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Creating time, over time

-- A study of marketing, artificial intelligence, efficiency and value creation --

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Abstract This article focuses on how artificial intelligence (AI) has potential to make marketing procurement more effective and efficient. Creating more time for marketing buyers gives them opportunities to engage in value creating strategy work benefiting the brand. Volvo Cars is used as a case study from which a qualitative discourse study is performed. The study consists of 27 interviews divided among marketing buyers, marketing managers and AI experts. With value creation theory in mind, I question marketing work to be consisting of administration in general and sourcing in particular when there is technology available to deal with such matters. The findings elucidate an information sourcing system based on AI and with emphasis on personal digital movements, market scans, internal data gathering and a chat bot. These findings will ultimately allow a bigger share of marketing work to consist of making strategic, value creating decisions. In the conclusion, I thus discuss how these findings prove AI to be necessary for marketing work efficiency and effectiveness.

Keywords: Marketing procurement; discourse theory; value creation theory; artificial intelligence; branding

Introduction

This article concerns how artificial intelligence (AI) can make marketing procurement more effective and efficient. More specifically, it deals with two matters. First, it deals with implied efficiency issues mentioned by marketing managers and marketing buyers. Second, it deals with AI as a solution to those issues. This is important, as procurement is the function through which marketing becomes operational.

Traditionally, marketing work has been recognised as a social and institutionalised activity (Cluley & Brown, 2015; Finch, Horan, & Reid, 2015; Mason, Kjellberg, & Hagberg, 2015; Roscoe, 2015). Zwick & Cayla (2011, 16) describe marketing work as the coordination of the *"institutional activities of a number of actors within the firm and without – including regulators, policy experts, technical devices, and consumers"*. The

core of marketing is, according to the same authors, that marketing work deals with knowledge and construction and dissemination thereof. This is due to how knowledge is used as the foundation for decision-making and collective understanding. (Zwick & Cayla, 2011; Laamanen, 2017; Lien, 1997).

During the last decades, marketing work has furthermore prospered to rely on technology to become operational (Finch, Horan, & Reid, 2015; Mason, Kjellberg, & Hagberg, 2015). This concerns data gathering, analysis of marketing data, different technological communication channels etcetera. The need for technological solutions originates in how marketing work is complex and time consuming (Nilssen & Helgesson, 2015). A type of technology supporting complex and time-consuming tasks is AI (Davenport & Ronananki, 2019). Miyazawa (2019, 1) defines AI to be "*the theory and development of computer systems able to perform tasks normally requiring human intelligence*". AI can be described as algorithms learning and analysing large amounts of data before formulating conclusions and actions. The amount of data to be analysed is gigantic and frequently updated. Therefore, results are always changing. Marketing wise, technology as described above is attractive due to its ability to improve efficiency and accuracy (Cluley & Brown, 2015).

In this study, Volvo Cars is used as a case study. Their investment in marketing during the last decade makes them interesting for studies concerning marketing innovation (Kurylko, 2014). The study is based on 27 qualitative interviews including marketing buyers at Volvo Cars, marketing managers at Volvo Cars and external AI experts. According to Yin (2002), a variation of types of respondents and perspectives provide both width and depth in data conducting a research study.

The purpose of marketing is to create value for a brand (Cluley & Brown, 2015). Therefore, I hope to complement the perspectives on marketing work and AI by adding the theories on value creation by Greaber (2001). Graeber discuss what value is, comparing the perspectives of sociology, economics and linguistics. By performing a discourse analysis, I hope to investigate what value is within the social setting at Volvo Cars (Fairclough & Wodak, 1997; Greaber, 2001). As I am interested in problems and solutions within the context, discourse analysis is appropriate (Edwards & Potter, 1992). More specifically, I will map the marketing buyers tasks and investigate which ones AI can replace. In the findings, an information sourcing system is discussed as the solution. Ultimately, I will settle for how marketing procurement functions need expanded opportunities for strategy work as such work creates value.

The purpose of this article is to explore and illustrate how AI can create value for marketing procurement processes through a discourse analysis. To do this, I perform a discourse analysis to find and specify common themes on marketing procurement and AI. Contributing to the understanding of how technological tools can be implemented to improve marketing work, the article remains a focus on how brands are impacted by strategic decision- making. This paper starts by explaining the characteristics of AI. After that, it is addressing the framework of Discourse Theory and Value Creation Theory. Thirdly, a summarising chart initiates the Findings- and Analysis section. That chart is explaining the optimal choice of how AI can liberate time in order to implement a growing focus on strategy. Thereafter, four discourses, empirically collected, are discussed. At last, the discussion opens up our perspectives allowing us to regard the situation from a macro perspective. Finally, different implications of this article and conclusions are added.

AI: potentials and shortfalls

To explore and illustrate how AI can create value for marketing, we must understand AI. AI is frequently discussed inspired by its fast development (Tecuci, 2012; Gallagher, 2016; Miyazawa, 2019). The definitions are however not solely concordant. Tecuci (2012, 169) explains how AI is the *"theory and practise of developing systems that exhibit the characteristics I associate with intelligence in human behaviour, such as perception, natural language processing, problem solving and planning, learning and adaptation, and acting on the environment"*. On the other hand, Miyazawa (2019, 1) define AI to be *"the theory and development of computer systems able to perform tasks normally requiring human intelligence"*. The definitions sound futuristic, but Kerr & Klonoff (2019) explain how the use of AI is already reality.

AI is developed from mathematics, linguistics, psychology, neuro-science, mechanical engineering, statistics, economics and control theory (Tecuci, 2012; Gorman, 2018). Originating in the will to create intelligent computer systems, AI was developed playing with functions of memorising and analysing information in the shape of games (Tecuci, 2012; Akerkar, 2019). Today, it is commonly accepted that human capacities to analyse alternatives fall short of computers abilities to perform the same tasks. Humans can forget things, for once. Computers can't (Tecuci, 2012). Tecuci (2012), at page 56:

> *"AI is not just a fly on the wall. It will affect every industry from every direction"*

AI functions through machine learning mimicking the human brain in creating predictions, interpretations and pattern recognition (Miyaawa, 2019). Neural networks are central for how AI works (Akerkar, 2019; Rouse, 2018). Rouse (2018) explain how algorithms perform correlation analysis on unstructured data to reveal connections and relationships. These connections mapping how "factor a, is attached to factor b, which in its turn is connected to factor c" – is called a neural network, according to Rouse. These models are according to Respondent 22 complex, as the algorithms never stop learning. The neural network is built on new data constantly being inserted, analysed and adjusted. In other words, what was current yesterday might have changed today. This constant learning is commonly referred to as deep learning or machine learning (Hall Bathaee, 2018; Chauhan, Iyengar, Katyal & Schatsky, 2019).

