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NETWORK POSITION AND E-AUCTIONS Transactional or Relational orientation?

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Abstract

Through decades, marketing and purchasing managers have been canonized with the promise of information technology and the benefits associated with its exploitation. How to exploit information technology is still one of the most important current concerns among managers and purchasing and supply executives. The purpose of this paper is to explore how the adoption of electronic auctions can be influenced by a firm's relative position in a network. In this paper, we present a single case study where we have searched for deeper understanding of e-auction practice in a business-to-business context. The research questions addressed are: a) what are the conflicts of interests and what effects might these have on business relationships? b) what role do network positions play in the implementation e-auctions in the buyer-seller relationship? Our empirical findings imply that network relationships and positions played a role on more than one level in the case that we present. On one level, the ambition to develop the existing relationship between buyer and seller and the strong network position of the buyer, made the management of the supplier comply in participating in the competition of the e-auction regarding the contract to become a system supplier. On another level, the relatively weaker position of the buyer in its turn to the owner group made management of the buyer, despite the former relational orientation and some skepticism towards e-auctions, increase the utilization of e-applications. The conflicts of interest that appeared were mainly based on lack of understanding among the managers of the supplier whether the buyer aimed at a relational or transactional orientation. The case shows that the implemented e-auction seemed to have elements of both the relational and the transactional approach. Even though the buyer expressed an ambition to change the character of their relationship into arms-length, the auction seemed more of a temporary disruption in a relational approach. The ambiguous messages sent on different levels caused confusion and distrust about the existing and future development of the relationship. Therefore when applying transactional orientation to an existing network of relational orientation the orientation in the eyes of the beholder (i.e., the local manager or employee) might be what decides the role, implementation and final outcome of the e-auctions.

Introduction

Through decades, marketing and purchasing managers (and others for that matter) have been canonized with the promise of information technology and the benefits associated with exploitation of information and communication technology (ICT). This almost axiomatic trust in enhanced productivity and profitability of information technology exploitation is the starting point of this paper. How to exploit ICT is still one of the most important current concerns among managers and purchasing and supply executives (Carter, et al., 2000). Besides providing a promise of enhanced productivity and profitability, ICT might also mean large investments and implementation problems, especially for relatively smaller firms with limited resources and strong dependencies. Competitive bidding in different forms is clearly an every day phenomenon in business relationships. Yet, during the last years, electronic auctions (e-auctions) seem to have attracted quite some attention as a mean to cut costs of purchased material. E-auctions do not exist in a vacuum, but are applied to existing networks and dyads. The view of industrial markets as presented in studies made by the IMP-group (e.g., Ford, et al., 2002; Håkansson, 1982; Håkansson & Snehota, 1995) seems to have contradictions with the promise that the e-auction seems to carry. In the case of e-auctions, one could expect that something that is good for one party might not be equally favorable for another. Studies of industries dominated by a few strong actors, with the power to dictate what is needed for other actors, might demonstrate such a case. The purpose of this paper is to explore how the adoption of e-auctions can be influenced by the firm's relative position in a network. To accomplish this it seems necessary to describe how e-auctions in practice are performed. Research questions addressed are:

- What are conflicts of interests and what effects these might have on business relationships?
- What role do network positions play in the implementation e-auctions in the buyer - supplier relationship?

The conducted study was exploratory in the sense that we searched for deeper understanding of e-auction practice in a business-to-business context. A close and detailed case account has been obtained through in-depth interviews with several actors at the focal firm, PrintTech, and in-depth interviews with its counterpart in the e-auction, AutoCorp. The ambition has been, in line with the suggestions of Wilson (1996), to capture the focal dyad by interviewing both sides of the relationship. In addition, with respect to our analytical focus on network position, we also consider elements external to the focal relationship. However, the level of analysis is considered to the dyadic relationship since it essentially is on this level that the e-auction is implemented.

The paper is outlined as follows. First, a theoretical framework is outlined. Here, previous work on e-auctions and the central concepts applied in the paper are presented. Second, the case of the AutoCorp e-auction is introduced. Here, the story of AutoCorp and PrintTech and the e-auction that they conducted is outlined. Third and final, a discussion with the attempt to bring more light on the research questions stated is made. This discussion is based on our research questions and we conclude the paper by discussing managerial implications and by proposing matters that further research need to deal with.

