supplier is engaged in discussions at an early stage of the sales cycle, a vendor can convince a customer of the value of its products. BM2 said that *“You therefore have to be engaged with the customer on day T minus 100”* which illustrates that if a vendor can convince the customer of the value early in the sales process, then the customer may formulate the RFQ in a way that is beneficial to that specific vendor. One of the best-case scenarios is one where the vendor helps the customer to write the RFQ. If a vendor has that kind of influence, the vendor has an excellent opportunity to impact the formulation of the RFQ in its favor. As BM2 said *“You try to include as much as possible that is vendor specific without destroying the trust in the relationship. If you can do that, then half is won already”*.

4.3.2 Request for quotation (RFQ)

In addition to the technical features, the RFQ has a strong focus on financials, such as price and cost. The RFQ should reflect what the customer perceives as important for acquiring a new solution. This perception is founded partly on what the customer itself thinks is important, but partly from influences from the information that the vendors provided in the RFI. When an RFQ is established, a vendor has limited power to present new values of its solution, which BM1 suggested is because *“Providing new benefits when we provide a quotation to an RFQ is a total waste of time because the framework is already set”*.

In the RFQ phase of the sales cycle the responsibility of the buyer moves from C-suite towards a procurement department. The department receives a mandate based on the technical evaluation of the solutions and the price of the solutions. The procurement department’s main task is to drive prices down in order to finally select the one vendor that best meets the criteria the customer has (BM1). They attempt to standardize the evaluation process to easier compare the different solutions. One industry common method of comparing costs of a solution in procurement is through a TCO-calculation. The calculation is a relatively new concept in the IT industry, but is established as a standard evaluation tool for vendor selection. BM1 suggested that in probably 80-90% of all deals today use TCO. Also, CM1 stated that *“since customers have a strong cost focus and they use TCO, we have to be in that dialogue as well”*. In addition to the technical evaluation, a TCO-calculation is thus included in an RFQ in most cases.

The TCO calculation is, however, not a standardized method. GlobIT prefers to include additional benefits in a TCO-calculation, while procurement – which is incentivized to minimize costs – prefers to keep the calculation simple. The BM1 explained that: *“Every customer decides its own basis of evaluation that should be included*

in the TCO-calculation. The customer wants to drive a commoditization of the product that nullifies the values we want to claim. The ambition is to include all vendors in a bidding war in which the prices decline. Then you don't want the TCO to be too complex". The TCO of the customer is thus fairly narrow compared to the quantification that GlobIT proposes.

4.3.3 Up-selling and recurring business

When a vendor wins a deal, the vendor has more flexibility to influence the TCO-calculation that will be used locally. As the TCO used in the bidding was on a global level, it can be altered to match the local conditions of the specific market. Thus, there is room for adjustments (SM1). As a winning vendor, the possibility of additional up-selling is greatly enhanced and when a customer grows, the winning vendor has great potential to do additional sales to the same customer in form of recurring business (SM1). It is said to be quite elaborate to switch vendor (PM2), so the natural response if the business is expanding is to purchase more solutions from the current vendor.

4.4 The Back-End of Value Argumentation

The value creation process at GlobIT is not a linear process and therefore hard to define in a structured way. However, some responsibility areas and patterns exist. The back-end of value creation refers to the divisions that centrally create the initial material. There are many involved players but the main division that we have focused on in this report is product owners (PO), product marketing (PM), Commercial Management (CM) and the Sales Managers (SM). We will briefly define the role of each of these divisions with regards to value argumentation below.

4.4.1 Product owners

The head of product management (HPM) stated that *"the product owners are the owners of the products, and thus they are the strongest people in the organisation"*. Ideas for a new product can, according to HPM, start at many divisions in the organisation, but it is ultimately the product owners who will decide what products will be developed and what areas to focus on. The product owners are therefore the carriers of the product information, and thus vital in the process of developing value argumentation material. They will provide information regarding the product and describe why certain features of the product are important for customers and they are responsible for the product worldwide. The product owner's (PO) view of value argumentation is that it is *"a counterargument to the customer's propensity to focus on cost reductions"*. Responding to all questions regarding the product is not feasible for the product owner from a time aspect (SS). The sales support assists the product owner with responding to questions and developing material for the product in cooperation with product

marketing (ibid). Sales support staff each have different roles e.g. a single point of contact for a specific region.

Development of products

The initiative to develop a new product can occur in various ways. The most common approach is that GlobIT generates an idea internally that is later presented to various customers to establish an attraction in the market, according to PO. In a recent development, an idea was spawned in research & development at GlobIT, which was then presented to a customer. Lengthy discussions for months were held with that customer in order to verify that the customer wanted the product.

A customer can at times approach GlobIT and describe that it is interested in a new feature, which can initiate the development of a new product in collaboration with that customer. HPM said that *“at times, the product will not be important to any other customer than the one that wanted it”*, but in some cases the product has the potential to be valuable to other customers. In these cases, several benefits have to be identified in order to convince other customers of the value of the product. At other times a need to cut internal costs, for instance, is driving the development of a new product. One product was developed in order to decrease costs of hardware, and a thought that drove the development was that *“do we want to sell the same product in rural areas as the ones we sell in areas with high population density”* (PO). The new product carried obvious CAPEX and OPEX saving features, which became the foundation of the value argumentation material that was created.

GlobIT is, thus, continuously engaged in a standardization process together with all other actors in the market. In some product areas, products are very standardized. *“There is a race between all vendors of who can deliver the standardization”* (HPM). GlobIT therefore needs to identify the needs of strategically important customers to understand how it can deliver on the standardization. In most cases, product owners and the customers have a dialogue throughout the development phase, and this dialogue concern what is or what will be important functionalities of products in the market. *“If a big customer believes this product is important, then the probability is high that other customers find it important as well”* (HPM).

4.4.2 Product marketing (PM)

Product marketing constitutes of three sub divisions, technical marketing, product programs and information marketing. Together they are responsible for promoting new products. An important channel for promoting the products is through value argumentation. Product marketing is responsible for creating value argumentation material that explains the characteristics of the products and to upload this material on the product catalogue.

Input

The goal for the product marketing division is to develop generic qualitative value argumentation material that will help the sale force understand the characteristics and functionalities of the products of GlobIT. The objective of creating the value argumentation is to get the customer to arrive at the conclusion that *“Ah, now I understand. The price is higher, but now that I know how much value it has I will gladly pay the higher price”* (PM2). To create this material the product marketing division collects information from several sources. The initial input for creating new technical value argumentation material comes from the product owners as they are responsible for the products and possess thorough knowledge regarding their features. This input is received through value argumentation workshops where the product owner and other technically skilled employers together analyze the product (Ibid).

Product marketing also needs to receive feed-back from the sales forces to make the value argumentation material they generate as user friendly as possible (PM2). According to a PM2 the feed-back loop from the users of the material needs to be improved *“No one reports back to me regardless if the material was good or bad. We try to improve our feed-back loop because we cannot create better value argumentation material if we do not know how the material we are currently making is used. At the moment, we have no system in GlobIT to systematically collect feed-back”* (ibid). PM2 further stressed that they do not know by whom and how their material is used.

The product program division receives in addition to information from the product owners, information from the specific regions regarding the customer which is to be used in a pilot business case (ibid). Most products are developed for the global market whereas some have emerged from specific demands from specific customers. When creating value argumentation for a product that has emerged from a specific customer it is important to understand where the product has come from.

Creation of value argumentation material

The technical value argumentation material that is created at the technical marketing division is mainly created through value argumentation workshops. In these workshops the product owner, a marketing manager and people responsible for pricing, sales and support sits together for a day to analyze the product with regards to its strength, weaknesses and competing products. At the end of the workshop four to six key arguments are defined that should be used to promote the product over the second best alternative and to clearly show the benefits of the product to the customer (PM2). Product program have a similar goal with the value argumentation they create *“we focus on around 6 main arguments, where eventually the local sales force highlights the three most important ones for their specific customer”* (PM1).

It imposes a challenge to follow the same structure for all the material that is created since it is made for different kinds of products. According to the PM2 *"the material we create does not follow the same structure for all products which does not make it easy for local sale forces to adapt and use the material"*. Another challenge the technical marketing face when they create their value argumentation is to make the material usable for as many people within the organization as possible. Due to constraints as limited knowledge of specific customers and markets and a limited amount of resources technical marketing can only create generic material *"we cannot create value argumentation material that is tailored to a specific customer. That adaption is supposed to be done in the local sales forces"*. Creating generic material from a product and global perspective that is to be used in local customer interfaces imposes a challenge for both technical marketing and the users of the material *"We try to make the material generic without making it too generic. If we make it too generic the local sales forces will have a hard time using the material and will contact the product owners for further support"* (PM2).

Based on input from technical marketing and from a local sales force about a customer, a business case is developed for a pilot customer. After the business case for the specific customer has been developed it becomes generalized and uploaded on the product catalogue (PM1). Product marketing starts by making a specific business case and then generalizes it rather than the other way around because it is easier to quantify a business case when real figure can be referred to and it also makes the value argumentation less theoretic (ibid).

The value argumentation is always first quantified in technical terms as the technical benefits must be understood in order to be able to translate the value argumentation into monetary terms (PM3). When the value argumentation is translated into monetary terms OPEX, CAPEX and increased value are the main factors that are used (PM1). Product marketing does not take the financial impact on the customer one step further by showing the impact on the EBITDA for the customer or on their operating cash flows because they try to keep the value argumentation as simple as possible and lacks insight in how it would be carried out (ibid).

Output

The value argumentation material that is created by technical marketing is uploaded on the product catalogue. According to the PM2 *"the material we upload is not quantified, it is up to the local sale force to complement the value argumentation material we create with quantified material"*, however how well this works in practice is beyond the current knowledge of technical marketing *"we do not know who has downloaded the material nor how the material that has been downloaded has been used"* (PM2).

Product program creates a pilot business case that is used either directly towards the customer or sent to the SC working towards the customer. The specific case is not uploaded at the product catalogue since it contains detailed sensitive information. Once the specific business case has been made more generic, that generic model is then uploaded on the product catalogue (PM1). The quality of the business case and the resulting generic value argumentation is highly dependent on the input and the technical and financial knowledge of the team that develop the material (PM3). As a result, the structure and layout deviates widely between the cases. However, recently initiatives have been taken to standardize the competence and the quality of the value argumentation within GlobIT.

4.4.3 Commercial management (CM)

Commercial management is involved in the operative sales work and should capture a broad spectrum of commercial aspects. It is divided into ten subdivisions of which two are primarily involved in value argumentation, business modeling and information intelligence. The magnitude of the commercial management divisions are mainly working with pricing. The business modeling subdivision creates templates and business models for quantitative value argumentation. These templates and models are made user friendly in order to reach as many people involved in value argumentation as possible. The information intelligence subdivision work with understanding the competitive environment and the customer's behavior and based on that give feed-back to the sales forces on how the value argumentation and key differentiators can be improved.

Input

Within the commercial management team there are subdivisions with different responsibilities. However when it comes to value argumentation the commercial management division makes generic quantifiable templates and value argumentation based on commercial intelligence, i.e. based on competitors and customers. Information for creating this kind of material is retrieved from *“product areas, or service area or business area depending on which business unit the material is for (CM2)”*. This information constitutes of business cases which are created by different units within GlobIT, but mainly by product marketing and technical sales support. In addition to this input the commercial management division recently developed a structured way to collect information from previous deals called One-loss-capture *“In this One-loss capture we are asking explicitly deal by deal what value argumentation has been used to engage with the customer and what was the acceptance of this value argumentation by the customer”* (ibid). From this information GlobIT can find out if the customer validates their proof points or not and whether something needs to be improved in the value argumentation.

The importance of understanding the total cost of the operator in order to demonstrate the full value of the products Glob IT are selling has previously been elaborated upon, however when it comes to the creation of generic quantifiable templates CM1 admitted *“Historically, we have not looked at the customers internal costs to a large extent, but we are trying get a broader perspective and capture that type of cost in our value argumentation”*.

Creation of value argumentation material

When the commercial management division creates quantitative value argumentation material the process is the following according to CM1 *“to start with you have to get acquainted with the product and its benefits by looking at different proof-points that the product delivers on. Then you need to assess the specific situation of the customer and determine what value we can generate for the customer given their situation. This is where the value calculators come in”*. The value calculators are designed to capture the net present value of the investment for the customer, the cash impact, the impact of different value components as OPEX and CAPEX, and the impact on the revenue of the customer in a time frame of five to six years (CM2). They are intended to capture the financial impact more profoundly and be more user friendly than the initial business cases used as input. Further, to clearly demonstrate the value of the product offering GlobIT contrasts it against the second best alternative *“we always try to quantify the value the customer will get over the second best alternative. The alternative could be to by one of our other products, to buy a competitor’s product or to do it themselves”* (CM1).

A danger with building dynamic business cases based on value calculators is that the value components present in the specific market where the case was made will be captured but the value components from other markets will be left out. The commercial management division relies on that the product owner takes this into concern (CM1). Another danger is that the value argumentation might not reflect the true needs of the customer but rather convey a message pushed from GlobIT *“when we define the value argumentation, we are not taking an outside-in approach. We are taking what is good for us and then we try to transfer that in value for the customer”* (CM2). For the value argumentation to be more efficient GlobIT should adopt more of a pull strategy based on the needs of the customer *“We should not find out issues post the product or the solution is built. We should make things in order to clearly solving problems or issues to the customers”* (ibid).