The models can be used from different perspectives, which adds to the complexity of the theory. Chauhan et. al (2019) explains that connections can be analysed upstream and/or downstream. Downstream analysis is used for predictions. Upstream analysis is used identifying causes (Chauhan et. al 2019).

AI offers several difficulties. The first challenge is described by Hall Bathaee (2018) and originates in human limitations. A person can think of an issue from a maximum of five perspectives. AI can handle thousands of dimensions. This means that AI quickly becomes more intelligent than human intelligence, which is often referred to as singularity. Black boxes occur, as humans do not understand a solution proposed by AI (Hall Bathaee, 2018). There is a debate in society whether such black boxes are to be trusted, or not (Hall Bathaee, 2018; Boman, 2018; Brynjolfsson & Mc Afee, 2017; Akerkar, 2019). A buyer might, for example, be presented with a suggestion of choosing a supplier from the AI. The buyer knows that the supplier is controversial in some terms. However, the AI says that the supplier is optimal. Should the buyer trust the AI? And who takes responsibility if that choice affects the own brand poorly? (Chauhan et. al 2019).

Another AI challenge comes from how all processes must be quantifiable. From Respondent 26, I learn how it is common to start with creating a problem for which AI is the thought solution. Instead, according to that same respondent, one should start by understanding what sorts of information is available. Upon realising not possessing the necessary data, it is vital to investigate whether aspects could be transferred into numbers, according to Davenport & Ronananki (2019) as well as Aerkar (2019).

One last challenge, also concerning data processing, was in 2019 described by Francesca Rossi, the global ethics manager at IBM. She explained how the algorithms process all data provided, no matter if the information contains prejudices or not. Due to this, also biased information is taken into consideration and prejudices are allowed to affect the result.

These implications are important to understand. There are two reasons. First, a realistic image of AI creates a realistic framework for the article. That provides this text with legitimacy. Second, the Findings- and Analysis section will suggest an information search system based on AI. Building that system requires accurate facts.

Theory

This theory section is divided into two chapters. First comes Discourse Theory. There, I describe and discuss social realities (Fairclough & Wodak, 1997). Second comes Value Creation Theory. That section is based on Greaber (2001) and concerns both what value is, and whether there are different kinds of value. The theoretical framework is chosen to support a constructive analysis and fulfil the article's purpose.

Discourse theory: creation of a social world

In this article, I study the social reality within the case study setting. I am interested in problems and solutions within the context. In such studies, Discourse Theory is appropriate to implement, according to Edwards & Potter (1992).

Discourse Theory has been discussed since Foucault initiated the subject in 1972. Many definitions have been apparent. Summarising Laclau & Mouffe (1985); Foucault (1972); Fairclough (1995); Fairclough & Wodak (1997) and Condor & Antaki (1997), discourse explains how different domains of social life, offer different patterns of reality. Discourse is a way of understanding and talking about the world, or of an aspect thereof. According to Laclau & Mouffe (1985), discourse analysis is thus the analysis of such patterns of reality, quoting page 105:

> *"We will call articulation any practise establishing a relation among elements such that their identity is modified as a result of the articulatory practise. The structured totality resulting from the articulatory practise, we will call discourse"*

All humans struggle to create a social world of social meaning. Definitions of society and identity constitute such social meaning, according to Laclau and Mouffes (1985). The social world can be regarded as information that has to be processed. People are isolated information processors who through cognitive processes observe the world and accumulate knowledge structures. This is all according to Edwards & Potter (1992), who also express how these experiences later govern peoples' worlds. Condor & Antaki (1997) explain how. People, constantly fed up with information about the world, use cognitive process methods to

categorise the world. Due to the masses of information, this is necessary to avoid mental chaos. The categories are later used to control actions, according to Condor & Antaki (1997).

Discourses are never closed entities. On the contrary, they are always being transformed through contact with other discourses, according to Laclau and Mouffes (1985). Moreover, Fairclough & Wodak (1997) explain how discourse is both constitutive and constituted. In other words, discourse both constitutes the social world and is constituted by other social practises. Furthermore, discourse does not only contribute to shaping and reshaping social structures, but it also reflects them, according to Laclau & Mouffe (1990).

Each discourse represents a way of talking about and understanding the social world. Therefore, discourse always struggles to achieve hegemony - the dominance of one perspective (Laclau & Mouffes, 1990). However, social phenomena can never be permanently fixed, finished or total, according to Fairclough & Wodak (1997). Still, a discourse analyst's task is to create this fixed meaning at all levels of the social world, according to the same authors.

"Discourse is made up of a limited number of statements for which a group of conditions of existence can be defined. It is from beginning to end, historical – a fragment of history as it is posing its own limits, its divisions, its transformations, the specific modes of its temporality"

- Foucault (1972, 117)

In the creation of discourse, language is fundamental. Winther, Jørgensen & Phillips (2002), stress how individuals are both producers and products of discourse in specific contexts of interactions. In other words, individuals can affect their language use and thus the reality in which they exist (Winther et. al. 2002). Therefore, language should be interpreted within its social context, according to Fairclough & Wodak (1997). This is due to how language users build on already established meanings. Contrasting from Laclau & Mouffes (1985) is Fairclough & Wodak (1997) as they explain that language discourse is not only a form of action through which people can change the world. It is also a form of action describing social and historical relationships.

Sign theory complements these views on language. Sign theory concerns the way humans try to express different values through behaviour (Laclau and Mouffe, 1990). In the simplest form, a branded sweater offers sign value to the user. Signs however offer a perspective to discourse theory. In 1990, Laclau and Mouffe explained how individuals and groups always try to fix signs' meanings by placing them in relation to other signs. And, those constant attempts, which never succeed, is the entry point for discursive analysis, according to Laclau and Mouffes (1990).

Knowledge also describes discourse. According to Foucault (1972), knowledge is not solely a reflection of reality. What is truth is to be regarded as a discourse construction, as different regimes of knowledge have different perceptions of true and false. Foucault (1977) clarifies by saying how there are endless ways to formulate statements. However, certain statements are appropriate within certain contexts, whilst they in other settings would never be accepted. According to Foucault (1973), each historical period has a knowledge regime. Therefore, it is historical rules of the specific discourses limiting what is possible to say. Fairclough (1995), Fairclough & Wodak (1997) and Condor & Antaki (1997) disagree to this part of the Foucauldian theory. Instead, they argue for how different discourses fight for the right to define truth.

In this study, discourse theory is used to analyse the social reality at Volvo Cars. Practically, I will investigate problems and potentials within the setting. By analysing the

social knowledge regime (Foucault, 1972 b), I hope to learn the discourse's truth (Condor & Antaki, 1997). Knowing truth, I will understand how to impact the knowledge regime (Fairclough, 1995 a).