A few points of departure

A business model that seems to be more and more frequently used in the business-to-business context is the electronic auction (e-auction). Even though the traditional auction, the seller initiated forward auction, is most common, the reverse auction, where the buyer initiates the process and where suppliers compete for the deal and sequentially drive the price downwards, has rapidly gained popularity (Smeltzer & Carr, 2003). E-auctions build on web technology and connect buyers and sellers in a way that was not feasible a few years ago. Through increasing the competitive pressure, e-auctions have shown to cut the unit costs of purchased material (Emiliani & Stec, 2004). The aim of this paper is partly to describe how e-auctions in practice.

An examination of the research topics within e-commerce research shows a diverse range of areas and a steadily growing number of publications (e.g., Ngai & Wat, 2002). The ongoing implementation of e-auctions has been studied in a number of lines of business. Previous studies have, for example, been made on e-auctions in the with specific focus on the aerospace industry (Emiliani, 2000), the medical industry (Tulder & Mol, 2002) or more general focus on e-auctions in industries varying from transportation to manufacturing (Wagner & Schwab, 2004). Even though there is a steadily growing stream of research on e-auctions, many questions remain unanswered about Web auctions (Sashi & O'Leary, 2002). For example, many organizations struggle with assessing the suitability of different solutions for specific commodities and portfolio of purchasing requirements (e.g., de Boer, et al., 2001). In a recent publication, Wagner and Schwab (2004) presented a study that investigated conditions that influenced the success of reverse e-auctions. The study concluded that, regardless of what type of product or service that was provided, the ability to specify the product or service properly had a direct impact on the success of the auction. In addition, that a competitive situation exists, i.e., a number of possible suppliers exist and that these firms have over-capacity to sell.

The conditions of e-auctions are to a large extent in conflict with the view of industrial relationships as presented in studies made by the IMP-group (e.g., Ford, et al., 2002; Håkansson, 1982; Håkansson & Snehota, 1995), which emphasize long term and stable relationships and interdependency between buyer and seller. Relationships are often complex and involve large investments in adaptation, co-operation and infrastructure and a single purchase might therefore take a long time to carry through. Due to the vested interest of the two parties, there is inertia towards leaving existing relationships and mostly changes are gradual rather than radical. Gadde and Mattsson (1987) found that relationships were mostly dissolved in a gradual way like adding a new supplier in parallel with the existing rather than making radical break. The problem of conflicting interests is brought up in recent studies on e-auctions in a business-to-business context (Smeltzer & Carr, 2003). Here, it is argued that buyers initiating e-auctions risk to destroy previously established relationships and that a lack of trust could emerge in the long run. In many ways, the ambition that many business firms have, to act relation-oriented as opposite to transaction-oriented, is challenged by the adoption of e-auctions.

The categorization into relational and transactional and the concept of orientation have been elaborated on by many (e.g., Coviello, et al., 2002; Coviello, et al., 1997; Gopalakrishna Pillai & Sharma, 2003; Sharma & Gopalakrishna Pillai, 2003). Following other authors who have

made efforts to study relational orientation (Gopalakrishna Pillai & Sharma, 2003), we define relational orientation as; the propensity to engage in relational behavior. This propensity seems to be affected by the level of trust, commitment and information exchange (e.g., Gopalakrishna Pillai & Sharma, 2003; Morgan & Hunt, 1994). Thus, having a transactional orientation means aiming at creating arms-lengths relationships rather than not having any relationship at all. E-auctions seem to carry a promise that contradicts the view of industrial markets presented above, as they send strong signals of being a tool used in a transactional approach. The e-auctions seem to signal of something completely different to close and long-term relationships. Yet, e-auctions do not exist in a vacuum. E-auctions are the today a reality in many business-to-business relationships. Therefore, in this study, we address the question: what are the conflicts of interests and what effects might conflicts like this have on business relationships?

In an attempt to understand the dynamic conditions under which a decision to implement e-auctions in a relationship are taken and received, one clearly could benefit from an application of the concept of network position. The term network position is a central and a seemingly well-established concept in the IMP tradition (e.g., Anderson, et al., 1998; Henders, 1992; Johansson & Mattsson, 1992). The concept of network position provides an additional perspective on a single business actions, as it puts a firm in relation to other firms in a network context (Easton, 1992). Johansson and Mattson (1992) stress that since network positions can be identified for all actors in a network, the concept can be used to describe network structure and network distance between actors. In addition, position has been argued to form a framework for actions (Henders, 1992). This means that firm actions are dependent on position. A firm acts according to what its network position, the framework for action, constitutes. This creates a view that actions, for example, might be circumscribed by position. In the coming section, we outline a case of e-auctions where we apply the term network position. In the case of the PrintTech-AutoCorp relationship, we address the question; what role did network positions play in the adoption of e-auctions?