A problem that the commercial management division face when they develop their value argumentation material is that local sales forces might expect to get less generic and more specific material than what the commercial management division are able to develop. According to (CM1) the local organization knows the conditions in their markets much better than what the CM division do and thus should make the material customer specific. However, this is not always the case in practice *“We see that the expectancy gap between the actual generic material that is produced centrally and what the local sales forces expect sometimes is too big leading to that the material is*

not always used. It is for that reason that we are developing value calculators that will be more widely used due to its user-friendliness” (ibid).

Output

The formal channel for distributing the value calculator based models made by the commercial management is the product catalogue. Sales consultant people in the regions make up the main recipients of the value argumentation material created by the commercial management division (CM1). The material is created to be used towards the C-level of the customers *“when we use the value calculation-approach that is meant to have a door opening with key decision makers amongst the customer”* (CM2). Approaching the C-level is important because if they see the value of the offering from GlobIT they will not only evaluate the price of the offering but also other components. The value argumentation used towards the customer is critically examined *“they do not accept our argumentation and our calculations without questioning them. But they take our arguments into concern and make own calculations and perhaps gives interesting competitors a similar opportunity”* (CM1).

The value argumentation created by the commercial management team include both cost and revenue aspects. Value argumentation focusing on cost is much more widely accepted as it is less sensitive and more trustworthy according to the customers, the acceptance of revenue arguments is highly dependent on towards whom it is used *“Revenue arguments can receive some attention, especially if you have the possibility to talk to a marketing organization that is interested in revenues”*. However GlobIT does not engage to a large extent with the marketing organization of their customers and the competence to deliver revenue arguments in the local sale force is questionable (ibid).

4.4.4 Sales managers (SM)

All sales managers have a region which they are responsible for. When it comes to value argumentation they do not produce any material but rather acts as coordinators between the local sales forces and the competence that is developed at the headquarters. They respond to requests from the local sales forces and make sure that the local sales forces uses value argumentation in the customer interface. The sales managers often gets involved in the later stages of the sales cycle and needs to approve the sales and verify price margins.

Involvement in the creation and use of value argumentation

The role of the sales managers at GlobIT with regards to value argumentation is rather reactive and based on requests from the local sales forces according to (SM1) *“I try to work proactively, but during a regular week I only spend 25% of the time with taking own initiatives. For the remaining 75% of the time I work reactively and respond to requests*

from the regions”. The amount of value argumentation material requested is highly dependent on the relation between the sales managers and the key account managers and also on the maturity of the local sales forces (SM2). Some accounts are more independent than others and thus requests less value argumentation material.

The sales managers do not create value argumentation material but ensures that the material is available and gets used in the regions *“I try to function as a gearbox by making sure that there is value argumentation material and that it is used with the right timing in the customer interface”* (BM1). In order to successfully help the local sales forces it is important that the sales managers understand the context *“I try to take into concern what types of customers we have, how mature they are, what market they are active in, where they are at in the development. For example, you cannot compare two regions that are in different stages”* (SM2).

When a certain kind of value argumentation material can be used is dependent on where GlobIT and their customer are in the sale cycle making the timing of the use of the material crucial. The sales managers need to be in contact with the local sale force early in the sale cycle to keep an open dialogue with them regarding value argumentation (SM2). They need to make sure that the local sales force has a strategy for value argumentation and that they use it early in the sale cycle towards the customer in order to influence the RFQ. However, this is rarely the case in practice. Instead the local sales force generally initiates the sale on their own and involves the sales managers in a later stage if that is needed.

The sales managers mainly works reactively based on request from the local sales forces, thus the output of the material they extract and compile varies significantly. Further, since they are not responsible for uploading value argumentation material to the product catalogue the value argumentation material they collect is typically sent straight to the local sales force making the request. As a coordinator the sales managers play an important role in that the value argumentation is used efficiently and thus have to ensure that the material covers all the important aspects *“You have to address all levels. Generally the CTO gives input to the procurement regarding what they shall purchase. It is towards the technical organization that we have had the most influence. But we also have to include value argumentation towards the procurement and the CFO”* (BM2).

4.4.5 Sales Consultants

GlobIT is present in 10 regions and every region is structured under one common operating model. Every region has customer units, which are accountable for one or more key accounts. The KAM in every region is the person responsible for the key accounts within that customer unit. The KAM is thus responsible to manage the customer relationship and drive sales, but should also provide innovative and cost efficient solutions to the customer.

Additionally, every region has sales consultants (SC). This function's overall vision is to generate sustainable and profitable growth for GlobIT, as well as for the customer. The function should capitalize on the company's global knowledge, customer insight, and market presence to deliver customer value and satisfaction.

As we are interested in the adaptation process of value proposition material, the SC-function is more interesting for our scope. The KAM is responsible for driving sales, while the SC is responsible for supporting the KAM with necessary material. The SC is the function that is supposed to create or adapt material that is to be used in the different customer engagements. We have thus chosen to focus on SC persons in each case.

4.5 Introduction to the cases

We have investigated three different cases: (i) one market with two customers, (ii) two markets with one customer, and (iii) one customer in a mature market and one customer present in a developing market. The different cases follow a similar structure: first, a background to the region and the customer is provided. We also present information from the customer's annual report and information from an analyst report to highlight those perspectives of the market. Secondly, we present the perspective from the interview with the sales consultant. Finally we end with a description of the content of a concrete presentation used in the customer interface. We also complement the presentation with clarifying answers from the sales consultant.

4.6 Case A: One market – Two customers

4.6.1 Background to region EastEu

Case A constitutes of a comparison of the selling process for GlobIT in region EastEu towards two different customers. Region EastEu is characterized by high growth. It is a highly fragmented market with a few urban areas that has experienced a fast growth and over the last years and are now moving into a more mature stage putting a downward pressure on the prices in these regions. However, rural areas of region EastEu have yet to experience such a development and therefore provide potential for future growth. The competition on the market is increasing because several new actors have entered the market.

The regulator in EastEu received according to RGI one of the lowest rankings in the index. Their overall score indicates that the political transparency and the regulatory governance in the region for the IT industry are low. Nevertheless, it plays an important role in the EastEu market by stimulating the market with new rule framework. Currently, the regulator in the market is focusing on reducing prices in the industry on traditional services, although some specific services are unregulated. There is also currently no ambition to

regulate these specific services, leaving room for discretionary price setting on these services. In relation to data traffic, the regulator has enforced fines and recently both customer A and customer B were fined for excessive charging of this service. According to the BMI EastEu, some technological regulations for traditional services are very unclear and both customer A and customer B has publicly proclaimed their frustration with the unclear guidelines. Regulatory requirement are currently focusing on ensuring access to services in rural areas (BMI EastEu).

4.6.2 Background to Customer A

Customer A is the largest actor within its industry in region EastEu with a market share of 30% (BMI EastEu). Their geographical presence covers almost the entire EastEu region and is growing in nearby markets. Much of the customer's revenues have been generated in the major cities of EastEu, but these cities are now close to saturation. This implies that the markets are becoming mature, and thus Customer A has to change focus from growing the customer base to actually focus on generating profits from the customers. Company A intends to accomplish this by delivering higher quality of services for the current markets, and to continue to expand into areas beyond the mature cities (BMI EastEu).

4.6.3 Customer and Analyst view

Information from annual reports of customer A

The CEO of customer A recently claimed that the CAPEX as a percentage of revenues should decline from 2013. In the last years, CAPEX as a percentage of revenue has been around 20% due to heavy investments and customer A expects the CAPEX to decline as future investments will not be of the same magnitude and the customer further states that the competitive activity in the region has decreased. The clear main objective of customer A is to increase usage of data traffic and to develop price models that capture value from this service. The CEO claims that promoting appropriate value bundles will be a necessity that will determine the success of a company in the industry today. A big proportion of the increase in revenue during 2012 for customer A was attributable to better value propositions to end-users and ability to retain quality of services. Also, focus is on retaining quality customers and not necessarily all customers. The main financial performance indications highlighted by the CEO are net income, operating income before depreciation and amortization (OIBDA) and operating cash flow (AR Customer A).

Analyst coverage

Customer A is, according to the analyst report, the preferred industry actor in the region as they have a stronger focus on the local market. Concern is, however, raised for the regulatory environment in region EastEu which can have significant impact on the future performance of the customer A. Currently, customer

A is trading at a discount compared to the group median of EV/EBITDA. Other metrics that the analyst highlights in the report is margin trends, growth and profitability (Analyst Report Customer A).

GlobIT and customer A

Information gathering

The local sales force in region EastEu working towards customer A uses several sources as input for creating value argumentation “*we get our material from the product catalogue, directly from the product owners and from sales support. We develop a roadmap of customer A that we then discuss with sales support*” (SC EastEu A). In order to get public data such as the number of subscribers a public database is used. To tailor the arguments to customer A, internal GlobIT material is used to get an understanding of the preferences of customer A. Further, direct input from customer A is received to improve the value argumentation towards them. The local sales force in EastEu presents their material to customer A and then receives feed-back on the content and in particular the numbers (SC EastEu A). This gives GlobIT the chance to revise and improve the presentation. In EastEu, GlobIT has a group working with tracking the market by capturing current trends and the customer behaviour. The local sales force in EastEu selling to customer A, uses the findings of this group to tailor their value argumentation to the local market.

The customer relationship and its implications

Customer A and GlobIT has a close relationship that dates long back. Thus the current business towards them is mainly recurring business. The local sales force in EastEu meets customer A several times a week. These meetings are not only initiated by GlobIT but by both partners “*It is common that they request presentations on specific topics from GlobIT*” (SC EastEu A). Dialogue partners for these meetings are mainly technical people within the customer A organization. Due to the hierarchy of EastEu companies the c-suite is not a common dialogue partner “*I did not engage with the c-suite but the people I spoke to wrote reports that were addressed to the c-suite. The people I spoke to wrote that the solution of GlobIT is technically better than other solutions*” (SC EastEu A).

Nature of quantification

As the main dialogue partners at customer A are technical people, the quantification naturally becomes technical. To choose vendor customer A has a vendor selection group described by SC EastEu A as “*they are very technically oriented, they evaluate the technical features of the vendors and tries to determine which vendor that is best in technical terms*”. When SC EastEu A included more general and financial value argumentation the dialogue partners at customer A showed little interest and instead stressed the importance of the technical aspects. The lack of interest towards arguments going beyond technical aspects could be based on the strong focus on the technical functionalities of the solutions by the dialogue partners at customer A or on the lack of knowledge

within other fields *“We included other aspects in our value argumentation such as implementation of our solution and the benefits from a regulatory view. The dialogue partners at customer A had difficulties in understanding the importance of these arguments as they had limited knowledge within these fields”* (SC EastEu A).

Standpoint to regulatory environment

The regulatory environment is taken into concern from a technical aspect according to SC EastEu A and the sales force in the region occasionally uses these requirements in the value argumentation. For instance, one regulatory requirement in region EastEu is on coverage rather than a certain level of quality of services, and SC EastEu A said that *“based on the requirements by the regulator imposed on customer A we presented a solution that would be suitable for fulfilling those requirements in rural areas”*. The inclusion of regulatory requirements in the value argumentation is thus based on technical requirement, rather than financial aspects such as price pressures from the regulator.

Value argumentation presentation

The value argumentation presentation analysed in region EastEu (VAP EastEu A) used towards customer A was developed by the product marketing division at the HQ with assistance from the local sales force in EastEu. The local sales force contributed by assisting the product marketing with region specific information. Sales management was involved by reviewing and providing input during the development of VAP EastEu A. Commercial management on the other hand was not involved in the process. VAP EastEu A was used towards customer A after the RFQ had been responded to but before the signing of contract. It was developed. It was initially presented to the vendor evaluation group of customer A and eventually to senior managers.

Despite the limited interest in financially quantified value argumentation from customer A, GlobIT quantified the benefits of the solution in VAP EastEu A *“They never asked us to quantify the functionality in monetary terms. It was our own initiative to financially quantify the benefits of the solution”* (SC EastEu A). The initiative was taken as a response to the interest showed by customer A of the solution. Customer A had requested a presentation of what a solution from GlobIT would look like. Instead of just presenting the technical capabilities of the solution, GlobIT wanted to show the financial impact of the technical benefits that the customer A saw in the product (SC EastEu A). To get the financial value of the solution to customer A, the current operations, the customer base and the general characteristics of the EastEu market was taken into concern (SC EastEu A).

VAP EastEu A includes both technical and financial quantification. It starts by demonstrating the technical benefits of the solution in general. As a next step VAP EastEu A shows the financial impact of the solution on OPEX savings, revenue, value of customer loyalty and of quality. This quantification is adapted to

customer A and the market dynamics in region EastEu. VAP EastEu A demonstrates the aggregated value customer A would gain by buying the solution from GlobIT. Further, VAP EastEu A includes a survey of the customer behaviour pointing to the benefits from the solution of GlobIT and a benchmark to the competitors of customer A demonstrating areas where customer A underperform.

4.6.4 Background to Customer B

Customer B is the third largest actor in region EastEu, which is also the company's home region. The company operates in multiple countries and its main strategy is to expand internationally and achieve scale advantages. Therefore, customer B is actively looking for acquisition opportunities (BMI EastEu). The region has experienced a very low pace of implementation of the new generation of technology, which has led to much pressure from regulators to uphold a certain level of technology utilization and level of service.

(SC EastEu B).