Value Creation Theory: are there different kinds of value, or not?

Discussing innovation, there is always interesting to ask yourself *why*. *Why* do we need this proposed change? Is there a value in the change, and what type of value is there? By introducing Graeber's Value Creation Theory (2001), I make an attempt to answer the question of what value really is. Coming from an anthropological perspective, Greaber analyse value given three perspectives.

The first of the three perspectives is from sociology (Graeber, 2001). In a sociological sense, value is regarded as conceptions of what is ultimately desirable in human life. Such desirable factors can, by instance, add a sense of properness to individuals. Kluckhohn supports this view of value. In 1951, he defined value to be "*conceptions of the desirable*" (251). He thus expressed how value influences choices between different possible courses of action. Graeber (2001) explain how that desirability does not necessarily refer to what people want, as people generally sought after many things. Values are, on the other hand, according to Greber (2001), what people ought to want. Values, from this sociological perspective, are the criteria people use to judge what desires are legitimate and not. In other words, if a buyer is to regard a work task as value creating, that work task must be desirable and legitimate.

The second perspective by Greaber (2001) describes value creation in an economic sense. Value is regarded as the degree to which objects are desired. This desire is measured by how much others are willing to give to get them. Money is the most common trading feature. Optimising value is trying to get maximum gain for the minimum sacrifice. In a business sense, logically, value must be regarded as profit. If the buyers are to focus more on value creating activates, in this sense, it means that they should become more effective, as such improvements can benefit the company financially.

Third, Graeber (2001) describe value in a linguistic sense. Here, value is measured on whether it creates meaningful difference. Being further concerned with the objectives of human actions, than the actions themselves – objects' values are estimated in comparison with others. In this perspective, Graeber (2001) explain how it is important to understand value in a larger system. Nothing can be analysed in isolation, Graeber stress.

Whether value from the three different perspectives has a coherent meaning, or if they differ, are debated. Graeber (2001) express how anthropologists tend to regard all three perspectives as refractions of the same thing. Others contradict that the three are all too different and that the potential connection is too abstract to be taken seriously (Kluckhohn, 1951). However, Lehler et. al. (2012) conclude by settling for how value in each sense ultimately is the same. Quoting Graeber (2001, 15): "*Things are meaningful because they are important. Things are important because they are meaningful.*"

In this article, value is regarded as consisting of different components. It is used to provide analysis with complementing perspectives. Ultimately, it will strengthen the conclusion. Moreover, the discussion aims at providing inputs on *why* technology is relevant. This discussion is foremost based on Graeber (2001).

Methodology

The topic

The purpose of this article is to explore and illustrate how AI can create value for marketing procurement processes through a discourse analysis. To do so, we must both understand marketing procurement and AI. This section will therefore motivate the choice of topic, as well as describe the acquaintance process.

In this article, Volvo Cars Marketing Procurement (Volvo Cars) is used as a case study. Therefore, my understanding of marketing procurement originates there. At Volvo Cars, the marketing procurement department purchases all marketing. That includes merchandise, events, and campaigns' etcetera. Their interest in technological solutions to develop their business, made them suitable to apply a case on. The initial contact with Volvo Cars was formed through a personal acquaintance. Communication with the company has occurred over phone, in person and through email. Throughout the research period, a majority of the work has been performed at Volvo Cars. That has proven practical given the closeness to the business. Volvo Cars has also provided me with a phone, a computer and access to their internal systems to support my work.

Aside from marketing procurement, we must also understand AI in order to fulfill the purpose. AI is amongst the most discussed topics today (Tecuci, 2012). Miyazawa (2019, 1) define AI to be "*the theory and development of computer systems able to perform tasks normally requiring human intelligence*". Most AI solutions regard business-to-customer due to how such systems gain more publicity, according to Respondent 18. Self-driving cars, medical solutions and home-assistants are examples. In this article, I therefore investigate business-to-business solutions. AI has a purpose of making life easier for humans by perfecting and managing complicated, time consuming and boring tasks (Miyazawa, 2019). Such help is inevitably important also in business. Information on AI has been acquired from academic articles, nonfiction literature and expert respondents. It is important to stress that this paper is written from a business perspective rather than a technological perspective. That means that AI and the functions thereof are described in words rather than in numbers.

Conducting the study

The study consists of 27 qualitative interviews stretching from 21 to 72 minutes. Introducing this method section, I stressed that given the purpose; we must understand both marketing procurement and AI. Also, with discourse theory in mind, I considered Yin's (2002) input on comparing different related discourses to gain insight. Therefore, the respondents are divided among marketing buyers, marketing managers and AI experts. The marketing buyers and the marketing managers work at Volvo Cars Marketing Procurement. They have different responsibilities and duties. One example is that some marketing buyers purchase merchandise, whilst others are responsible for events. The selection represents the width of those differences. To understand AI, AI-experts were consulted. About half of those AI experts come from a business context and the other half from an academic context. To make an example; respondents from IBM's AI section Watson, in California, have been interviewed to support the business perspective. To guide my selection, I turned to Boettke, Habermas, Nicholsen & Stark (1990). They recommend a variety of respondents to illuminate a range of relationships among different variables. Yin (2002) agrees, stating how a variety of categorised profiles and perspectives provide both width and depth in data. Therefore, I find the selection of respondents appropriate. Below, Chart 1 structures the interviews.

Respondent	Marketing buyer	Manager	Technology expert	Length of session (min)
1	X			32
2	X			33
3	X			45
4	X			26
5	X			56
6	X			39
7		X		45
8		X		40
9		X		47
10		X		30
11		X		22
12		X		41
13		X		41
14		X		29
15			X	54
16			X	28
17			X	33
18			X	26
19			X	44
20			X	31
21			X	32
22			X	72
23			X	55
24			X	41
25			X	21
26			X	27
27			X	30

Chart 1. Respondents and respondent categories

The interviews were based on templates designed for the three different respondent groups. The questions for the *buyers* focus their current work situation; what they appreciate in their daily tasks and not, present challenges, efficiency issues and so forth. To exemplify, this interview guide is attached as Appendix 1. The interviews with *management* have a stronger emphasis on strategy; where they are right now in relation to this strategy, what challenges they are bothered by, their view on investing in AI and so forth. Finally, the interviews with the *AI experts* concern the technology behind AI, what implementation possibilities the experts see for the current problem setting and how such possibilities would work technically. Moreover, the AI-experts were presented with all the tasks of a marketing buyer, and asked to predict when that task had potential to be replaced by technology. The result of this is mapped in Chart 2. Furthermore, all interviews were conducted as dialogues from which spontaneous follow up questions were expressed. That creates a safe and relaxed setting for the respondents. Such freedom in interviewing is beneficial as it allows for more information to come forward, according to Bryman, Bell & Hollman (2005).