The AutoCorp e-auction

In this section we present a case of e-auctions and conflicting interests that is based on interviews at the two firms PrintTech and AutoCorp. The section is outlined as follows. First a presentation of the background to the implementation e-auctions in the established relationship between PrintTech and AutoCorp is given. Second, a description of the promise of e-auction as expressed by AutoCorp and a description of what possible role network positions played in the implementation e-auctions in the PrintTech/AutoCorp relationship. Finally, presentation of how the e-auction in practice was performed is concludes this empirical section.

Background

Since PrintTech was founded in 1923, a lot of things had happened in their business. Product and process development had changed the graphical industry from being mainly local into being a global business. ICT development had revolutionized not only production but also distribution of their products. Recent innovations were print on demand services and electronic forms and documents. The printing industry clearly had become more than just forms and consignment notes. To stay competitive, a capacity to offer forms available via the

internet either for printing locally, or for distribution between computers was necessary. In addition, it seemed necessary to offer the capacity to do electronic commerce and to offer goods tracking services, integrated logistics systems and so on. Regarding the development of ICT support, the management at PrintTech had experienced an increased need for the firm to have a readiness to supply customers with not just printed products, but with an integrated offer. PrintTech had many of these capacities. A business area manager at PrintTech expressed the following about the development of ICT and in what ways the firm stayed competitive:

We value IT as an important component [of our offer]. Our position is that we are one of two leading firms in our market. And we target the customers we want; the customers where we become a leading firm of our business are actually big firms that have a demand for a supplier that can offer broadness. To be a partner [that will be taken into consideration by big firms], it is important to be good at those emerging e-commerce functions as to produce the pieces of paper that we do here. There are many suppliers out there that can produce pieces of paper, what makes us competitive is that we offer a complete solution.

In May 2003, the managers at PrintTech were invited to participate in a reverse e-auction that was orchestrated by the purchasing department of AutoCorp. PrintTech, a well established actor in the printing industry, supplied AutoCorp with both shorter (on demand) and longer customized series of printed products. The two firms had been working together for quite some time. Over the years in business together, the number of orders from AutoCorp had varied. A product that had been delivered from the start was traditional consignment notes. The managers at PrintTech had high expectations in the relationship with AutoCorp. The strategy for PrintTech was to become a system supplier of all printed products that AutoCorp needed.

The promise of e-auctions

Even though the invitation from AutoCorp clearly stated that the deal would go down through an e-auction, the contract that PrintTech were invited to bid on was highly attractive. Through the invitation, which was presented through a massive amount of documents (more than 10 binders filled with material); the management at PrintTech realized that the contract meant that AutoCorp searched for a system supplier of printed products. If a contract was signed with AutoCorp, it meant big business. The deal covered printed products and electronic forms and documents. Electronic forms were services that PrintTech had put a lot of investments in, in terms of software development. For the management at PrintTech, the initiative of AutoCorp seemed contradictive. The initiative was a sudden and unexpected answer to PrintTech's wish to become a system supplier of all printed products that AutoCorp needed. For some time, PrintTech had developed the abilities to offer a whole range of products and state-of-the-art services to its customers. However, the management at PrintTech had expected that such a proposal would be more oriented towards creating a strong relationship through collaboration and mutual trust. For many years, the ambition of PrintTech had been to act relation-oriented, as opposite to transaction-oriented and arms-length. Instead of working in a close supply relationship, the managers at PrintTech felt that to suggest e-auctions was a signal of something completely different.

At AutoCorp, the explicit ambition (e.g., communicated through purchasing policy documents) has been to develop relationships that are built on trust, involvement and continuous improvements. Nevertheless, to use e-auctions in procurement was very promising and very much part of the future for the firm. In the group of firms called BigTech, AutoCorp was, even though they were a relatively small firm compared to other firms in the group, in the forefront exploiting the promise of e-procurement. BigTech and AutoCorp both had put a lot of effort into e-implementation during the last couple of years. The relative size of BigTech made their case carefully studied by their environment – they were market leaders and many followed their example. According to a group manager of purchasing development at AutoCorp, the first e-auction ever among BigTech firms was held at AutoCorp in 2000. The message was clearly that e-auctions were an application that was here to stay and, the belief in the superiority of e-auctions as a procurement tool seemed rock solid. A few years ago, the purchasing manager at AutoCorp expressed it even more clearly that this was something that their suppliers were demanded to adopt:

AutoCorp demand that suppliers make a bid for e-commerce via the Internet [...]. This is a message that is communicated to all the suppliers of the BigTech. The suppliers that do not learn and apply will be left behind and risks being out of business.