4.6.5 Customer and Analyst view

Information from annual reports of customer B

In the financial highlights of the customer's annual report, operating revenues, EBITDA, and net cash from operations are mentioned. Further, the increase in the customer base is also presented. The business strategy is focused on increasing cash flows and generating returns for the company's shareholders. The company believes that the increased data traffic in the industry will change the game of the industry, and resources are thus allocated to these services in terms of quality and coverage. Further, the company works with differentiation through new price models in order to capture revenue growth in this segment.

Company B is currently focusing on profits and cash flow generation in the region EastEu. The market has a high utilization rate of traditional services, and therefore the company has decided to focus on improving service quality, but it has also decided to focus on improving CAPEX efficiency in order to maintain its margins. The infrastructure of the services is the biggest item on the cost side and the company has addressed this by sharing infrastructure with other companies and by centralizing the procurement department. The new services are one of the fastest growing streams of revenue, and the company has taken initiatives to promote the usages of the service in order to increase customer loyalty (AR Customer B).

Analyst coverage

The analyst report covering the company described that the company has shown good results and is currently trading at a slight discount to the peer group median of EV/EBITDA. Additional financial metrics are

margin trends, growth & profitability. The report highlights competition and regulatory changes as key risks for the industry. Company B has focused on improving its service quality in order to catch up to the level of the competitor's. Allegedly, it believes to be at par with its competitors now. The report, however, stresses that the perception of customers will likely take more time, making additional investments and marketing expenses necessary, which in turn makes the company exposed to competition from future new entrance in the market (Analyst Report Customer B).

4.6.6 GlobIT and customer B

Information gathering

SC EastEu B acknowledges that the product catalogue contains both technical and sales material and that it describes all the building blocks of the different solutions in details. The product catalogue is mainly used as a source of information regarding the products, rather than for sales information. The sales information in the catalogue is very general and because of this, assistance from business units is sometimes needed in order to tailor the proposition to the specific customer. For strategically important products, GlobIT develops general business cases, which then should be used locally in the regions. However, SC EastEu B suggests that these tools contain inputs that are important for the region in which it was developed. *“Input for a business case is very region specific, what is crucial for EastEu might not be crucial for another market. It might even differ from city to city”*. SC EastEu B exemplified by stating that in some regions, power consumption is crucial while in EastEu no one cares about it.

SC EastEu B explains that the most important information to create value argumentation is actual customer needs. Therefore, meeting customers and incorporating their feedback and concerns in the argumentation is vital. *“After we gather all this, we can identify some important aspect where we can bring some value”*. This implies that the relationship between SC EastEu B and the customer is very close and that propositions often originate from the actual needs of the customer.

The customer relationship and its implications

SC EastEu B claimed that it is very important to have a good relationship with the customer, knowing which persons are decision makers and which persons has a strong influence on those who makes the decisions at the customer. *“The relationship is important, but it should not be overestimated”*. With this statement, SC EastEu B described that its customer recently became a global operator and moved the HQ to another country. This implies that central decisions are now made in another country and pushed down to the local offices. The move has thus made it harder for the sales force in the region to influence the local decisions.

In the industry today, EastEu B suggests that it is not enough to talk to one person or one department in order to make a sale. *“There is no such thing as a customer. There is a bunch of departments, and each of them has their own option, they might not even meet each other”*. The challenge is that every person in an organization is driven by his or her own priorities, which means that you have to analyse what impact a solution will have in all areas. *“A solution might involve some OPEX or CAPEX features, which makes it cheap. But at the same time it could impact performance, and ultimately influence the revenues, which make the sales process complex”*. Around every technical solution, business cases are developed and in these, SC EastEu B says that revenues and cost efficiencies are included in order to back up the premium price of GlobIT’s solutions. The business case is discussed with different departments of the customer for the sake of illustrating that acquisition price is basically half of TCO.

Nature of quantification

“Of course we never commit to hit some financial KPI of the customer. It is never like that. GlobIT commit to meet some KPI only if the achievement of KPIs is fully under control of GlobIT” (SC East EU B). Therefore, commitment is made for technical KPIs, and potential impact on financial KPIs is illustrated in the presentation for the customer. *“The most frequent measures, I would say, is CAPEX, OPEX, and maybe investment return”* (SC East EU B).

“I would say that in general in the region, the recent trend is that technology is not so important” (SC EastEu B). The statement illustrates that the technical aspects are not the most important dimensions for customers in the region. *“I would say in Region EastEu that everybody claims that they focus on quality but relay does not”* (ibid). SC EastEu B explains that the end-users perceive little difference between the market actors in the region. Also, the market actors have huge capital and operational expenditures, but currently they do not succeed in extracting much revenue from their operations. This forces the actors to cut costs in order to maintain margins, which in turn brings every technological discussion to a price discussion. SC EastEu B suggests that for customer B, *“80% of the decision is financial, other 10 % is time to market, and 10% is technology”* illustrating that the procurement department is the leading division in the decision process at the customer. *“Whatever solution you propose, all will end up in procurement department and you will be pushed hard in prices”*. When the discussion thus comes to a tender process involving a TCO estimate, customer B will chose the one with the lowest price.

Standpoint to regulatory environment

The region naturally has monopoly regulation that ensures that competitive prices are offered on the market. The price pressure from the regulator is not something that SC EastEu B includes in value argumentation. Service and technology penetration, however, are regulatory demands that are taken into account in the value argumentation. SC EastEu B exemplified by saying that a typical technical requirement can for instance be to

provide a minimum level of service for all cities with a population with more than 10 000 people. In these areas, SC EastEu B said that *“we might be more expensive in terms of one equipment node, but in terms of overall solution to meet some certain level of service requirements, we might offer a lower TCO”*, which is a strategy employed by the sales force in the region. SC EastEu B explains that in some cases, regulatory requirements are the heart of the business case, while in others the requirements are not as important.

Value argumentation presentation

In region EastEu, the value argumentation presentation proposed to customer B (VAP EastEu B) concerned a new technical solution. The presentation was intended to illustrate the reason why it would be better for the customer to switch to the new solution from their traditional solution. VAP EastEu B was presented as a request of information from the customer, and thus classified as in the RFI-phase in the sales cycle. As the technical solution is a premium solution compared to the traditional one, the presentation had a strong focus on illustrating the financial value of the solution's benefits. SC EastEu B suggests that in order to show these benefits, the calculation should be simple. *“Every complicated calculation with huge number of assumptions is less credible than simple ones, based on concrete facts”*. The presentation included the necessary CAPEX and showed OPEX savings the solution would generate compared to the current traditional solution, and also illustrated additional value in increased revenue per average end-user. The model also stressed that the solution would improve customer retention, which was translated into a monetary number as well.

The business case was developed by the sales consultant in the region jointly with the back-end function of GlobIT. The commercial management was consulted to decide appropriate price levels for the solution. SC EastEu B explained that commercial management is part of any proposal, as it is that department's responsibility to make sales profitable. In turn, these price levels had to be approved by sales management. The sales consultant was working in tight collaboration with the customer, from which SC EastEu B received specific customer information. The business case was not only developed by GlobIT, but was developed together with the customer's technical department. This department later promoted the business case internally at the customer. For this particular case, no regulatory aspects were applicable.

4.7 Case B: One customer - Two markets

4.7.1 Background to customer C

Company C is one of the largest actors on the global market in their industry. Their HQ is located in Europe but they have a global presence. The core markets for customer C are Europe and Latin America. They have approximately twice as many customers in Latin America as in Europe, but the revenue is split fairly even between the regions. The growth and profitability differs substantially between different regions in the

industry, as customer C is to a large extent exposed to markets with declining growth and low profitability they are willing to give up market shares in some regions in order to ensure maintained profit margins (BMI LatAm).

4.7.2 Customer and Analyst view

Information from annual reports of customer C

Customer C is a world leading company within its industry. To maintain its position customer C recently reorganized its organizational structure by dividing its two main markets Europe and Latin America into two different business units which came as a natural response to that Latin America recently became the largest revenue source for customer C when it surpassed Europe in terms of revenue. The aim of the new organizational structure is to capture growth opportunities and to benefit from the large customer base in each region. Furthermore, customer C wants to anchor their position as a global actor. The strategy for customer C is to capture growth and to attract high-value customers.

The main variable used by the management in their strategic decisions is average revenue per user, retention and customer acquisition costs and increases in market shares and customer base. In the financial highlights for the year customer C emphasizes achieved and expected growth in their customer base and OIBDA (operating income before depreciation and amortization). Customer C managed to reach a positive growth in their customer base for FY2012 in line with expectations mostly driven by the growth in Latin America. Regardless of the low demand in the European markets, customer C achieved a growth in OIBDA during FY2012 as well (AR Customer C).

Analyst coverage

The expected growth in revenue for customer A in region WestEu is according to analysts negative for the next couple of years, while it is positive in region LatAm. Thus, the growth differs substantially between different regions in the industry, as customer C to a large extent is exposed to markets with declining growth and low profitability they are willing to give up market shares in some regions in order to ensure maintained profit margins. The financial reporting of customer C is heavily impacted by foreign exchange changes as a substantial part of the total revenue comes from non-Euro denominated currencies. As a consequence, the volatility on the financial markets has had a significant impact on the performance of customer C. Due to the poor growth in Europe and the foreign exchange losses the EV/EBITDA of customer C is below the industry average but there is consensus amongst analysts that there are signs of improvement (Analyst Report Customer C).

4.7.3 Background to Region LatAm

The LatAm market has an annual growth of 4% and free trade agreements with a wide number of countries. The current middle class is growing at a fast rate while the production costs are expected to remain low for several years to come. This has made LatAm an attractive market for multinational companies. Customer C has a market share of approximately 20% in region LatAm. The revenue from region LatAm makes up approximately 2% of customer C's total revenue. Furthermore, region LatAm is in relation to the other markets where customer C are present characterized by a higher average EBITDA margin for the industry and less rigorous regulation (GlobIT IM LatAm, BMI LatAm).

The regulator in region LatAm received according to RGI a fairly low score indicating that the political transparency and the regulatory governance in the region for the IT industry is low. One of the regulator's responsibilities is to govern price levels, but its focus has rather been on restricting foreign investments in the industry. This has hindered developments and competition in the market, keeping prices high and unaffordable for many people.

4.7.4 GlobIT and customer C in region LatAm

Information gathering

There is not a systematic procedure to gather information regarding value argumentation in LatAm. The input comes from many different sources according to SC LatAm *"You have to download the information from the intranet, from external sources, and use your experience and your contacts. There is no recipe on how to collect information"*. Thus the input collected will vary from person to person. The product catalogue is used in order to organize the way the customers are approached in LatAm (SC LatAm). It is rather used as a complementary source of information than as the main source. According to SC LatAm one of the main sources of information is customer feedback *"the main driver for us, or at least for me because I cannot speak for everyone from LatAm, is customer feedback"*. The customer feed-back is used as a basis for analysis of customer C and to create a strategy for value argumentation towards customer C (ibid). Further, an internal developed tool that is used to map the status of customer C is used as a complementary source to the product catalogue and the customer feed-back.

The customer relationship and its implications

As customer C is a global customer with a global contract, the local sales force in LatAm is engaged in recurring business and upselling towards customer C. Thus, the focus is on the later parts of the sale cycle where the competition is less intense (SC LatAm). However, for new business opportunities GlobIT has experienced a fierce competition where the competitors are creating value argumentation in different manners to gain market shares and does *"no matter what needs to be done in order to get the contract"* (ibid).

GlobIT has a close relationship with customer C. Since the sale process in LatAm is based on the global contract with customer C the local sale force can refer to that contract when approaching customer C in LatAm *“the global agreement facilitates the negotiation and reduce the possibility that the customer says "I do not agree with this" (SC LatAm). The close relationship GlobIT has with customer C has enabled them to influence the preferences of customer C “It is easier for account LatAm to go out to the customers and sell, because our customer is already aligned with Glob IT” (SC LatAm). For current contracts there are prizes prices for the products and the software that should be applied to all regions. Thus, the local sales force in LatAm can refer back to this contract in sales engagements to convince customer C about their solutions. Further, the global contract reduces the ability for the customer to say no to the solutions of GlobIT as a price has already been agreed upon and it also reduces the need for adaptation of the value argumentation material that is produced centrally at GlobIT.*

Many different people are involved in the sales process both within Glob IT and in the customer organization. The main dialogue partner for SC LatAm is the engineering department at customer LatAm. SC LatAm also engages with the CTO or more financial focused people as the procurement department. However, as the main focus is on showing the technical benefits of the products and software’s by the sales force in LatAm, the engineering department has become a natural dialogue partner.

Nature of quantification

According to SC LatAm financial quantification with arguments regarding CAPEX and OPEX can be included in the value argumentation but is not emphasized to the same extent as technical aspects. In order to be able to quantify the benefits to customer C, even just in technical terms, a thorough understanding of customer C is needed. In the sales force in LatAm a dimensioning tool is used to check the status of customer C and to identify selling opportunities *“the dimension tools is used to see what the actual needs are for the customer from a technical point of view” (SC LatAm). Once a thorough understanding of the customer has been obtained, it can be used to highlight improvement areas for the customer. Rather than merely promoting the benefits of the solutions of GlobIT, SC LatAm addresses current shortcomings of the customer “ we got information from your operations and noticed that you are having some failures in the performance of this specific KPI” (ibid). This kind of approach can be used to catch the interest of the customer as it in numbers clearly demonstrates areas where customer C needs to improve. It also makes it hard for customer C to question the validity of the argumentation as it is derived from their own performance (ibid).*

Value argumentation presentation

The value argumentation presentation analysed in region LatAm (VAP LatAm) demonstrates the functionalities and the technical benefits of the solution to the customer. It was presented to the CTO of customer C in an RFQ during the latter part of the presale phase. VAP LatAm was developed by a group of SCs specialized in the field of the solution. During the development of the model commercial management was consulted for price information regarding the components of the solution. The sales manager in region LatAm was consulted in the development of VAP LatAm.