The final question asked were whether the respondent knew anyone who could be interesting for further interviews. These persons have been contacted, foremost by email, and interviewed. Through this system, I have built a global network. A majority of the interviews were initiated through this method. However, additional interview requests have been sent to selected AI experts, foremost within academy. The additional interview requests were sent by email.

Most interviews were conducted in person. In those cases, foremost Volvo Cars premises were used due to respondent convenience. However, interviews have also been conducted in public spaces, such as cafés. Furthermore, a minority of the interviews was made over Facetime or Skype due to geography. Being located in Gothenburg myself; Stockholm, Vienna and California are respondent' locations which demanded phone enquiries. Seven of the 27 interviews were made over phone. The rest occurred in present.

Performing the analysis

All interviews were transcribed in manner suggested by Miles and Huberman (1994). When all the interviews had been conducted, the transcriptions were printed and placed on a table. Eight colouring pencils were used to categorise the material into different discourses, which is in line with the suggestions by Thompson, Locander & Pollio (1990). Appendix 2 contains a draft of such categorisations. To exemplify; all buyers' expressing strategy as their preferred field of work can be categorised as a discourse. Early in the analysis process I discovered seven different discourses. Reducing those discourses to only include the ones relevant for the purpose was necessary. Therefore, four discourses – two concerning strategy, one concerning an information sourcing system and one concerning AI was concluded upon. The themes are to be regarded as trustworthy. This is due to the well-grounded selection and width of respondents as well as the themes' support to theory (Yin, 2002). Also, the four discourses are regarded in the hermeneutics sense with the purpose of challenging the trustworthiness of the text (Ricoeur, 1976; Boettke et. al, 1990).

Given the diverse and solid selection of respondents (Boettke, 1990) alongside the trustworthiness of the analysis (Yin, 2002), the article can be regarded as legitimate (Nicholsen & Stark, 1990). I end this article with implications for marketing managers, marketing theory, society, and future. This legitimacy (Nicholsen & Stark, 1990) implies those implications to be accurate and trustworthy.

Findings and Analysis

This Findings- and Analysis- section is initiated by a description of the problem field. After follows a mapping of a buyer's different work tasks alongside predictions on when AI has a potential to support those tasks. The main part of the section then constitutes of four discourses. These four are each analysed empirically and theoretically.

To clarify the setting; marketing buyers want to be more strategic. The procurement management supports that ambition. In order to accomplish that ambition, it is necessary to liberate time by using AI.

To develop and optimise a solution, I found two essential factors. First, it is important to understand what work tasks that are the most beneficial for AI to support. According to the buyers and their managers, there are five different groups of work tasks:

- The first task is *administration*. The procurement system demands much administrative work, which is time consuming.
- The second task is *sourcing*. Sourcing assures deliveries to be made in time, with the right quality and at the right cost through information search online.
- The third task is *business*. This includes evaluation of offers, negotiation and signing deals. Throughout all interviews, managers emphasise the importance of considering sustainability doing this.

- Fourth is *relationship development*. Relations with both suppliers and other stakeholders are important and needs to be maintained.
- Fifth is what Volvo Cars refer to as *strategy work*. Later, further emphasis will be put on strategy and it's meaning for marketing work.

What tasks the buyers prefer to perform are important. Respondent 10 explains how people generally perform better when they are motivated. If someone thinks something is interesting, they are generally better doing it. And that is, according to Respondent 10, a better way to conduct business. As a result of thus, each marketing buyer has been consulted in what tasks they prefer performing. As visible in Chart 2, administration is least preferred whilst strategy is most preferred.

Second, it is important to consider the potential of AI. To map that, AI-experts have been consulted on when AI potentially can replace each work task. The result of both the first and the second factor is visualised in Chart 2.

Preferred tasks	**Years**	2020	2025	2030	2035	2040-
↑	**Tasks**					
	Strategy			X		
	Relations					X
	Business		X			
	Sourcing	X				
	Admin	X				

Chart 2. Tasks, line of preferment and technological implication

In Chart 2 we see that AI potentially can replace current administration and sourcing. AI is furthermore estimated to support business within five years, and strategy within ten. It is predicted that AI will be able to support relationship development and maintenance in twenty years.

Volvo is working to digitalise administration at this very moment. Therefore, this paper will focus on sourcing. In order to understand sourcing, four discourses are discussed. To clarify and provide the structure of the following chapters, Chart 3 provides an overview of these discourses.

Discourse 1	The buyers prefer doing strategy work. Such work is emphasising meeting suppliers, building relationships, discussing with the suppliers.
Discourse 2	Managers express a need for the buyers to do more strategy work, due to how such activities is value creating. Strategy work is by management described as making decisions, which will benefit the brand in the long run.
Discourse 3	Sourcing is a problem. Up to 80 % of a buyers' time consist of sourcing for information.
Discourse 4	AI as the solution to the challenges in Discourse 1, 2 & 3.

Chart 3. Four discourses.

Discourse pattern 1: What the employees want to do is strategy

The first discourse concerns how the marketing buyers want to spend more time on strategy. It is based on my interviews with marketing buyers. Strategy work is summarised as evaluating procurement processes. More specifically, strategy work is described as challenging suppliers and being challenged in return; having a goal and being allowed the trust to work towards that goal alongside learning the supplier field and making optimised choices. Today, about 20% of a buyers' time is spent on strategy, according to Respondent 1, 3 & 4. The buyers would prefer it to be higher. Respondent 4 explains:

> *"To me, strategy work is thinking. It is making decisions, which requires someone to think. The way we work today is not developing for us as buyers. We foremost spend time on matters, which can be done without thinking. If I had the time to think, I would make better decisions."*

However, if Volvo Cars are to benefit from strategy work, it must be value creating (Greaber, 2001). Therefore, I question this. According to Zwick & Cayla (2011) marketing work concerns construction of knowledge. In other words, a marketers' task is to formulate the knowledge discourse of a brand. In this sense, only activities contributing to that knowledge regime is value creating, marketing wise. So, does strategy work contribute to the knowledge regime? Graeber's (2001) economic perspectives on value creation provide input. Graeber (2001) explains how value is created as demand is created. Value is thus measured in what someone is willing to pay to get it (Greaber, 2001). Remember how strategy work is to make optimised decisions, according to Respondent 4. Hypothetically, a buyer might negotiate with five suppliers. In such a situation, Respondent 2 explains, strategy work is to consider all facts and make the right decision. So, does choosing the right supplier create value for a brand? Does it contribute to create favourable knowledge of a brand (Zwick & Cayla, 2011)? The answer is yes, due to two factors. First, a supplier's brand and actions reflect Volvo Cars. Second, the marketing work made by the supplier, affects Volvo Cars. Summarising, all actions connected to a brand reflects the knowledge of that brand (Zwick & Cayla, 2011). Being connected with certain knowledge increases demand (Greaber, 2001). Therefore, strategy work must be regarded as value creating in Graeber's (2001) economic sense.