The expression by the AutoCorp purchasing manager is quite clear. Either you complied with the demands of AutoCorp or you were dumped as supplier. The fact that PrintTech was a market leading firm did not seem to matter much. The management at PrintTech was clear with that they did not accept all proposals of e-commerce that was presented to them by their customers. At occasions, they had made it clear that they would not comply with the demands from some customer or supplier. However, the deal with AutoCorp meant big business. The only way to have a chance on the deal was to comply with the demands on doing business electronically.

The auction

Before the e-auction was initiated in May 2003, AutoCorp had an internal initial screening of potential suppliers. This initial evaluation meant, among other things, that supplier representatives were invited to AutoCorp to present their firm and their offer. These negotiations seem to have been important both for AutoCorp to make adequate specifications and for PrintTech to be able to evaluate the potentials of the contract. The administrative manager at PrintTech stated:

We did visits at AutoCorp several times. We presented our offer and our solution to their problems. Much of what we presented in our offer at that time was things that they had as criterions in their final RFQ. We felt that they had listened to us in our discussions.

Based on the initial screening and pre-auction negotiations and discussions carried out therein, AutoCorp sent out RFQ's (Request for quotations) to a number of suppliers. As it turned out, the AutoCorp e-auction was somewhat troublesome for both parties already at this time. The specifications in the RFQ were, despite the pre-auction negotiations, still unclear. In

the RQF that came from AutoCorp from the beginning, several things seemed unclear for the staff at PrintTech. The administrative manager at PrintTech explained:

A lot of documents came to us. It was a gigantic task to go through it. I think we had twelve or thirteen binders of material to go through. And then they had to do it all over again due to the poor quality of the documents. We cannot do calculations on a photocopy of a form. We need to know more than that.

After continued discussions on this matter, a new corrected and clarified RFQ was sent out by AutoCorp. The new RFQ was split into parts. The suppliers could either bid on, for example, just the electronic forms part or on the contract as a system supplier, the whole lot of printed products. Initially, PrintTech just made bids on the electronic forms part of the RFQ. This was a tactical move. PrintTech wanted to wait and see what the competition had to offer. Through the auction that took approximately one hour, PrintTech was careful to put bids that still had a margin for an additional bid from a competitor. PrintTech lacked information on which the other participants on the auction were. However, based on the RFQ and the demands that AutoCorp had put in it, there could not be that many that had the capacities to offer the full range of products that was demanded in the RFQ.

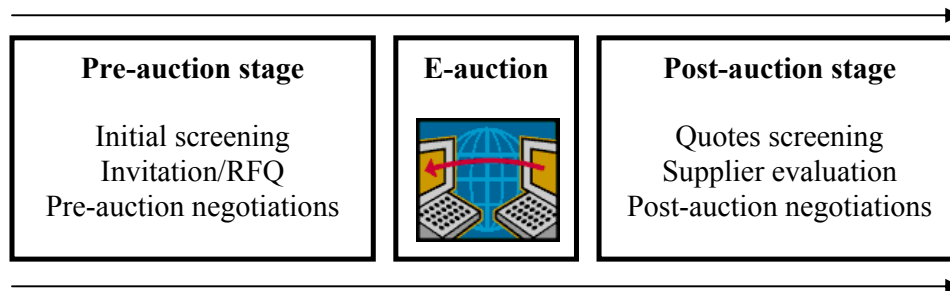


Figure 1, Stages in the AutoCorp e-auction

In addition to the problems of poor specifications, the e-auction suffered from more problems. When the e-auction was running, technical problems occurred. Due to these technical problems, the first e-auction was cancelled had to be started all over again. Even though this seemed to have been disturbing for the parties, it did not affect the overall accomplishment of the e-auction. According to the staff at AutoCorp that dealt with e-auctions, the auctions are technically quite complicated. In 2004, AutoCorp plans to do approximately 10 auctions of this magnitude. This number of auctions has decreased the last two years and the management at AutoCorp hopes that the number of auctions will increase. Nevertheless, the number of auctions that in practice are conducted at the moment means that there were quite few to learn from for the administrative staff.