The presentation constitutes of two parts, a generic section about the characteristics and benefits of the solution, and a more detailed section adapted to customer C. VAP LatAm concentrates on highlighting the technical benefits of the solution. According to SC LatAm the quantification is technical since the benefits SC LatAm is familiar with are technical rather than financial related. The technical benefits are demonstrated through benchmarks where the technical performance of the solution is compared to the technical performance of competitors of GlobIT. On overall, VAP LatAm is a generic presentation containing little adaptation to customer C and in particular to region LatAm.

4.7.5 Background to Region WestEu

Region WestEu is a mature market characterized by slow growth. Customer C has a market share of approximately 25% in region WestEu. The revenue from region WestEu makes up approximately 10% of customer C's total revenue. The regulator in region WestEu received one of the highest rankings in the RGI index, indicating that the political transparency and the regulatory governance in the region for the IT industry is high. The main concern of the regulator in region WestEu is to pursue the interests of the citizens in the region. Its principal duties are to maintain high quality and ensure a wide range of services. One initiative that was taken in 2013 was to cut prices of 10% every year for the three next years. The main argument is that it will help business and academic institutions, and also lead to lower prices for end-users. Another initiative was to permit end-users to terminate a contract without penalty with a company if that company introduce a price rise during the contract period. The regulator argues that the changes will entail more flexibility in pricing the services and promotes benefits for the end-user (BMI WestEu).

4.7.6 GlobIT and customer C in region WestEu

Information gathering

The main input for creating value argumentation material in WestEu is the product catalogue. It is used on a daily basis to keep the local sales force up to date (SC WestEu). Further, it is used to support roadmap meetings that are taking place on a regular basis and treats any new products launched by GlobIT. The

product catalogue is a good starting point when creating value argumentation material as it contains the technical characteristics of the products and the value argumentation in WestEu is derived from technical value argumentation (SC WestEu). A complementary source to the product catalogue used in WestEu is a source called the customer product information which contains compiled information regarding the customers of GlobIT that is produced by GlobIT (SC WestEu). The information provides the sales force in WestEu with technical details regarding customer C.

The customer relationship and its implications

GlobIT won a local contract last year with customer C with duration of several years. The RFQ came quite unexpected for the sales force in WestEu who were only given notice of the upcoming RFQ a few weeks in advance. Having shorter notice of an upcoming RFQ reduces the potential to influence the customer and the content of the RFQ *“last time we had 18 a months’ notice and in that situation we were able to influence a great deal the content of the RFQ in our favour. This time, we got very little notice and it was very short time-scales in terms of replying and it was very prescriptive in terms of what they wanted”* (SC WestEu). Despite the short notice, GlobIT managed to win a significant market share in the networks of customer C. A key factor to winning the contract was the trust that the customer had towards GlobIT, they knew from experience that GlobIT would deliver the solution in time and that the solution would have higher quality than that of the competitors as GlobIT was a supplier to customer C prior to the RFQ (SC WestEu). Another key factor was the ranking that GlobIT had received from customer C from the global selling process that was taking place simultaneously to the local selling process in WestEu. In that ranking potential suppliers are mainly ranked based on the technical specifications of their solutions. During the selling process customer C tried to position them so they could compare the prices from the vendors on an equal basis. However, in order to make the offerings of the vendors comparable, several iterations are typically needed *“we had about 7-8 different iterations of our offer and in November last year we signed a contract”* (SC WestEu).

The customer interface in WestEu between Glob IT and customer IT is not restricted to several actors. Most actors have natural dialogue partners *“technical parts of the sale force talk to the technical teams whereas the commercial part of the sales force interacts with the procurement department”* (SC WestEu). During the upselling part of the sale cycle the local sales force in WestEu starts by approaching the lower levels at customer T and then works their way up. According to SC WestEu a natural explanation for this methodology is *“at a lower level you deal more with technical and less with the financial benefit and as you go up it probably tilts the other way”*.

Nature of quantification

The sales force in WestEu focuses in their value argumentation on stating the benefits of the solutions they are selling. There is no structured approach to how to illustrate the benefits and whether the benefits are quantified or not will depend on the situation *“we will list the benefits but will not necessarily quantify them. Whether quantification is possible or not depends to some extent on the customer. I can understand that depending on the customers status and configuration, we may not be able to guarantee any quantified numbers, but we could at least give a typical range of what would be expected”* (SC WestEu). When value argumentation is quantified it is initially so in technical terms (SC WestEu). The local sales force in WestEu compares the technical characteristics of their solutions to those of the competitors of GlobIT. Technical quantification can then be used to create financial quantification *“Once you have got the technical quantification then it is relatively straightforward to convert that into a financial benefit but you need that technical validation to underpin any commercial benefit”* (SC WestEu).

Value argumentation presentation

The value argumentation presentation analyzed in region WestEu (VAP WestEu) shows the technical benefits from a solution offered by GlobIT to customer C. It was developed by a team constituting of sales consultants, a KAM and a program personnel and presented to the customer during the RFQ phase of the sales cycle.

VAP WestEu constitutes of three parts. The first part of the presentation shows the technical features of the solution and through two scenarios demonstrates how it works. It also highlights a few general benefits of the solution for the customer and for the end user. The second part of the presentation contains an example of how the solution works in another region to show that there is a best practice for implementing and using the solution that customer C would benefit from if they were to buy the solution. The last part of VAP WestEu builds on the relationship GlobIT has with customer C. It highlights previous successful co-operations and shows how well a further co-operation would suit customer C. A short implementation plan is also included in VAP WestEu.

4.8 Case C: Mature Market vs. Developing Market

4.8.1 Background to Region Mature Market (MM) and customer D

Region MM is characterised as one of the most developed regions in the world and has a very high utilization rate for the solutions that GlobIT provides. The region is classified as a mature market and this implies that growth opportunities are limited for customers, driving them to develop strategies to increase revenue from existing end-users, to increase retention rate, and to try to take market share from competitors. The

customers are increasingly experiencing pressure on revenue sources from traditional services from the regulator, but also from substitute service (BMI MM).

The regulator in region MM received the third highest ranking in the RGI index, indicating that the political transparency and the regulatory governance in the region for the IT industry is high. Their role in the region is to ensure that the industry market is functioning well and that healthy competition is promoted. In 2012, the regulator proclaimed that some prices on traditional services would be lowered. In 2013, the regulator announces that prices would fall even lower, and the regulator expects that retail prices of this service will fall as a result. One of the customers in the region consulted the regulator and stated that it had no intention to lower its prices on these services, but ultimately it was forced to follow the directives (BMI MM).

Customer D is a joint venture (JV) and as a result, it comprises the interest of more than one party, namely those of two parent companies. The parent companies also share hardware equipment in the market. The JV has no end-consumers and is first and foremost driven by the specific mandate it has been given from the two parties. This mandate has made the JV, in essence, a procurement organization. The customer is also located in a strategically important market. *“We do not want to lose customers this market. Even though it can be though to deal with them, we have to take good care of that relationship”* (SC MM). The statement illustrates that the customer is strategically important.

4.8.2 Customer and Analyst view

Information from annual reports of both the parent companies

The JV provides no public information, and thus we choose to look at the parent companies’ annual reports. In addition, analyst reports of the sector and of the specific parent companies have been reviewed.

One of the parent company’s vision and strategy is to be the leading operator on the market, to offer the best customer experience, to have high-quality services, and to be cost efficient. In the annual report, the company is described as a pioneer in the industry a position that has been achieved by being innovative and dependable. In the highlights of the year-section, the financial data illustrated graphically is the development of net sales and EBITDA-margin. From the CEO statement, the challenges ahead are how to address the continuously increasing demand for services, whilst being faced with price pressure. The CEO illustrates that data traffic has increased by 80%, but revenues from this service has only increased 20%. Thus, a main challenge ahead was suggested to be to develop price models that better capture the end-users’ current and future behaviour.

The second parent company's vision is to provide the best customer experience in everything the company does. From the annual report, one can find that the mission of the company is to be a flexible competitor and always provide solutions according to the end-users' preferences, but to a lower price. From the highlights of the year, three financial aspects are highlighted in particular: Net sales, EBITDA, and proposed dividends. The CEO describes that the company will transition from a traditional industry model into a model that addresses the new service in the changing industry climate. Up until now, one pricing model has been used to make the service popular. That tactic was suggested to jeopardize profitability, and the new challenge now is to choose a suitable price model for that service. The CEO stresses that it is those players who successfully can navigate in the new landscape that will be the winners of tomorrow (AR parent company X, AR parent company Y).

Analyst coverage

The customers both have a focus to create pricing models that better captures value from the new service. Analysts are not as convinced in this effort. One report covering the entire region acknowledges that new business models can capture value better than current models do today. The report does, however, not suggest that the new revenues will fully compensate the decline in the traditional services in the industry.

The first customer has shown a solid result according to an analyst report, both in terms of revenue and EBITDA. The report stresses that the company's main problem is related to growth, and suggest that the company may have to consider more investments to enhance top-line momentum. The valuation multiple used to value the company is EV/EBITDA, which gives a number that is on a premium to the industry.

The analyst report regarding the second customer claims that EBITDA trends are "exceptionally weak" and revenues were also under expectations. The report suggest that the EBITDA margin is low as a consequence of the transition from the traditional model to a model that better captures value from the new service. Although this recognition is made, the report suggests that the near-term future is uncertain in regards if increased revenues actually can be realized. The valuation of the company is also used with the EV/EBITDA multiple, which gives a number in line with the industry (Analyst Report parent company X, Analyst Report parent company Y).

4.8.3 GlobIT and customer D

Information gathering

Two sources that are used for information by the local sales force in region MM is the product catalogue and the technical sales support. These sources are mainly used for technical material, and are thus not a primary source of financial value argumentation material. *"I do not use the product catalogue to collect sales material; I use it to get a technical understanding. It contains some business cases, but those ones have not been relevant for us"* (SC MM). Further,

“To gather information we mainly use the state administrative authority, but we also use an American consultancy firm that provides general material (SC MM)”, annual reports are also used as input, a source that the SC MM motivates that the public information gives you a hint of what areas are important for the customer – currently and in the future.

The customer relationship and its implications

GlobIT and the customer D have had a long relationship, and thus the sales are mainly recurring business. GlobIT is the sole supplier on the market, and therefore benchmarking against competitors is not something SC MM does. The SC MM described that a common process begins with GlobIT presenting new products to the customer, which can be both the parent companies and the JV. Afterwards, the customer responds to those products it found interesting and that is when GlobIT initiates the actual selling process.

The relationship allows for access to customer data, which GlobIT uses in its quantification of benefits in its value argumentation. The relationship is also unique in regards to geographical distance. *“The short geographical distance we have between our HQ and that of the customer facilitates our communication and makes it easier to exchange information (SC MM)”*. Further, GlobIT and one of the parent companies of the JV has a very good relationship, and this naturally affects the negotiation space that GlobIT has with the JV. *“We cannot be too harsh in our discussions, because if we are, the customer account will come back to us and create a commotion” (SC MM)*. The JV has a more commercial oriented approach, and thus the parent companies are invited into the discussion when GlobIT needs to discuss technical details.

“Our customer is classified as a harvest customer as they do not grow or expand their market to any big extent” (SC MM). The importance of using value argumentation in the customer interface is dependent according to SC MM dependent on the growth phase of the customer *“at some point, the growth stagnates and it becomes more important to keep high margins as in region MM. In those cases value argumentation needs to receive more focus”*. As a consequence of the mature phase of customer D, they have their hardware equipment in place and are therefore mainly procuring software at the moment. It is more difficult to convincingly set prices for software than for hardware *“I believe the technicians often want our products, but the products might not generate enough value given the price, so they do not buy them” (ibid)*. Naturally, all software is not equally hard to sell. Some software demands a lot of argumentation, whereas other software is more easily sold *“we know that some things are more easily sold because it affects the KPIs that the decision maker at the customer is evaluated on” (ibid)*.

The relationship with the JV and the parent companies puts great demand on the adaptation of material with concern to what is to be included and to whom the material is to be presented. The big difference between the JV and the parent companies is that that the JV is commercially oriented while the technical competence

is located in the parent companies. It is reasonable to think that the JV would be more inclined to listen to the financial translation of technical benefits, but the contrary seems to be the case. *“They [JV] do not like when we translate it [propositions] into money, because that is often a drawback for them”* (SC MM). With drawback, SC MM suggests that if the JV would discuss the value in monetary terms, it would be obvious that the propositions contain much value. The mandate the JV has, however, is to minimize cost and to illustrate the potential value puts them in an unfavourable bargaining position.

The customer is essentially a procurement organization and has a mandate to govern one technical function. If the value argumentation is not clearly related to that technical function, then the JV will not be interested in listening. As a result, the sales force of GlobIT at times tries to circumvent the JV and direct the value argumentation towards the parent companies. *“As we have much business with of one of the parent companies it can sometimes be more efficient to approach them first”* (SC MM). In addition, GlobIT meets all three parties in most meetings, that is, representatives from the JV and from both parent companies. The sales force has to persuade the parent companies’ technicians in order to get approval from the C-suite; and when addressing the C-suite of the customer, SC MM suggest that the material is made less technically oriented, clearly illustrating the benefits of a solution. However, SC MM suggests that the CTO of the customer used to have more power. *“If he said that this is how it is done, then you followed that advice. Today, even he has to prove why a certain method is the correct method”*.