However, in a sociological perspective, Graeber (2001) describe value as conceptions of what is ultimately desirable in human life. Such desirable factors can, by instance, add a sense of properness to individuals. Would a higher percentage of strategy work provide this sense of properness, and thus create value (Greaber, 2001)? Laclau and Mouffe (1990) would say yes. According to them, we all live in a social reality through which meanings of status arise. Signs can be the intermediaries of such social status. Respondent 3 explain how procurement is rather looked down upon due to the lack of thinking. Buyers are foremost "told what to do" and are not trusted with strategy, according to Respondent 3. Strategy work, however, has the sign value of being advanced. And, such advancement is apparently desirable in the discourse (Laclau and Mouffe, 1990). Therefore, strategy work is value creating also from a sociological perspective (Graeber, 2001).

> *"The strategic bits are the best parts of my job"*
>
> - Respondent 1

According to the consulting company Wise HR (2012), development possibilities is stated the most important factor to feel happy at work. And, according to the same study: being happy at

work is the single most correlating factor in being happy overall. Therefore, and as strategy work is value creating (Laclau & Mouffe, 1990; Graeber, 2001), I regard this discourse as important and a cornerstone for this article. The analysis based on Graeber (2011) will be further developed in Discourse 2.

Discourse pattern 2: Management want the buyers to focus on strategy

The second stream of reality (Fairclough & Wodak, 1997) is a discourse among marketing managers at Volvo Cars Procurement. They express that buyers must be allowed the time to focus more on strategy. Respondent 9 explains:

> *"The department definitely needs to work more strategically. Why? It is all about value creation. The value of a persons' time is really to pursue a strategic mindset. The simplest form can be pictured as a buyer goes to the supplier saying that we need 10 000 child seats. We are willing to pay a thousand kronor – are you willing to do it? Say yes or no. Yes – place the order please. There is nothing strategic in that. There is nothing saying that the supplier is the best, there is nothing saying that supplier is not using child labour, there is nothing saying that this is the best price, or what ever. A strategic person would go in and say that we actually got three suppliers here. How can they deliver the task? The first one might be the most price competitive. The second and the third are a bit more expensive but closer to Volvo Cars geographically. The second one, however, has bad quality according to rumours. Towards a fourth one we´re a bit suspicious cause we heard that they are dumping oils into their rivers outside their office – or whatever. And then you, as a marketing buyer, got to make this judgement call. And that decision is where the value lies. Cause Volvo cars as a company - we need to have the right value."*

Value creation is of centre both to Respondent 9, to the other manager respondents and to Graeber (2001). Volvo Cars must have the right value, Respondent 9 says. What does that mean? From a theoretical perspective based on Festinger (1957) and Fairclough (1995, b), Volvo Cars have their own discourse. More specifically, there is a knowledge regime through which people agree on common facts about the company. Any way of maintaining and improving those common facts, is affecting the discourse. And, by affecting the discourse, you also affect the values associated with the brand. This is marketing (Zwick & Cayla, 2011).

Volvo Cars wants to be connected with certain values. Therefore, language-use (Fairclough, 1995, b) must create a common theme throughout the discourse. In this, factors such as suppliers can offer important sign value (Laclau and Mouffe, 1990). Using car seats with poor quality can be regarded as a sign of not caring for children, which is inevitable to reflect back on the discourse.

Respondent 12 explains that suppliers' image and actions reflect back to Volvo. Therefore, strategy work, in the form of strategic decision making, is value creating. To further clarify, management respondents' explains how procurement is often thought to just deal with price. Generally, it is common to think that a buyers' goal is foremost to acquire maximum quantity at minimum price. However, according to Respondent 8 and 9, price is not among the most important factors in marketing procurement. Instead, it is important to create the right long-term brand value. Thus, quality, location, heritage, brand, sustainability and environmental factors are more important. Therefore, the marketing buyers have to extend their focus on choosing the long-term suppliers compliable with Volvo Cars' values.

"A strategic mindset is choosing the car seat, which will save a child in a car crash, ultimately giving the brand good publicity."

- Respondent 8

Economic value creation (Graeber, 2001) is the goal. Strategic decision-making is necessary to create a solid image, according to Respondent 9 and 12. This is accomplished through customer satisfaction. Negative perceptions, experiences and publicity perhaps concerning how a supplier uses child labour, lets tons of oil into the ocean every year or uses toxic chemicals in their production can be devastating for brand value and image. And, brand image drives sales (Zwick & Cayla, 2011). Therefore, strategy drives profitability, which in Graeber's (2001) economic sense makes strategy work a value creating activity.

Summarising the findings and analysis so far; marketing buyers prefer strategy work. Management agrees. Volvo Cars and academic research (Graeber, 2001; Zwick & Cayla, 2011) agree on strategy work's profitability. Despite this, strategy work still consist only 20%. The reason is lack of **time**. This is where AI enters. With background in Chart 2, an information sourcing system is rationalised as optimal to make processes more efficient and effective. The rest of the Findings-and Analysis-section will thus regard this system.

Discourse pattern 3: Sourcing is a problem

The third discourse concerns how information sourcing is a problem. Different groups of individuals constitute different discourses according to Laclau & Mouffe (1985). Buyers having separate discourses are natural. The same goes for managers, and for different combinations of workgroups, departments and corporations. Therefore, Discourse 3 is based on both marketing buyers and their managers. To initiate, I quote Respondent 3.

"No matter how much time one spends, the time spent is never enough. There is always more data. As a marketing buyer, you need to have so much information. You can spend infinite time on Google, and it will still not be enough. You will never have browsed through the whole web. Today, we spend some time searching but it is never enough. It is not only about finding all suppliers available worldwide and the information thereof, but also understanding different suppliers' price tools, comparing offers and frankly finding internal information. We are huge, and it can be hard to grasp".

The purpose of sourcing is to be well informed prior to negotiations. In other words, buyers must understand their discourse. Laclau & Mouffe (1985) offer an interesting perspective on the topic of understanding your setting, as they explain the struggle of achieving hegemony. By attempting to understand the knowledge regime, Fairclough (1995, b), describe how the buyers try to fix meaning (Laclau & Mouffe, 1985). This can be regarded as both important and problematic given Laclau & Mouffe's (1985) statement how social phenomena never can be permanently fixed, finished or total. The buyers search for knowledge about the discourse, but will never grasp the full picture, as there according to Laclau & Mouffe (1985) is no fixed meaning. So, is information sourcing in vain? Fairclough (1995, a) do not think so. Instead, he explains how individuals being locked into general discourses have no other choice than to try and understand them. And perhaps, in a negotiation situation, the winner is the one who has understood the discourse best.