In e-auctions like the AutoCorp auction, there is no immediate answer to the question of which supplier that gets the contract. It was a reverse auction that was open in the sense that the participants could see each others bids. The purchasing department felt that they had delivered a strong bid that was tough to compete with. However, just because PrintTech had presented a nice offer and that they also had the capabilities to fulfill did not mean that they had the contract. The administrative manager at PrintTech explained:

Unfortunately, one should not be cocky in a situation like this. Just because we, in many ways, have unique capabilities and that these were demanded in the RFQ, this does not in any way mean that we will get the contract. We have learned this the hard way.

A group manager of purchasing development at AutoCorp gave his view on the same matter:

We have made it clear for participants that we as buyers can buy from what ever supplier we want to in the auctions that I have been part of ... if we don't pick the lowest bidder then this should not annoy them ... they have to understand that we have several criterions. In addition, in e-auctions, we added a function that allows the participants to withdraw a bid. [...] Purchasers that I have spoken to have said that they don't want a supplier that by accident have made a bid which was 15 % lower than what they actually can handle. In this case it is much better to do an immediate withdrawal than to wait just to do the same thing two weeks later.

Following the e-auction was a number of additional events. For PrintTech, making their final bid in the auction meant the start of a series of additional negotiations. These negotiations were, of course, preceded by a new screening of the bidders and their bids. For AutoCorp, this procedure meant that a number of suppliers could be excluded and this left them with just a few competing bids. In the AutoCorp e-auction, two firms were still in the competition after the post-auction screening. One of these remaining suppliers was PrintTech. The administrative manager at PrintTech stated the following:

I thought it was a bit strange that they did not have a comprehensive supplier evaluation until after the e-auction. [...] The last negotiation, or perhaps I should say meeting, which we had with them was during the supplier evaluation. This was, by far, the most thorough supplier evaluation I have seen.

In early 2004, a straight answer from AutoCorp about the winning party had not been delivered. Yet, the management at PrintTech feared the worst; they had lost the contract to someone else. At the moment, PrintTech still supplied AutoCorp with consignment notes but, at least directly after the e-auction, they expected this (smaller) contract to go away as well. This has, however, not yet been realized. Instead, if the stages in the AutoCorp e-auction are considered in wider context, PrintTech seems to be back at square one. Or, almost back at square one.

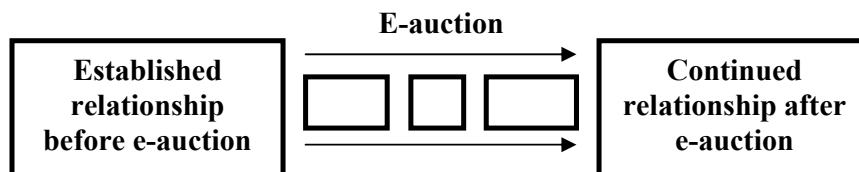


Figure 2, Stages in the AutoCorp e-auction in a wider context

Supposedly, but not confirmed, the process which started with an established relationship before the e-auction was introduced, had ended up in a continued relationship. Still, there is hope that AutoCorp had recognized the difficulty of their RFQ and split the final contracts into parts and thus kept PrintTech as their supplier of consignment notes. At present, nothing else had happened and for PrintTech and AutoCorp it was business as usual. What probably happened was that AutoCorp also contracted an additional supplier to supply the additional parts of the contract that PrintTech did not supply before the e-auction and do not supply after the e-auction either.

Discussion

A question that needs to be raised is how well the approach to buy system solutions through e-auctions that AutoCorp has fit the requirement of 'specification' that has been brought up by previous research (e.g., Wagner & Schwab, 2004). Clearly, it was difficult for AutoCorp to specify what they needed. The fact that they searched for a system supplier did not make the specification any easier. Conducting a meaningful comparison of two system suppliers would mean that they needed to bring up a broad range of variables. Did they have a good enough picture of their actual needs? The case showed that the pre-auction negotiations meant that PrintTech intervened and gave support in clarifying the RFQ. This sharing of knowledge and know-how seems to fit well with the purchasing policy that includes the propensity to engage in relational behavior. Does it fit a relationship that conducts transactions through e-auctions? What happens with the trust and commitment in the relationship as others have argued that the implementation of e-auctions could lead to (e.g., Smeltzer & Carr, 2003). Through sharing knowledge on how to specify the RFQ seems to have been exploited by AutoCorp without any further notice. This will, most certainly, affect the future commitment and trust that PrintTech has in AutoCorp.