Nature of quantification

SC MM stresses that it is much easier to quantify improvement than it is to quantify functionality. The translation of improved software performance into financial numbers is often not done. When it is quantified, it is at those times when the software carries significant value, or at times when the customer claims that the software is too expensive. Further, no attempt is made to describe how buying a solution will impact the financial benchmarks that the customer will be evaluated on by the capital market. SC MM explains that the division does not have the specific information to make those judgments.

The technical quantification of software is done regularly. GlobIT has access to customer data, which is utilized in the technical quantifications. *“We can tailor our calculations to their data, and when we have done these calculations we have received very good results”*. Quantifying functionality is harder though. *“If you save three seconds in your solutions by switching to us, how do you quantify that value?”* In addition, the customer has completely different information and perception of why one feature may be important, making the argumentation even harder. The argumentation related to functionality therefore centre around the value that has been proposed by HQ.

Value Argumentation Presentation

The value argumentation presentation used in region MM (VAP MM) demonstrates the potential benefits that several features can produce for the customer. The customer wanted to know the value of the features to understand why the proposed price was appropriate. This kind of sales initiative is classified as recurring business as GlobIT releases features semi-annually and the customer evaluates these and decides which ones are of interest, after which GlobIT initiates the sale.

The SC MM explained that the presentation for the sale was developed locally, but input was used from other divisions in GlobIT. Technical sales support conduct analyses of the customer's services to understand how the services work and where a feature can provide benefits. Sales management was not consulted in the development of VAP MM, but was advised for feedback on the presentation in order to understand which benefits were suitable to present to the customer. Product management gave feedback on technical aspects but also on which benefits were important for the customer. Information from the state administrative authority was also used as an input to adapt the calculations to the customer's conditions.

Different business cases for the features exist on the product catalogue. In these, benefits are calculated both in technical and financial terms. The financial impact in these business cases is translated into CAPEX, OPEX, and Revenue figures. The potential benefits from the different features in the VAP MM, however, were only quantified in technical terms, not financial. According to SC MM, the benefits were quantified technically because the presentation was directed towards the parent companies' technicians. The technicians are interested in the technical value and thus leave the financial quantification to the JV. Regulatory influences was something that was not considered according to SC MM – neither in terms of price pressures from regulators nor in terms of potential usage to leverage technical aspects that meet specific regulatory demands.

4.8.4 Background to Region Developing Market (DM) and customer E

The growth in the market is strong, but competitive and regulatory pressure has brought prices down for services in the industry. The service utilization in the market is less than 70% and the middle class is growing in the region, opening up for much growth opportunities for companies in the region (BMI DM).

Customer E is the dominating company in region DM and is present in over 20 markets. It experience difficulties with maintaining their service quality, and have yet to solve the problem although investments have been made. SC DM explained that the regional company answer to the group company, which decides the regional budgets and financial targets, such as expectations of return on investments. Some years ago, the regional company was growing rapidly and at that time the customer was more easily convinced to invest.

Today, the customer is more aware of its investments and the owners of the company are stressing the importance of growth, but they are also keeping an increasing pressure on margins for the region.

The regulator in region DM received a fairly low score in the RGI index for their political transparency but a fairly high score in the RGI index for their regulatory governance. Their responsibility is to create an enabling environment for competition and to ensure that the services in the industry are efficient throughout the region. The regulator has encouraged both local and foreign investments in the sector and a recent initiative aims to reduce prices customers currently can charge. The ambition of the initiative is to position all current customers on the same price level in a couple of years for a traditional service, and new entrants are offered preferential price levels to encourage new investments. Although the regulator's focus is to reduce prices in the sector, in recent times, customer E was ordered by the regulator to increase prices on certain services, as its prices were significantly lower than other competitors. They were also fined for having a poor-quality level of their services (BMI DM).

4.8.5 Customer and Analyst view

Information from annual reports of customer E

Customer E's strategy is to ensure that a leadership position in emerging markets is maintained. They acknowledge the need to move dependency of revenue from traditional services to capture revenue from the new service that is rapidly growing in the industry. The main financial KPIs that are highlighted in the annual report are revenue, EBITDA and CAPEX, and growth of the customer base continues to be a main goal for the company. Sustainable value creation for stakeholders is mentioned as fundamental to the strategies and to make best usage of cash and CAPEX programs. The main strategies for the future are to organically grow revenue and EBITDA and to continue to increase the size of the customer base.

The company has currently taken an initiative to transform its operating model. The market in the region is increasingly said to become more competitive and regulators put more pressure on companies, which have a negative effect on revenues. These changes produced a need for a new operating model in order for the company to maintain profitability. The new operating model will focus on standardizing processes, leading to a transformation of supply chain and procurement processes.

A main challenge during the year was to address deteriorating quality of services. The regulator reduced the price level of the services in the region, which led to a significant increase in usage of these services. The increase was above the anticipated increase, which led to a poorer quality of the services, which in turn led to

regulatory penalties for the company. This incident made the company commit to additional investment in the region in the upcoming future in order to address the increased usage of the services (AR Customer E).

Analyst coverage

The analyst report indicates that average revenue from end-users has declined while the new service has grown, which suggest that the competitive price pressure is intensifying. The company is valued using EV/EBITDA multiple and the identified risks in the region are related to competitive and regulatory actions. The report highlights that the company has been keen to illustrate all efforts taken to meet the regulatory requirements and how the company intends to restore the deteriorating quality of services. The financial indicators highlighted in the report are revenue change from services and net additions in the customer base (Analyst Report Customer E).

4.8.6 GlobIT and customer E

Information gathering

“The product catalogue serves as a reference, you educate yourself about new products and updates. After a while, you know what is there and what the benefits are” (SC DM). SC DM acknowledges that the product catalogue contains value argumentation material. Nonetheless, the catalogue is not mainly used as a source for specific value argumentation material that is to be directly used in the customer interfaces, but rather used as a reference source for technical specifications and technical updates.

Public information is used through an external party that provides the information. This information is often in the form of a market map, including financial data of the customer and analyst opinions of the customer. In addition, benchmark against competitors is provided in these market maps. The information is used to get an in-depth understanding of the customer’s position in the market (SC DM) and with this understanding, GlobIT works together with the customer to address what actually is important for the customer, for instance increasing revenue or reducing OPEX.

The customer relationship and its implications

SC DM stresses the value of having a prior relationship with the customer. *“After a while, you know one another and you know what works and what doesn’t”*. Further, by establishing trust through a long relationship access to customer data becomes easier to obtain. This access facilitates the selling of features, as a convincing quantification of features requires more customer specific information. The quantification of features is more complex than that of hardware, and SC DM explains that sales support is thus consulted in order to produce a credible quantification for some features. The relationship between supplier and customer carries value, but

you cannot depend exclusively on it. *“In the end, you have to do your homework. You have to know the customer, the market, the problems the customer is facing and the opportunities in the market”.*

Previously, the technology division was the main decision maker in the market, but that is changing. SC DM suggests that the CTO can experience one problem and suggest a solution, but ultimately it is the marketing department- that will sell and market the product. *“With the introduction of numerous new technologies in the market, the chief marketing operator and the market side have become much more active”.* As a consequence of this change, the value argumentation needs to be adapted to the recipient’s area of expertise.

Standpoint to regulatory environment

Customer E is receiving much attention and feedback from the regulator in the region. SC DM suggested that this is not unusual as the customer is the industry leader. The regulator often conducts tests to verify the quality of the services. SC DM explains that GlobIT have assisted in this process by verifying the tests done by the regulator and compiling reports that the customer have used to argue for its case against the regulator.

Nature of quantification

SC DM acknowledges that most benefits can be quantified – either in monetary or technical terms. The quantification in financial terms is vital as SC DM finds it hard to argue for value without a quantified price, because the price is what the customer experience. The ambition is to *“put a price on the offered solution, or present a parameter that can be translated into money”.* Nonetheless, SC DM argues that the financial side is not where GlobIT has its competence. *“We are very competent in talking technology. For us, it is a decision of either staying in a comfort zone, or going into an area where we are not as comfortable”.* Further, the customer is a multinational customer that has a global price list with GlobIT. *“If you were to buy a configuration in one country, then it would cost the same in another country the customer operates in”.*

Value argumentation presentation

The value argumentation presentation used in region DM (VAP DM) concerns the introduction of a new technology in the customer’s region. SC DM highlighted that VAP DM was held for more than one audience; it was held for the group company, the regional CTO organization, and the regional CMO organization. VAP DM was introduced in the pre-RFI phase, which implies that it was introduced early in the sales cycle. The purpose of the presentation was to help the customer understand what markets would be suitable for this particular technology.

The business case includes two parts: A TCO analysis and a business case analysis concerning revenue impacts. The ambition was to translate the advantages of the technology into money terms, and to adapt the calculations to the customer's specific conditions using information from the global price list for prices and from the regional account for local specific information. The TCO model was calculated over a period of 5 years and is discounted to a net present value. The business case is used to illustrate that CAPEX expenditures does not constitute the majority of TCO, highlighting that acquisition price is not the only determining factor. The business case includes a benchmark analysis, illustrating the potential increase in OPEX expenditures from a competition solution, and also highlighting the consequences this would have on EBTIDA and cash flows.

In the business case, revenue variations are illustrated, relying on assumptions that are encouraged to be shared and challenged if not accurate. The baseline business case with the technology is presented as a net present value; internal rate of return; payback year, and also illustrated with impact on free cash flow, EBITDA, and net profit. A sensitivity analysis is also presented to show the value in financial terms of a specific functionality of the technology. Although a lot of customer specific information was used, concern for the regulator was not taken into consideration in this particular presentation. Commercial management from GlobIT developed the presentation and input for the presentation has come from the product catalogue.

5 Analysis

5.1 How is a calculative device developed as a global practice?

It has been suggested that managers today focus on life cycle cost of products instead of acquisition price (e.g., Zachariassen & Stentoft, 2010), which is aligned with our empirical findings. We found that the customers in the industry use the total cost of ownership (TCO) model as a vendor selection tool. The customer's choice of TCO has major implications for the creation of a calculative device. Storbacka & Nenonen (2011) claim that market actors need to share a common language in exchange practices, and SC EastEu B stated that *"Whatever solution you propose, all will end up in procurement"*. The customers' use of TCO will thus partly outline the acceptable language in the market. This has implications for how a vendor can define a calculative device. Callon & Muniesa (2005) describes that the creators of value argumentation also decide the rules that govern the calculative device. However, as the accepted language in the industry is TCO, GlobIT has to include that in the creation of the device, illustrated by CM1 who claimed, *"Since customers have a strong cost focus and they use TCO, we have to be in that dialogue as well"*. The TCO thus forms the foundation of the calculative device.

A common method to incorporate new values on the market is that one actor in the exchange includes an additional dimension to the existing ways exchanges are carried out (Kjellberg & Helgesson, 2010). This is clearly aligned with the practices within GlobIT. The philosophy of value creation promoted from back-end has clear resemblance to the concept of total value of ownership (TVO), which Wouters, Anderson, & Wynstra (2005) describes as an extension of TCO that involves any additional performance advantages the customer firm gains. These additional performance advantages are in GlobIT promoted through any benefits in revenue that a product can generate. The calculative device promoted from GlobIT is thus an attempt to expand the language in the market to include an additional dimension, namely revenue impact.

The initial creation of value argumentation material is based on input from few sources. The material is highly dependent on the product owners who are involved in the early development phases of products. They are the owners of the products and also know the benefits of the products. The products are not developed in a vacuum, but GlobIT needs to ensure that a market need exist and thus, products are developed with collaboration and dialogue with selected customers. The close collaboration with customers, both from an organizational and a technical perspective, resembles what Lind & Strömsten (2006) names integrative customer relations. The products will thus be developed with the needs of specific customers, which for instance can be a strategic customer. HPM explains that *"If a big customer believes this product is important, then the probability is high that other customers find it important as well"*. The needs of the selected customer will thus impact what is included in the calculative device.

The input from the product managers is the main source for value argumentation workshops, in which employees from GlobIT identifies several key performance indicators for a product, which would imply that the technical benefits of the product is driving the value argumentation generation. This process is inward looking, utilizing the knowledge of the companies' employees rather than incorporating external information. The process resembles the critique that Roslender & Hart (2010) provided, which is that company personnel specify the information rather than originates from the customers themselves. The input from the product managers is derived from actual customer needs, but it is related to those who were involved in the collaboration of developing the product. The input is thus not necessarily representative of the needs of the entire market.

The outcome of the workshop is then used to create a pilot business case on a specific customer. Afterwards, the outcome of that business case becomes generalized and uploaded on the product catalogue as global value argumentation material according to PM1. At this stage, customer needs derived from a customer itself are taken into concern, implying that the process at this stage is not inward-looking. However, there is a risk that customer specific needs and regional context will influence the content of the global value argumentation material, which is stressed by SC East EU B who said that *“Input for a business case is very region specific, what is crucial for EastEu might not be crucial for another market”*.