More specifically and prior to negotiation, sourcing concerns finding appropriate suppliers. What constitutes an appropriate supplier is based on many factors.

Quality measurements, cost structures, market fluctuation, politics and laws, tax and so forth are a few of those factors. These factors are important to know, but can be hard to grasp due to several reasons. First, the factors are complicated in their nature. Second, the factors are often communicated in foreign language. Language is also of interest for Winther et. al. (2002). They express how language creates realities at different domains of social life. Thus, language creates different patterns of reality. And, the German reality is relevant to understand for Swedish buyers, aiming at creating a fulfilling image of a situation. Therefore, sourcing takes time.

With background in Graeber (2001), we have already discussed how making decisions benefiting the image will drive sales, profit and thus create value. In this section, we develop that point. By understanding the importance of sourcing, we also legitimate an investment in the task. Buyers need to understand the full image in order to make value-creating decisions (Graeber, 2001). However, as Respondent 3 explains, "*time is never enough*". Therefore, it is also important to investigate how it can be made more effective, efficient and accurate. That leads us to our fourth discourse.

5.1.3 Discourse pattern 4: AI as a solution to the problem

So, how can AI make sourcing more effective and efficient? This section is based on two sources of information. The first source is empirical material from AI-experts. The second is literature.

To start, Respondent 22 stress that AI cannot replace humans in all processes. Remember how AI consists of neural networks performing correlation analysis on unstructured data (Miyazawa, 2019). Thus, to be relevant for AI, processes must be quantifiable. And, not every process offers that possibility. However, Respondent 24 explains, "*on the information sourcing side, AI can definitely be implemented*". More specifically, Respondent 24 explains how the system would benefit from letting the algorithm register every digital movement of the buyer. Quantifying those movements, the algorithm grows an information base. This allows personal recommendations.

More specifically, the system would be based on several functions. The first function is supplier mapping. In this sense, a buyer might be interested in knowing all suppliers of a specific product or service, within a geographical area. The AI can then gather and present a list of who they are, financial numbers, location and so forth. An overview of different scenarios would be presented stating how "*these five suppliers would work best for your setting. Supplier A has proven to have better quality than supplier B. However, Supplier A is better suited geographically. Supplier C, on the third hand, is expensive but have through their extensive CSR-work a possibility to reflect back positively on your brand*" *(Example quote)*. This improved basis for decision-making provides the buyer with potential to make more accurate supplier decisions. This paper explains how such accurate decision making create both sociologic and economic value in Graeber´s (2001) sense.

The second function is a market scan. Market dynamics analysis is according to Respondent 21, 23, 24 and 27 more accurately performed by AI then by humans. This is regardless of human experience of the industry. AI finds patterns, which go unnoticed by humans. And, such information is important in discussing fluctuations, market reactions as products enter or exit the market, and communication channel implications. Respondent 21 explains:

> "*Through sensitivity analysis, the system must be able to say that this supplier was best last time, but now, we have a political situation in those parts of the world potentially affecting the situation negatively. Through the same*

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consequence and full image thinking, you'll be able to know that if I buy a 200 of these merchandise, sales tend to go up this much. And that can prove a basis for decision making with emphasis on how the market will be affected. An AI based system would of course also be able to clarify such results graphically, if requested"

In Discourse 3, I discussed the struggle of achieving hegemony concluding on the importance of knowing the discourse's knowledge regime in negotiation situations. The imposed market scan function further puts emphasis on that conclusion. Through this market scan, buyers will further understand their discourse setting. Therefore, buyers will also be better prepared for negotiation.

As a third, the system would be supported by internal information. Volvo Cars is a huge company, and according to Respondent 2 and 4, internal information is complicated to access. Quick access to information such as employees per department, financial numbers and so forth would thus also be of interest to include.

The fourth function is a *chatbot*. A chatbot is a robot communicated with through chat. Marketing buyers could use it to ask specific questions. Stretching from macro to micro, information of different complexity could be of interest. Questions concerning suppliers' revenues are an example. The description of a campaign followed by suggestions of relevant suppliers, is another.

Amounts of information, which would take humans week to process, would be scanned, gathered, analysed and summarised in a few seconds. The purpose of such decrease in volume of information is human capacitates. We are not intelligent enough to understand the full image. AI is. Respondent 27 also stress how "*AI is more of an information tool than a decision making tool*". That fits our purpose well. The marketing buyer is presented with options. However, the system is not thought to make decisions. The strategic decision-making is left for the marketing buyer. The marketing buyer is thus also responsible for the decision. However, the question still remains. Should we trust AI? Can we trust that the information provided is accurate?

In using a proposal from AI, you must consider ethics. Are companies responsible for black boxes (definition: see section on artificial intelligence)? Who is responsible when AI fails? If an accident occurs and AI was involved: is the marketing buyer responsible? How can Volvo Cars explain that externally and internally? "The AI told us to do this", is not a very satisfying answer.

To solve ethical dilemmas, ethical principles can be consulted according to Ladkin (2018). One ethical principle is Utilitarianism. Utilitarianism expresses how the goal is minimised harm to maximised benefits. In this cost-benefit analysis, the moral value is determined by its consequences. De George (2006) explains how decisions should be made according to the "greatest-happiness-principle". That principle is defined "*an action is right or good if it produces the greatest amount of good for the greatest amount of people*" (De George, 2006, 255). To make an example: imagine that an AI manages to perform the same business with lesser environmental impact, statistically. Then, one day, an emission scandal occurs. However, the original decrease in emission exceeds the impacts of the scandal. According to Utilitarianism, AI is still motivated to use. And, Respondent 21, upon discussing black boxes, express:

"People will always be sceptical of what they cannot understand. The fact is that AI, despite if we understand it or not, provides more accurate facts than any human will ever do. Of course, there will be faults. But all research so far indicates that these faults occur far more seldom, than faults made by humans."

To summarise the Findings- and Analysis-section: Buyers want to engage in strategy. Managers agree. However, there is a lack of time. Today, information sourcing is among the most time consuming activities for a buyer. Therefore, I have suggested an information search system. However, such a system raises awareness of whether to trust AI or not. To conclude this section, I thus chose to quote Respondent 22.

> *"AI is here to stay. And, in such a world, we must choose to rely on the information coming from a computer. We have to - for the greater good"*.