The case showed that the explicit ambition of AutoCorp (e.g., communicated through purchasing policy documents) had been to develop relationships that are built on trust, involvement and continuous improvements. Nevertheless, to use e-auctions in procurement was very promising and very much part of the future for the firm. The managers at PrintTech asked themselves; what made AutoCorp change their mind about the importance of closeness? For them, the ambition to start working with e-auctions was very much contradictive. A question that could be raised here is if e-auctions and this expressed wish for a relational approach even possible to combine? In fact, e-auctions seem to have elements of both the relational and the transactional approach. Even though AutoCorp expresses an ambition to change the character of their relationships and adopt e-technology, there still many interactions and discussions between the parties following. If one looks at the 1-2 hours of e-auction that takes place in the case, the transactional elements are evident. But, all in all, if one looks at the 1-2 years of interactions that the negotiation and auction on the contract requires, there is much more to it than just a transactional approach. If we consider the stages in the AutoCorp e-auction in a wider context, since AutoCorp kept PrintTech after the e-auction was made, they continued the relationship after the e-auction and added an additional supplier of printed products. Could the objective of AutoCorp be to put additional pressure on the established relationship they had with PrintTech? A statement made by a group manager of purchasing development at AutoCorp shows our point:

If [e-auctions] risks a good relationship? Well, of course it is uncomfortable, if one has had a good relationship ... [...] A good purchaser should, in principle, have one supplier that supplies all what one needs but make this supplier feel a constant threat [of being replaced].

There is an ambiguity in the way AutoCorp acted because of the combination of the relational orientation and the making use of transactional tools like e-auctions. AutoCorp did not break any relationships but rather, in terms with network theory, made a gradual change in which they seems to have added a new supplier (Gadde & Mattsson, 1987). Therefore in this case the transactional tool seemed to be used with a relational purpose. There are other ambiguities between talk and action which seemed to be both transactional and a relational orientated, leading to confusion of the suppliers.

From the case it seems clear that the network position of PrintTech, albeit strong in terms of being a market leader, was weak in relation to AutoCorp. The relative power of AutoCorp, eloquently expressed in a quote by their former purchasing manager, was clear; either you complied with the demands of AutoCorp or you were dumped as supplier. The contract that PrintTech was competing for in the e-auction meant big business. The only way to have a chance on the deal was to comply with the demands on doing business electronically. Regarding network position, the case of the AutoCorp e-auction puts emphasis on position not only in terms of relationship PrintTech/AutoCorp but also the group that AutoCorp is part of BigTech. Even though not explicitly expressed, there was a clear pressure from BigTech that AutoCorp should develop their e-capabilities. This pressure was not received with complete compliance. In fact, there was internal critique at AutoCorp to the complete focus on e-auctions and the transactional approach that had emerged in their purchasing activities over time. In addition, within AutoCorp and the BigTech group, there seems to be a cultural conflict present in terms of how the group of firms should act towards their suppliers. This becomes a problem when the firms start to coordinate their purchasing through the exploitation of e-applications. Thus, the belief in the superiority of e-auctions as a procurement tool was not, after all, shared by all.

The purpose of this paper was to explore how the adoption of e-auctions can be influenced by the adopting firm's relative position in a network. As the case showed, network position can be used on two levels. On one level, the network position of PrintTech, albeit strong in terms of market leadership, made the management at PrintTech meet the terms of AutoCorp to be able to participate in the competition regarding the contract to become a system supplier. On another level, the network position of AutoCorp, albeit internal critique, made the management at AutoCorp meet the terms of BigTech. The conflicts that appeared were mainly conflicts in terms of lack of understanding among the managers at PrintTech whether AutoCorp aimed at a relational or transactional orientation. The AutoCorp e-auction case showed that e-auctions seem to have elements of both the relational and the transactional approach. Even though AutoCorp expressed an ambition change the character of their relationship into arms-length, there still many interactions and face to face discussions following. Applying the transactional orientation to an existing network of relational orientation it might be as time consuming and difficult as changing a culture of the firm (if ever successful). Either there will be an adaptation and making use of the new tool- e-auctions -into the relational orientation i.e. using it for switching non successful relationships or there will be a transformation to the transactional orientation. However, it seems that during change

period it will be “the eyes of the beholder” i.e. the purchasing manager at the buying firm that might decide the role, implementation and final outcome of the e-auctions.

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