In short, the process of creating a calculative device is constrained by the accepted language in the industry. In GlobIT's industry, this language is determined by the buyers' usage of TCO. By initiative of GlobIT, an additional revenue dimension is added to the calculative device used in the customer interface, making it aligned with the definition of TVO proposed by Wouters, Anderson, & Wynstra (2005). The input for the calculative device is dependent on the product owner's knowledge of the product, the knowledge of the people involved in the workshop, and the customer on which the business case was developed. Thus, the global calculative device is coloured by the context in which it is developed.

5.2 Practices: Linkages and Discrepancies

In this section of the analysis we will focus on the content of the different markets in which calculative devices has been used. The analysis will follow our analytical framework, which is an adaptation of Kjellberg & Helgesson (2006) and Callon & Muniesa (2005), as summarized in the table. All the normalising practices relate to the answers from the interviewees in the regions. The representational practices contain information from the analyst reports, annual reports, industry reports, and also interviewee answer regarding the product catalogue. The exchange practices centre on the value argumentation presentation and include clarifying answers from the interviewees.

	Case A		Case B		Case C	
Factor	Customer A	Customer B	LatAm	WestEu	DM	MM
Normalizing						
Purpose of product catalogue	Technical information / Reference	Technical information / Reference	Technical information / Reference	Technical/Value Argumentation	Technical information / Reference	Technical information / Reference
Tech vs. Fin value quantification	Technical - Heavy, Financial - Limited	Technical - Limited Financial - Heavy	Technical - Heavy, Financial - Limited	Technical - Heavy, Financial - Limited	Technical - Heavy Financial - Heavy	Technical - Heavy, Financial - Limited
Approach towards regulators	(Active)	(Active)	(Active)	Passive	(Active)	Passive
Representational						
Customer KPI in financial highlight	OIBDA Revenue Net income Operating cash flow CAPEX	Revenue EBITDA Net cash from operating activities Customer base	Revenue OIBDA Customer base CAPEX Net debt	Revenue OIBDA Customer base CAPEX Net debt	EBITDA Revenue CAPEX Customer base	Parent X: Net sales, EBITDA, Dividend
						Parent Y: Net sales, EBITDA, Dividend
Customer strategy	Reduce CAPEX Increase data usage and data quality Price models	Promote usage of data Retention of quality customers CAPEX efficiency Price models	Improve customer experience Increase customer base Promote growth	Improve customer experience Increase customer base Promote growth	Leadership position Price models Grow the customer base	Parent X: Best customer experience; Price models, High-quality services
						Parent Y: Best customer experience; Price models; Low prices
EP view of important customer KPI	Not mentioned	CAPEX, OPEX, Investment return	CAPEX and OPEX mentioned but not emphasized	Not mentioned	FCF, EBITDA, Net profit	No financial quantification
Analyst view	EV/EBITDA Regulatory environment Profitability	EV/EBITDA Regulatory risk Need for additional investments Profitability	EV/EBITDA Growth Profitability	EV/EBITDA Growth Profitability	EV/EBITDA Revenue Growth of customer base Regulatory risk	EV/EBITDA Revenue
Exchange						
Financial KPIs taken into concern	OPEX Added revenue generation Increased customer retention	CAPEX OPEX Added revenue generation Increased customer retention	No Financial KPIs	No Financial KPIs	CAPEX, OPEX, Revenue, FCF, EBITDA, Net Profit	No Financial KPIs
Tech vs. Fin value quantification	Technical - Heavy Financial - Heavy	Technical - Heavy Financial - Heavy	Technical - Heavy Financial - none	Technical - Heavy Financial - none	Technical - Heavy Financial - Heavy	Technical - Heavy Financial - none
Approach towards regulators	Passive	Passive	Passive	Passive	Passive	Passive
Agent	Technical actors, few senior managers	CTO: Network development Department	CTO	Different actors	CTO; CMO; Group company	CTO of parent companies
Exchange	RFQ	Pre-RFI	RFQ, presales	RFQ	Pre-RFI	Recurring Business
Goods	New Technology - solution	Solution	Solution	Solution	New Technology	Features

5.2.1 Normalizing

The normalizing practices set the rules and tools that actors in the market should obey, follow and use (Chakrabarti, Ramos & Henneberg, 2013; Kjellberg & Helgesson, 2006; Kjellberg & Helgesson 2007; Veal & Mouzas, 2012). They link to representational and exchange practices through *rules and tools* and *measurements & methods of interest* (Kjellberg & Helgesson 2006). Normalizing practices can be categorized as external or internal (ibid). In this section we intend to analyze three different normalizing practices of our empirics. First we will compare what the back-end considers to be important factors in value argumentation to what the local sales forces considers as important factors to investigate an internal measurement method within GlobIT. Then, we will contrast the intended purpose of the product catalogue to the actual use in order to see how GlobIT deals with internal tools. Finally we will compare the approach towards the regulatory environments in the different regions to capture how GlobIT relate to external rules.

Technical vs. Financial Quantification

An intensification of the competition has forced GlobIT to demonstrate the value they provide for their customers not just in technical but also in financial terms. To avoid being put into a commoditization category by the customer GlobIT must show the full value the solutions of GlobIT provide to their customers “*Value that is not quantifiable, people won’t pay for*” (HM). According to the value creation methodology, the value argumentation should include the financial impact on the customers’ CAPEX savings, OPEX savings, additional revenue, EBITDA margin and operating free cash flow. From our interviews with people involved in the central development of value argumentation we can confirm that CAPEX savings, OPEX savings and additional revenue arguments are key factors to value argumentation. Even though the impact on the EBITDA margin and operating free cash flow is not a common practice, there is still a strong emphasis on financial quantification from the back-end at GlobIT.

Amongst the users of value argumentation there are different views on whether value argumentation should focus on technical or financial quantification. Out of the six different users that have been interviewed only two finds it important to include financial quantification in the value argumentation. In region EastEu the norm of quantification for the local sales force working towards customer A is in technical terms rather than in financial terms since the technical side is where the customer’s competence and interest is. However, the sales force in region EastEu working towards customer B have much more of a financial focus in their value argumentation as they claim that customer B is very financially oriented. Thus, customer A and customer B are approached differently even though they operate in the same market and are of similar nature. The local sales forces working towards customer C in region LatAm and WestEu both emphasize technically oriented value argumentation. In region LatAm the main focus is on technical value argumentation, both because the

technical oriented competence of the sales force and because the main dialogue partners at customer C primarily are interested in technical aspects. In region WestEu the value argumentation is initially quantified in technical terms. EP WestEu mentions that the process to develop financial quantification once technical quantification is established is rather straightforward. The norm for the local sales force in region MM is to focus on quantifying in technical terms as well, as the technicians of the parent companies themselves are competent in translating the benefits into financial impact. In contrast, it is becoming increasingly important to quantify in financial terms in region DM. The region has been characterised by a growing industry in which the technical benefits were most important to demonstrate. However, recently the competition in the industry in region DM has increased and as a result customer E has put more focus on their margins, which has increased the importance of financial quantification. To conclude, even though the perception of whether technical or financial quantification is most important to include in value argumentation, there is an indication that technical quantification is perceived as more important this stands in contradiction to the view of the back-end in GlobIT.

Product Catalogue

The product catalogue is the formal channel for communicating qualitative and quantitative value argumentation from the back-end to the front-end at GlobIT. According to PM2 there is a shift in focus from qualitative information towards quantitative information in the product catalogue *"It is a lot of qualitative information on the product catalogue since historically that has been the main focus. However, quantitative value argumentation is receiving more and more focus"*. The fact that product program within product marketing and commercial management are increasingly uploading financially quantified information is strongly contributing to this shift. However, in the local sales forces the product catalogue is primarily used to retrieve technical information regarding the products. In region EastEu, SC EastEu B stresses that the value argumentation material in the product catalogue is very general, and thus the product catalogue is rather used as a source of technical information. SC EastEu A mentions the product catalogue as a source of information amongst others, but not as the key source on which the value argumentation is founded. The regions working towards customer C use the product catalogue for the same purposes but to different extents. In region LatAm, the product catalogue is used as a complementary source of information while the product catalogue is used on a daily basis in region WestEu. Even though the product catalogue receives more attention in region WestEu it is used in both regions working towards customer C to retrieve technical information. In both region MM and region DM, the product catalogue is mainly perceived as a reference source. The users in these regions recognise that the catalogue contains value argumentation material, but it is not mainly used for that purpose. Value argumentation material is either used from old business cases or developed locally, as in the mature market; or it is used indirectly when developing material co-jointly with back-end, as was the case in the

developing market. With indirectly, we mean that the people in the back-end of GlobIT used material that exists on the product catalogue. To conclude, we can see that there is a clear discrepancy between how the catalogue is intended to be used and how it is used in practice.

Approach towards regulators

The regulator plays an important part in the IT industry as they put price and quality pressures on the actors in the industry. From our empirics we have found that GlobIT relates differently to the regulator in different regions. The regulator receives much attention in region EastEu both towards customer A and B. An explanation is that the regulator in region EastEu has a mandate to ensure that a certain technical quality or certain coverage is provided in the market and has enforced fines on both customer A and B. Another explanation is that the regulator in region EastEu received the poorest ranking amongst the analysed regions in the RGI index indicating that they have a low political transparency and low regulatory governance. The local sales forces working towards customer C in region LatAm and region WestEu does not take the regulator into concern to the same extent. As the regulator in region LatAm received a poor rating and the regulator in region WestEu received a high rating according to RGI, the regulatory environment deviates between the two regions. For instance, the regulator in region LatAm has focused on restricting foreign direct investment rather than on governing price levels which has been a main concern for the regulator in region WestEu. Regardless of the difference in the role of the regulator between the regions, they are rarely included in the value argumentation by either of the sales forces working towards customer C. The regulator in region MM was ranked amongst the top five countries in the RGI whereas the regulator in the region DM received a fairly poor ranking and is characterized by high regulatory governance but low political transparency. Although the regulator has been pressuring prices in region MM, regulatory demands are not something that is actively included by the sales force working towards customer D in the value argumentation. The regulator in region DM has a similar focus as in region MM, but receives more attention from GlobIT. Two explanations for the difference in how the regulator was addressed in case C is that the regulator had penalized customer E in region DM and according to RGI is less transparent. To conclude, regardless of the strong position of the regulator in the market, they are merely taken into concern by GlobIT towards the customers that have been penalized by the regulator.

5.2.2 Representational

In this section we intend to analyze the representational practices. The representational practices attempt to create an aggregated image of the exchanges in the market (Kjellberg & Helgesson, 2006). The images are methods to make business models visible or to create a description of the market (Storbacka & Nenonen, 2011) and representational practices are linked to the normalizing and exchange practices through providing

descriptions and *results*. We will first analyse the practices from an internal perspective through company presentations. We also classify customer's annual reports as an internal perspective as it represents the market view of one individual actor. We will then look at the external representations of the market through the analyst reports as these should have a broader perception of the market. We will interpret the contents of these sources, and then contrast them to the perception of the market from the interviewees.

The internal presentational documents of GlobIT describe that the markets are highly driven by growth in data traffic. This has made higher quality of services a key differentiator for customers and service performance was said to be the main driver for end-user satisfaction. Further, the main challenge in the market is how to best generate revenue from the increased usage of data traffic. Also, the regulators in the market are said to become more active in influencing how customers can develop price models. As a response to the market conditions, value argumentation propositions should illustrate the financial impact on the customer's business, and the financial metrics that are stated as important for customers are: OPEX, CAPEX, Revenue, EBITDA and operating free cash flow. The illustration of financial impact is necessary in order to illustrate that GlobIT understands what drives value in the customers' businesses.

Customer strategy

In case A, both customers promote data usage, price models and CAPEX-efficiency as strategically important while customer B also promotes retention of customers. For the customer in case B, strategic focus is on growth and improving the customer experience. Growth is also a focus for customer D, while the parent companies in the mature market both promote customer experience. Focus on developing appropriate price models for data traffic and delivering customer experience or quality of services is thus strategically important for most customers.

The KPIs that the actors in the market choose to highlight are either important from an industry perspective or from the perspective of the actors' strategies. Two of the customers in the cases are highlighting OIBDA-margins in their key financial highlights of the year, while the other three highlights EBITDA-margins. In all cases these metrics and revenue are highlighted as important. Cash flows are important in case A, while in case B and C it is not mentioned in the financial highlights. CAPEX-focus is mentioned either as strategically important or as a KPI in the financial highlights in all cases besides in the mature market in case C, in which the concern is not explicitly stated. The joint venture was, however, formed for better CAPEX-efficiency, which implies that the parent companies are focusing on costs as well. Thus, the analysis indicates that customers share a focus on developing price models for data traffic and providing better customer experience. Meanwhile, all customers are mentioning CAPEX-efficiency as strategically important and are all indicating their annual performance through either EBITDA or OIBDA.

Analyst view

The analyst view is in consensus on what metric to evaluate the customers: EV/EBITDA is used throughout all cases. A concern in case A for both customers is the regulatory environment, which is said to be because of the uncertainty surrounding the regulatory body in the region. The regulatory perspective is also mentioned for customer C, and the report writes that the customer has been keen to illustrate all steps it has taken to meet regulatory requirements, as the customer recently had problems with the inadequate level of services. For customer C and D, the analyst reports highlights growths, this is well aligned with what the customers promote in their strategies and in their financial highlights. In the mature market, revenue is highlighted as potential problem, as the analyst is sceptical if the new price models will generate sufficient revenues. Revenue is mentioned in the developing market as well but is used as an indicator that competition is increasing rather than it should be a concern.