Discussion

Despite the quote finishing the previous section, one matter remains. In this discussion, I question *why* we shall develop AI solutions. Furthermore, I discuss this article' implications for marketing managers, marketing theory and society. I also discuss a conclusion, before the implications for future research.

To start, I thus question *why*. What is the reason for developing AI solutions? In my sense, there are three different reasons. Comparing these to Greaber's (2001) theories on value provides interesting insights.

The first reason is that AI offers personal insights for the buyer. The buyers want to engage in value creating strategy work. Such work is in the socially constructed reality (Winther et. al, 2002) viewed as more advanced and refined than sourcing (Respondent 2). Therefore, it is more fulfilling from a motivational point of view (Greaber, 2001). And, according to Wise HR (2012), development possibilities are the most important factor to happiness. This reasoning suggests that Volvo Cars develops AI in order to develop their employees, by liberating them from sourcing duties and to put more emphasise on strategic work. Is that realistic?

The second perspective is based on Greaber´s (2001) economic value creation theory. In this sense, AI systems are beneficial to corporations' competiveness. Therefore, development of AI-systems is also important for profit. Statements according to this indicate loyal employees. In other words, employees prefer AI solutions, as they will provide Volvo Cars with competitive advantages.

The third perspective is related to global development. Buyers and their managers support AI as they want to contribute to global technical development. This is interesting to discuss in comparison with Greaber (2001). In Graeber's linguistic sense, value is understood in relation to other subjects. One elements' value makes sense only in contrast with other elements. Graeber (2001) would imply that Volvo's AI investment has not created value until it brings meaningful difference to the world.

To summarise the discussion, we have three perspectives. The first perspective implies Volvo Cars' ambition to develop their employees. The second perspective implies ambitions to develop the company, whilst the third implies ambitions to develop the world. During the empirical gathering, each alternative was discussed with management respondents. Their reasoning can be summarised in the following quote.

> *"I think every perspective is relevant – but foremost, the most important part is that how we work today is draining people of energy. To exert the best of people, you have to give the pre-requisitions and system supports, which empowers people to make decisions. In that, we must remove some things in order to add others. Also, it is more fun to do business than to do administration, which in my sense in why one might want to work in marketing procurement. Today, we*

however prioritise our time wrong, and that has to change. For the individuals sake"

– Respondent 22

The most important reason for AI development, *in the manager's sense*, is development of the employees. In saying so, they also support value to concern sociology (Graeber, 2001). This view would be interesting to compare with other managers, at different levels and different companies. What is socially accepted in the discourses is likely to affect this (Fairclough, 1985, b). However, given how this article offers Volvo Cars Marketing Procurement as a case, this is the constructed reality in this article's setting (Laclau & Mouffe, 1985). Foremost, Volvo Cars develop technology with employee development as purpose.

To further understand, I will now discuss this articles' implications for marketing managers, marketing theory and society. With background in this discussion, the conclusion will work its way through knowledge, marketing, truth and value creation.

Implications for marketing managers

This article has several managerial implications. First, it confirms the buyers' and managers' implied need for development of marketing buyers' profession. Second, it suggests a solution to the challenge of implementing such change. That suggested solution is both technically well timed and has potential of making significant change. This is due to the amount of time currently spent on sourcing. Through connecting the theories of value creation with branding, I also strengthen the hypothesis of how technological change will benefit profitability.

Implications for marketing theory

My work contributes to the literature on AI use in marketing procurement as performed by market discourse. Positioning marketing procurement discourse with relation to both Value Creation Theory and technology does this (Fairclough & Wodak, 1997; Condor & Antaki, 1997; Greaber, 2001). Earlier studies have mentioned technology to have a rising importance to marketing (Finch, Horan, & Reid, 2015; Mason, Kjellberg, & Hagberg, 2015), without offering concrete examples. Thus, this article also contributes to the understanding of the potential outcomes of such technology. Ultimately, brands are central, which Neumeier (2005) describes as natural in marketing research.

Implications for society

The implications on society are twofold. Tecici (2012, page 56) express that AI will "*affect every industry from every direction*". However, Respondent 22 stress that most solutions regard business-to-consumer. Through this business-to-business solution, I thus offer the marketing procurement sector a possibility to create an image of technological advancement.

Also, the findings contribute to the understanding of how technology can improve employee development. In this article, I increase the understanding for how traditional sourcing drains employees of energy and motivation. To strengthen employees with the trust to make strategic decisions proves beneficial to health. Applying the results from this article thus has a potential to contribute to employee health.

Conclusion

Initially, marketing work was defined to be dealing with the construction and dissemination of knowledge (Zwick & Cayla, 2011). Knowledge is also of interest to Foucault (1972) who explains how truth is to be regarded as a discourse construction of what is common knowledge. Can marketing work thus be regarded as dealing with brand discourse? Or, in other words, can marketing concern formulation of the discourse's truth of a brand?

Foucault (1972) continues by expressing how there are endless ways of formulating statements. However, he continues, within certain contexts, producing certain statements are appropriate, whilst others would never be accepted as meaningful in the context. In my sense, this is central in marketing, strategy and the problem setting.

Why? Much like Respondent 9 explains – it is important to make decisions benefiting the brand. With background in Zwick & Cayla, (2011) – can this strategic decision-making be explained as dealing with knowledge formulation of the discourse? Is this sense, a brand image can be regarded as a discourse, and a marketer as the knowledge producer of that discourse. The marketer's task is to create a truth about a brand. Therefore, all decision-making must support *that* truth. Each decision a marketing buyer makes is communicating with the discourse (Laclau & Mouffe, 1990). To make an example; choosing a merchandise is to have that merchandise reflect back onto the overall brand. It is to create value for the brand. But, to be allowed such carefully made strategic formulations, time is essential. And, the case study proves that time is not sufficient among marketing buyers.

Thus, marketing procurement needs AI to deal with the characteristics of marketing procurement as time consuming and messy (Nilssen and Helgesson, 2015). Marketing needs AI to save time. Time, which in its turn can be focused on creating value for the brand, by doing things that exclusively can be made by humans. And, no matter what form of value (Greaber, 2001) – value creation must be regarded as central for all human, business and collaboration.

Implications for future research

This leads us to suggest a few implications for future research. First, adding more case studies would make the conclusions of this paper of more general relevance. Then, a discussion of the case study limitations to factors such as industry, geography or size would be of essence before applying the case. Second, a technical application as a demo of the system is of interest. Having performed that demo, it would as a third be of interest to follow up the results by discussing the implications for marketing managers, theory and society stated in this article.

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Appendix 1 – Interview Guide Buyers

Is it OK for me to record and eventually quote your sayings?