What is important in the market view is thus to a large extent shared by HQ of GlobIT, analysts and the customers in the industry, with some differences related to strategies and regulatory risk. Some companies promote growth while others are more focused on promoting the best customer experience in their current markets. These representational practices should therefore influence the exchange practices through the *results* of what the market perceives as important. The data from the interviews does, however, not display the same picture of the importance of financial KPIs. All cases acknowledge that financial argumentation is becoming more important, but financial metrics were not strongly emphasized in the interviews.

Perception of representational practices from the interviewees

In two regions, CAPEX and OPEX are mentioned, but the strongest financial orientation was displayed in the developing market. EP EastEu B said that 80% of the decision is financially related for customer B. Since financial KPI is not fully under the control of GlobIT, however, no commitment is made to meet specific KPIs. What GlobIT commit to is the technical KPIs that are under the control of GlobIT. EP DM suggests that it is hard to argue for value without a quantified price, because the price is what the customer experiences. EP DM does illustrate the problem with financial quantification in GlobIT by saying that “*we are very competent in talking technology. For us, it is a decision of either staying in a comfort zone, or going into an area where we are not as comfortable*”. In the mature market in case C, EP MM described that the customer did not want benefits to be quantified in monetary terms because that would put them in an unfavourable bargaining position. The emphasized problems of not quantifying financially is thus that financial KPIs are not under the control of GlobIT, people are not as competent in financial quantification as in technical quantification and the dialogue partner is not interested in listening to the arguments.

5.2.3 Exchange

The exchange practices influence the normalising and representational practices through providing *interests* and *measurements* (Kjellberg & Helgesson, 2006). These interests and measurements can be conveyed through general exchanges or related to specific exchanges, where the latter is the practices we have investigated. Chakrabarti, Ramos & Henneberg (2013) describes that the exchanges is not only a transfer of goods, but it includes social contact, information exchanges and other interactions.

Technical vs. Financial Quantification

We can see large differences in the content of the value argumentation presentations used in the customer interface. The exchange in Case A towards customer A and B, and the presentation is the developing market was very financially heavy. Both presentations used in case B, along with the presentation in the mature market had no financial quantification at all. There is thus a strong discrepancy among the cases: either heavy financial quantification in the presentation or no financial quantification at all. In all cases, the technical department or CTO were the dialogue partner, while in some cases the presentations were also displayed to the CMO or senior managers. Thus, adaptation to the actual dialogue partner cannot solely explain why the content was either financially quantified or not.

Timing of the sale cycle

The timing of the sales cycle suggests some explanation of the division between financial quantification and non-quantification. The presentations were both used in the Pre-RFI phase for customer B in case A and for customer D in case C. For Customer A, the presentation was used during the RFQ process, but this particular presentation was created because the customer requested a presentation of what a particular solution from GlobIT looks like. The customer thus wanted to better understand what GlobIT can offer, but did not request any financial quantification – that initiative was taken by GlobIT. Both presentations in case B were used during the RFQ-phase, while the presentation for customer E in case C was in the later stage in the sales cycle, namely in the recurring business-phase. For customer E, the exchange was also a response to the customer's request for an additional presentation regarding the value of the features. In this case, no financial quantification was included with the motivation that the recipient was the parent companies' technological department who is competent in translating technical benefits into financial benefits on its own. The different exchanges thus suggest that presentations used early in the sales cycle, or presentations per request from the customer, includes financial quantification while presentations later in the sales cycle are technically oriented.

Involvement of back-end

Exchange practices are not exclusive to the seller and the buyer directly involved in the exchange according to Kjellberg & Helgesson (2007), but also includes the actors who take an interest in the exchange. For this reason, we want to investigate how the back-end part of GlobIT was involved in the development of the presentations used in the customer interface.

In the instances where the back-end of GlobIT was part of developing the presentations, the presentations included financial quantification. The presentation used towards customer A was developed by the back-end, as was the presentation used for customer E in region DM. The presentation used towards customer B was co-jointly created by the back-end, the local sales force, and the customer. In contrast, the value argumentation presentations where the back-end function was involved merely by providing feed-back and input no financial quantification was included. For example, the presentation used for customer C in LatAm, input on price information and feedback from the back-end was given, but the presentation itself was developed by EPs specialized in the field of the solution and as a result contained no financial quantification. For customer C in WestEu the process was similar to the one in region LatAm, as input was used from the back-end but the development of the value argumentation presentation was done locally. The presentation that was used in the interface towards customer D also lacked financial quantification and was developed locally but with input and feedback from other departments of GlobIT. Thus, when back-end was involved in the creation process of the presentation, quantified financial argumentation was included. In the instances where back-end had a more consultative role, the presentations did not include financial quantification.

Alignment with market actors: regulators, customers, & analysts

In general, the value argumentation presentations contain limited adaption to the local context. To start with, the impact of the regulators on the customer of GlobIT that we have analysed has not been demonstrated in any of the VAPs we have analysed. Even though our empirics show that the regulator has an important role in the market as they put pressure on the customers of GlobIT they are not actively taken into concern by GlobIT in their value argumentation. Secondly, the stated strategies of the customers have not actively been taken into concern in any of the VAPs either. Both VAP EastEu A and VAP EastEu B address the CAPEX savings that could be generated for customer A and customer B which is in line with their strategies. The reason for addressing these metrics is rather based on the value creation methodology than the strategies of customer A and B. Hence, indirectly; it can be inferred that the strategies have been addressed as the metrics of the value creation methodology includes metrics that are believed to be important for the actors in the industry. Thirdly, the impact of the solution of GlobIT on the main metric which the customers of GlobIT are evaluated on by analysts, EV/EBITDA, is not demonstrated in any of the VAPs. However, the customer

is taking into concern in most of the VAPs through scenario building or business cases that show what the solution of GlobIT would look like in the setting of the customer and what technical benefits they would gain. For the VAPs presented in region EastEu and region MM the financial impact on CAPEX, OPEX and revenue is included as well. To conclude, GlobIT tailor their value argumentation to their customers by showing the technical impact of the solutions in the environment of the customer, but GlobIT are not aligned with their customers in the exchange practices when it comes to addressing their strategies, their regulatory environment and the metrics on which they are evaluated on by analysts.

5.3 How is the calculative device affected by the context in which it is used?

5.3.1 Distance between the market practices

The analysis above indicates that there appears to be a disconnection between the exchange practices and the other two practices. Kjellberg & Helgesson (2007) states that in certain settings, normalizing and representational practices can clearly be seen as separated from the exchange practices. The authors argue that the division of labor is clear in these settings: some engage in exchange, some set objective and norms, while some produce images of the market. This configuration makes the normalizing and representational practices seem external for an actor who is actually engaged in exchanges in the market. The practices thus have limited power to influence how exchanges are carried out. Although the image is not as definite in GlobIT, our empirical investigation do suggests a similar configuration.

The perception of the market is widely shared by the customers, the analysts, and the back-end of GlobIT. Developing price models for data traffic is becoming important, market actors are price conscious, and the profitability metric used in the industry is EBITDA and the closely related metric OIBDA. These images can be seen as representational practices in Kjellberg & Helgesson's (2007) terminology, and their power is that they can generate debate and induce change in organizations. The images portray a very financially oriented view to operations. The descriptions of the market dynamics are reflected in the value argumentation philosophy created by the back-end function of GlobIT. These normalizing rules and tools promoted internally from GlobIT are thus well aligned with the market demands illustrated in the representational practices.

From the answers in the interviews, the exchange practices appear to persistently be viewed as dominated by technical quantification rather than financial. When financial quantification is mentioned, the financial impact extends to CAPEX and OPEX and at rare occasions to revenue. Influence on the customer's KPI such as EBITDA is not stressed, as five out six interviewees did not mentioned the financial metric in the interviews. The customers has a focus on EBITDA, the analysts have a focus on EBITDA and the internal normalizing

rules and tools also mentions EBITDA; but these practices are not influential enough to alter the exchange practices we have investigated. In three out of six calculative devices investigated in the empirics contained financial quantifications. In these instances, back-end was involved in creating the device, and thus arguably acted as a bridge of normalizing rules and tools to the exchange practices.

Further, the value argumentation material (or rules and tools) is uploaded to the product catalogue. The catalogue should function as a channel that the sales force in the different regions can utilize for this kind of material in their customer engagements. The interviewees, however, did not describe the function of the product catalogue as such. The product catalogue is consistently described as a reference source, and is not used as a key source for value argumentation material. The perception of the product catalogue as a source for technical information further strengthens the idea that the normalizing practices are perceived as external to actual exchanges in the market.

Our empirical findings suggest that the exchange practices are more influenced by the different market elements involved in the exchange practices than by the other two practices. In the interviews, the relationship aspect was consistently highlighted as highly important in the value argumentation process. Further, in case C the findings suggest that the exchange practices are more influenced by the customer than by the local market. In region MM, technical quantification was exclusively used based on the preferences of customer D. From the interview, however, the perception of what is important in a mature market revealed another picture, as SC MM said that *“at some point, the growth stagnates and it becomes more important to keep high margins as in region MM. In those cases value argumentation needs to receive more focus”*. This implies that the content of the calculative device is determined by the actors involved in the exchange rather than by what has been signalled through representational or normalising practices. In region DM, however, financial quantification made a significant part of the value argumentation despite the high growth in the market. These findings would suggest that in GlobIT’s setting, the people engaged in the actual exchanges perceive the people that set the objectives as external to the market.

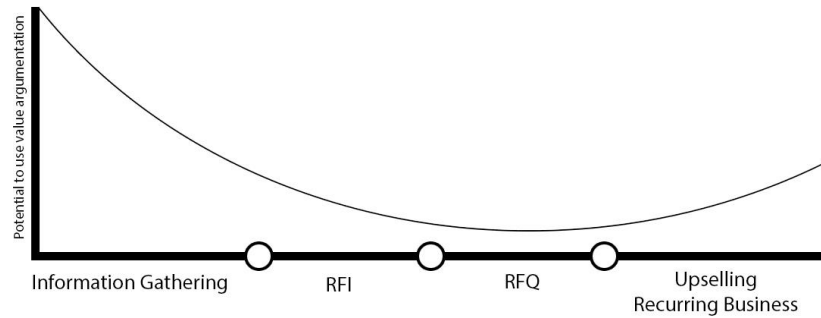
5.3.2 The timing of the sales cycle

According to Callon & Muniesa (2005) the calculative device is developed in a three step process. In the first step the constitution of the product is defined. In the second step the product is moved into a space framed by a set of rules in which it is compared to other products. Finally, a result is extracted out of the space based on the value of the products combined or on an individual basis. Each step of the process is dependent on the actors that set the rules of that step. Thus, as a vendor it is important to be part of the process when the buyer shapes the calculative device in order to be able to influence the calculative device in its favor.

Our empirical findings suggest that the potential for influence is restricted to the timing of the sales cycle. During the information gathering and RFI phase of the sales cycle the buyer defines the calculative device based on the information gathered from the vendors. Hence, during this phase of the sales cycle the vendors can influence the preferences of the customer by promoting their solutions *“You try to include as much as possible that is vendor specific without destroying the trust in the relationship. If you can do that, then half is won already”* (BM2). Both the VAPs that were used during the RFI phase contained financial quantification indicating that GlobIT attempted to influence the customer from a wider perspective than merely promoting the technical benefits. The recipient of the value argumentation during the RFI phase is the C-suite that is driven by providing value for the end consumers. During the RFQ phase of the sales cycle the customer wants to compare the potential suppliers on an equal basis through a set of requirements. These requirements include a TCO, but leave little room for introducing new value arguments as the RFQ reflects what the customer considers as important *“Providing new benefits when we provide a quotation to an RFQ is a total waste of time because the framework is already set”* (BM1). The vendors are compared based on a given set of criteria’s, *“The customer wants to drive a commoditization of the product that nullifies the values we want to claim. The ambition is to include all vendors in a bidding war in which the prices decline. Then you don’t want the TCO to be too complex”* (ibid). Further, the dialogue partner during the RFQ phase is procurement and they are incentivised to cut costs rather than to maximize value which limits their willingness to embrace value argumentation that goes beyond costs. In the upselling and recurring business phase of the sales cycle the buyer rarely switches vendor and as a consequence the winning vendor is in a good position to do additional sales (SM1). As the phase is not restricted to an already established calculative device the opportunity for the vendor to influence the buyer is larger than during the RFQ.

To conclude, the potential to influence the calculative device is high in the information gathering and the RFI phase of the sale cycle which can be linked to the second step of the three step process of Callon & Muniesa as the vendor in that step can influence the components of the calculative device. During the RFQ phase vendors are being evaluated on given set of criteria’s as thus have little room for influence. In the upselling/recurring business phase of the sales cycle the constitution and the use of the calculative device is changed leaving room for influence from the vendors. Thus, the value influential power of the calculative device is highly dependent on the timing of the sales cycle as illustrated in figure 7 on the following page.

Figure 7: Potential for value argumentation is dependent on the sales cycle



Source: Adaptation from interview data

5.4 *The implications of key-findings to the field of customer accounting*

Customer valuation techniques aims to determine which customers to value, then determine what they value, and then deliver that value (Boyce, 2000). However, the critique against customer accounting is that the techniques serve the business itself rather than the customer (Roslender & Hart, 2010), is inward looking (Guilding, 2000), and the accountant determines the values rather than the customer (Roslender & Hart, 2010). The implications of our findings can help meet the critique and expand the traditional definition of customer accounting.