Tell me about your work: what do you do, where in the organization scheme do you fit in, how long have you been working here?
--> What are the biggest down side in your work?
--> What is the most fun part about your work?

What do you **know** about AI?
--> What do you **think** of AI?

Do you think that AI could **benefit** your work? Why?
--> How do you **want** AI to benefit you in your work? Exemplify, come with suggestions and so forth.
--> **How** could AI be implemented in your work, do you think? What potential is there?

There is a difference between mass quantitative purchasing and qualitative, strategic purchasing. Strategic purchasing does in further sense require human input. However – how can AI be used to make the strategic purchase processes more refined, in your sense?

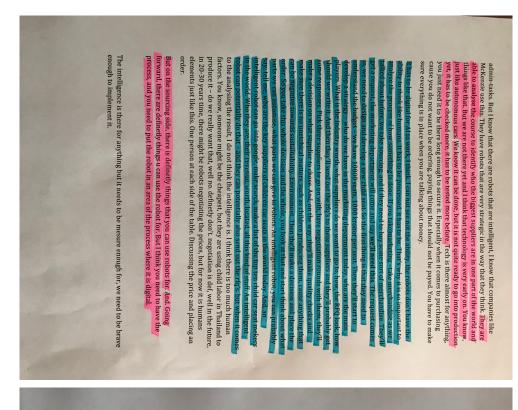Have you heard of e-bidding?

Remember the down sides of your work that you described to me before. How do you think that AI could help you with these tasks, allowing you to focus on the more fun things?

Do you see a potential in how AI can develop not only your job: but the whole field in which you are active?
--> Will AI be used in procurement? Guess!

Who would you recommend me to speak to next? Names.

Appendix 2 - Draft from coding of transcribed material

admin-tasks. But I know that there are robots that are intelligent. I know that companies like McKenzie use this. They have robots that are very strategic in the way that they think. They are able to analyse the course to identify who the biggest suppliers are in one part of the world and things like that. But we are not there yet and I think that technology is very early on. You know, just like autonomous cars. We know it can be done, but it is not quite ready to go into production yet. it has to be checked more, it has to be tested more before. Tech is there almost for anything, you just need it to be there long enough to secure it. Especially when it comes to purchasing cause you do not want to be ordering, paying things that should not be payed. You have to make sure everything is in place when you are talking about money.

It has to be digital for AI to work, I think. I can not see not the ability, the robots don't have the ability to think like humans. It has to be processed. It has to be. That's why it is so important to analyse the process of how something is done. If you take marketing - take merchandise as we talked about before, we are sourcing, and if they need to buy some sort of merchandise. They'll get a request, the marketing department will come and say, we'll need this. The request comes in, we need to design and develop a new child seat. So the first thing is that they need to understand the budget - we have 10000 seats, 1000 kronor per seat. Then they'll start to develop a strategy - who do we have in the marketing department today, who are the main players. What is the industry worth, what suppliers do we want to go to, how, the RFQ look, how should we write it. And then they'll send out the RFQ to these suppliers and they'll probably get some responses. Pick three suppliers to go on with, have negotiation rounds with them, they'll make a decision on what supplier to chose. And, on the way, they'll make quality checks and make sure there is no unethical matters, such as children producing them, cause anything that can be negative towards sustainability. Environment. Then the'll make a decision and place the order. So you take this whole decision and the whole, you look at that and start think about what parts we can automise, what parts we can give to robots. An intelligent robot, you can probably say, tell me, who are the key suppliers of children car seats in the world today. And, an intelligent robot can go into google, make search, make a list of the top ten child car seat makers in the world. Who they are, their revenue, worth, located, all this kind of stuff. An intelligent robot can potentially do that - and they can potentially also send out the rfqs, but when it comes to the analysing the result, I do not think the intelligence is. I think there is too much human factors. You know, someone might be the the cheapest, but they are using child labor in Thailand to produce it - do we really want that, well no. definetly don't. negotiation is def, well in the future, in 20-30 years time, there might be robots negotiating the prices, but for now it is humans elements just like this. One person at each side of the table. Discussing the price and placing an order.

But on the sourcing side, there is definetly things that you can use robots for. And Going forward, there are definetly things u can use the robot for. But I think you need to have the process, and you need to put the robot in an area of the process where it is digital.

The intelligence is there for anything but it needs to be mesure enough for, we need to be brave enough to implement it.

How I define AI - replication of humans thinking, in a sense where the computers or the algorithms are mimicking a complex thought process that has been regarded impossible for computers to do before. With that comes certain possibilities as well as certain shortfalls that the whole process of AI, or the thinking process of computers differs from that of humans but the idea...

Is there no AI in procurement right now? Cause it seems to be a lot of standardised processes comparing offers and such. I mean, if there is non, I'm really asking you, if there is really non existent in procurement.

Lots of standardised processes in procurement where you compare offers, right. I would say that, AI would greatly help to reduce those standard processes and reduce. Quickly, you could create a shortlist with AI which then I would say needs some human input, but that is what I think AI could do. Comparing offers. Or, when you have perhaps some specs for the technical parts, you can answer like "there are my requirements to the products on the markets. Cause I mean the shere volume of the market is. Could be too much for humans to understand, but for AI, AI could in just a few seconds say that these five would theoretically work, best for your current machine set up, or so.

Essentially what I mean, is to create a information search system. Scanning and understanding the magnitude of the products and reducing it to an amount that can be understood by a single person to make a single decision then.

In a perfect world, I would tell the system what part of my production process needs replacement and the system tells me that these four items, these four or ten items or what ever, seems to be most. They seem to work best with the setup that I have. Taking into account the production problems that I have. Comparing the spect of the problems that I am having, the items that I am buying. Without a person having to look through the entire market.

Practically, how would it work? Can algorithms read the system or do we manually have to insert the data?

It is hard to say as I do not know procurement, but my magic number I would say 80 % could be assisted. I mean it is a question of what AI does, it is a question of how systems and automation but I would say 80 % of all processes could be enhanced. 20 % needs to be inserted into the algorithm by a person. That is comparing the offers and creating a final decision. AI is more, to me, of an information tool, than an decision making tool in procurement.

AI can definetly help strategy work. Maybe not on final decision making as one of the short falls of AI is that it lacks creativity, or an ability to think outside the box and things like that, but as a source of information or as an information analys tool, it has great potential.

How? If you are talking strategy, by example, as a price analysis system. Anlysis of how the market is moving can be analysed way better by computers than by any person could ever do it. Even if that person has been in the industry for 20-30 years, AI can actually find or find patterns that go by unnoticed by a person and this information can be very important if you talk about shortfalls in demands in certain periods, or how the market reacts when there is a new product if the market or entering the market. It can tell you about your customer group to some extend that it tells you how the