TCO from the buyer's side is a supplier selection tool (E.g., Ellram, 1993) but for a vendor, the customer's TCO gives an indication of what that the customer thinks is important and how the customer makes decisions. BM1 said that *"When the RFQ is established then the customer has decided how they will procure and make decisions"*, which illustrates that the TCO can provide the vendor with information of how the customer makes decisions. Our empirical findings indicate that when the TCO is presented to the vendors, it is too late for a vendor to have an influence of the customer's perception of what is valuable, illustrated by BM1 that said *"providing new benefits when we provide a quotation to an RFQ is a total waste of time because the framework is already set"*. This creates very little room for dialogue between vendor and customer. The TCO can thus be seen as a one-way dialogue in which the customer just collects information for its own benefit.

The TCO process, however, is not a standardized method but *"every customer decides its own basis of evaluation that should be included in the TCO-calculation"* (BM1). The creator of the device shapes the content of the device. What is included will be driven by what the creator perceives as important (Callon, 2005). Value has been said to be subjective (Ravald & Grönroos, 1996) and based on individual judgment (Zeitham, 1988), implying that there is room to influence the creator of the device. Thus the calculative device that is TCO is not only an

instrument, but rather the accounting tool representing what the creator perceives as being important or valuable.

Kjellberg & Helgesson (2010) claimed that an engagement is likely to be unsuccessful if value propositions differ from value proposition that other market actors uses. Value argumentation was introduced in GlobIT to be “*a counterargument to the customer’s propensity to focus on cost reductions*” (PO) and as previously said, the value argumentation in GlobIT is aligned to the concept of TVO. As the value argumentation technique in GlobIT is based on the customer’s perception of what should be included in a calculative device, namely TCO, the customer is less likely to regard the argumentation as “*market puffery*” (Anderson, Narus, & Wouter, 2006).

Adopting the customer’s language (in this industry, TCO) as a vendor and introducing an additional dimension (as revenue impact in TVO) can thus allow for a common context around which fruitful debate can occur. TVO is created from the language in the market, incorporates customer information, and provides an additional dimension to the calculative device. But the calculative device is not only a tool that generates a number. “*They [the customers] do not accept our argumentation and our calculations without questioning them. But they take our arguments into concern and make own calculations*” (CM1). Further, the calculative device is used in the customer interface involved more than one meeting, illustrated in by EP WestEu who said that “*We had about 7-8 different iterations of our offer*”. Thus, the calculative device plays an active and central role in the social relation between buyer and seller illustrated by PM2 who said that the ambition is to get the customer to say “*Ah, now I understand. The price is higher, but now that I know how much value it has I will gladly pay the higher price*”. The calculative device of TVO thus creates a common context between the seller and the buyer and has the power to improve communication, create a common understanding and strengthen the relationship. We therefore argue that calculative devices can be designed to actively influence the value of the relationship between a vendor and customer, and this view thus adds to the traditional definition of customer accounting.

6 Concluding remarks

6.1 Conclusion

The main purpose of this research paper was to investigate how calculative devices are created and used in different settings, and further to investigate whether calculative devices can expand the traditional definition of customer accounting. Our thesis has investigated the creation process of value argumentation within a case company, GlobIT. The paper has afterwards investigated three different cases in order to understand how calculative devices have been used in different market settings. We adopted the theoretical approach of using a domain and method theory. We wanted to investigate the usage of calculative devices in social settings and thus, we investigated our domain theory (customer accounting) through the theoretical lens of a method theory (Kjellberg & Helgesson, 2007) from the field of marketing theory. This allowed us to gain a new perspective and syntax to explore our field of choice.

Firstly, we identify the process of creating a calculative device as a global practice. The process of creating value argumentation material is not standardized and is limited to a number of key people. The knowledge from the product owner is the most important input in the creation process to understand the benefits from a product. People from different departments, together with the product owner, then co-jointly create value argumentation material. The output of this workshop is afterwards tested on a customer in order to create a pilot business case, which later is generalized to a global practice. The process is limited to a small number of people and connected to some specific customers. The process is thus dependent on the knowledge of these people and contingent on the needs and context of the specific customers. The value argumentation material, or global calculative device, is thus coloured by the context in which it is developed.

Secondly, we investigated different market configurations through the conceptual framework of Kjellberg & Helgesson (2007). The investigation indicated that market practices (normalizing, representational, and exchange) are disconnected in GlobIT's operations. Through its internal normalizing practices, GlobIT is aligned with the representational practices of the market. That is, the content of the philosophy behind GlobIT's value argumentation is well aligned with what customer and analysts perceive as important in the market. After investigating our cases, we found three instances that used financial value argumentation while three instances relied on technical quantification, suggesting that the exchange practices are distant from the normalizing and representational practices. The investigation thus indicates that the content of calculative devices will vary in settings with disconnected market practices.

Thirdly, the promise of calculative devices is that they carry the potential to influence the customer's perception of how to evaluate different suppliers. In this industry, GlobIT uses TVO as an effort to influence the content of a customer's TCO. This influencing power is, however, contingent on the timing of the customer's procurement process. In the beginning of a customer's procurement process, when the customer is familiarising itself with a product or solution, there is space to influence the customer's perception of what is valuable. In the later stages of the sales cycle, when the customer wants to actually procure a product and establishes its TCO, the space to influence is limited. Thus the influential power of the calculative device is highly dependent on the timing of the customer's sales cycle.

Lastly, the ambition of this paper was to investigate how the concept of calculative devices can add to the field of customer accounting. Customer accounting has been suggested to serve the business itself rather than the customer (Roslende & Hart, 2010) and to be inward looking (Guilding, 2000). The customers in GlobIT's industry are using TCO, which arguably can be claimed to serve the business itself, as it is a tool to evaluate suppliers. The method adopted by GlobIT, however, is based on the customer's terminology (TCO) and adds an extra dimension of revenue enhancing potential, which is aligned to the theoretical definition of TVO provided by Wouters, Anderson, & Wynstra (2005). A calculative device as TVO uses the market language and creates a mutual context between vendor and customer, which can generate fruitful debate. TVO is thus not only an instrument, but a concept embedded in a social context. TVO has the power to create a common understanding, influence the perception of customers, and strengthen the relationship between vendor and supplier. We argue that TVO is an example of a calculative device that actively can influence the value of the relationship, and is thus an example of how the traditional role of customer accounting can be expanded.

6.2 Managerial implications

6.2.1 Adopt an outside-in approach to capture the true customer needs

The process of creating value argumentation material today adopts an inside-out approach in which the employees of GlobIT provide input of what is valuable for customers. The concept of using value argumentation workshops ensures that different views are incorporated into the material, but these views continue to be the views from GlobIT. The problem of having an unspecific understanding of what the customers themselves actually perceive as important is that inefficient material can potentially be created. Also, clear responsibilities of who is accountable for doing what would be beneficial for the creation process. Throughout the interviews, several people have claimed that the product owner has the responsibility to determine if aspects are beneficial only to a certain context or if the aspects are beneficial to a wide array of customers. However, the product owners are people as well with their own perception of value. Further, they are, from our understanding, engaged with a limited number of customers and will therefore likely be

influenced by the needs of these specific customers. We would therefore recommend GlobIT to adopt an outside-in approach and actually involve customers in the creation of the material. This is partly done by creating pilot business cases on selected customers in order to get “real-life” data. This is, nevertheless, a late step in the value creation development process. Inclusion of customer-specific information should be done at an earlier stage.

The intention of creating global material is to leverage scale effects and to standardize methods, but the interviewees suggested that the material potentially is too generic for them to use. The feed-back loop thus needs to be enhanced, as developing too generic value argumentation material that never is used has no purpose of its own. Through the interviews, people suggested that they re-use old business cases that they have used in prior engagements. The benefits of using old business cases are that the people know that the material has been used, to whom it has been used, and people know how it was received by the customer. Thus, including more information surrounding the material would allow people to understand if the material is relevant for them in their customer engagement.

6.2.2 Align value argumentation creation process between back-end and front-end

The normalizing and representational practices are to a large extent disconnected from the exchange practices in GlobIT, i.e. the creation of value argumentation is distanced from the actual use of the material. For instance, in the front-end technical quantification is still the norm while it is financial quantification at the back-end. Another example of the disconnection between the back-end and the front-end can be found in the relation towards the product catalogue. According to the back-end it is the main channel for value argumentation while it is rather used as a reference source by the front-end. A consequence of this misalignment between the back and the front end at GlobIT is that the development of value argumentation material becomes inefficient and the best available material may not be used in the actual customer interface.

We are aware of that GlobIT has taken recent initiatives to improve the coordination of the value argumentation process in GlobIT. Nevertheless, we would like to recommend that GlobIT standardize the value argumentation process. First of all, the orientation of the quantification needs to become unanimous in GlobIT. From our interviews, we have understood that many sales consultants quantifies in technical rather than financial terms based on previous experience. Thus a first step would be to standardize the competence amongst the personnel working with value argumentation. Secondly, the purpose of the product catalogue needs to be enforced to the sales personnel. A feed-back loop from the users of the material uploaded on the product catalogue to the creators of the material should be established to improve the content of the information. Finally, the expectancy gap between what the back-end considers as feasible and what the front-end expects from the value argumentation needs to be reduced to improve the efficiency of the value

argumentation process at GlobIT. This could be achieved by giving clear responsibilities to the people involved in the process.

6.2.3 Ensure early contact in the sales cycle

The potential to influence a buyer with value argumentation is highly dependent on the timing of the interaction. Our empirical findings suggest that buyers are more open to sophisticated value argumentation presentations in the earlier stages of the sales cycle as they have yet to define the constitution of their acquisition. As the sales cycle progress, the buyer narrows down the possible scope and reduce the opportunities for the vendor to influence the requirements of the buyer. Once a contract is won the possibility for the vendor to influence the buyer improves again.

GlobIT attempts to approach their customers during the information gathering phase of the sales cycle rather than during the evaluation phase of the sales cycle. However, from our empirical findings we have seen that this is rarely a case and as a result GlobIT too often ends up in unfavourable tendering processes where the primary point of evaluation is cost. We would therefore recommend that GlobIT ensures that they approach their current and potential customers as early as possible in the sales cycle. This would increase the influential power of the value argumentation created by GlobIT and reduce the risk for GlobIT to end up in tendering process where they will struggle against price focused competitors.

6.3 Avenues for further research

The investigation in our thesis indicates that the content of a calculative device can be influenced by different market configurations. By investigating multiple cases, we found a pattern that indicated why the adaptation occurred. We did not have the opportunity to investigate the actual causes behind the adaptation in-depth. Understanding the customer's perspective, for example, from actual interviews of the customer instead of relying of published material would generate a better understanding of the potential of TVO as a customer accounting technique. Conducting an in-depth case study on the phenomenon of influences from market configurations would thus be interesting to understand exactly what causes the adaptation of calculative devices to take place.

Further, we believe it would be interesting to explore the potential for calculative devices in the customer interface in a different industry. In GlobIT's industry, the influential power of TVO is, in our perspective, highly contingent on the fact that customers are using TCO to evaluate different suppliers. Therefore, it would be interesting to study what techniques suppliers adopt in a different industry in which customer uses a

different selection method than TCO, and to see what other techniques could add to the field of customer accounting.

We believe that the research agenda suggested above would assist in expanding the currently limited research field of customer accounting. Accountants should recognize that customers are part of determining the value of the relationship between vendor and customer –it is time to listen to their side of the story!

7 References

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7.1.1 General interviews

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Head of Product Marketing (HPM)	Physical	26 November, 2013

7.1.2 Back-End interviews

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Product Marketing 2 (PM2)	Physical	1 October, 2013
Commercial Management 2 (CM2)	Physical	2 October, 2013
Product Marketing 3 (PM3)	Physical	22 October, 2012
Sales Manager 1 (SM1)	Physical	22 October, 2013
Sales Manager 2 (SM2)	Physical	22 October, 2013
Sales Support (SS)	Physical	22 October, 2013
Product Marketing 1 (PM1)	Physical	21 November, 2013
Product Owner (PO)	Physical	26 November, 2013

7.1.3 Case interviews

Sales Cons. Mature Market (SC MM)	Physical	3 October, 2013
Sales Cons. LatAm (SC LatAm)	Physical	30 October, 2013
Sales Cons. Mature Market (SC MM)	Physical	1 November, 2013
Sales Cons. EastEu A (SC EastEu A)	Telephone	1 November, 2013
Sales Cons. Developing Market (SC DM)	Telephone	7 November, 2013
Sales Cons. WestEu (SC WestEu)	Telephone	8 November, 2013
Sales Cons. EastEu B (SC EastEu B)	Telephone	20 November, 2013

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Annual Report costumer A FY2012 – AR Customer A

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Deutsche Bank Analyst Report Q1-Q3 2013 Customer A - Analyst Report Customer A

Deutsche Bank Analyst Report Q1-Q3 2013 Customer B - Analyst Report Customer B

JP Morgan Analyst Report Q1-Q2 2013 Customer C - Analyst Report Customer C

Deutsche Bank Analyst Report Q1-Q3 2013 parent company X - Analyst parent company X

Deutsche Bank Analyst Report Q1-Q3 2013 parent company Y - Analyst parent company Y

Deutsche Bank Analyst Report Q1-Q3 2013 Customer E - Analyst Report Customer E

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Value argumentation presentation region LatAm, customer C - VAP LatAm

Value argumentation presentation region WestEu, customer C - VAP WestEu

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