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Improving the Competitiveness of a Value Network:
Communicating Understandable Purchase Contract Information to Related Third
Parties

Ymmärrettävän ostosopimustiedon kommunikointi sopimukseen liittyville
kolmansille osapuolille arvoverkoston kilpailukyvyn parantamiseksi

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ABSTRACT

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The objective of this bachelor's thesis is to investigate how organisations can communicate understandable information about purchase contracts to third parties that relate to the contracts. An operating model, in which the contracting organisations have agreed that their sub-contractors can purchase goods using the same contract prices or terms as the contracting parties, is examined.

The empirical study is conducted as a qualitative single case study and it evaluates the topic from the perspective of a large Finnish technology company. The study differentiates private purchase contract information from confidential as only private can be shared with third parties. To make the communication of private purchase contract information more understandable, utilisation of visualisation, typography, modularity, and a certain type of language are suggested. Written form is the most effective when communicating complex information. Therefore, this study suggests that the best channels to share purchase contract information are information technology systems and email, or training sessions that combine both written and verbal communication. The outcomes of understandably and effectively communicated information are more competitive value networks and stronger business relationships.

TIIVISTELMÄ

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Tämän kandidaatintutkielman tarkoituksena on selvittää, kuinka organisaatiot voivat kommunikoida ymmärrettävää ostosopimustietoa sopimukseen liittyville kolmansille osapuolille. Työ keskittyy liiketoimintamalliin, jossa sopimuksen tehneet organisaatiot ovat yhdessä sopineet, että heidän alihankkijansa voivat hyödyntää heidän sopimiaan sopimushintoja ja -ehtoja ostoissaan.

Empiirinen tutkimus on toteutettu laadullisena tapaustutkimuksena, joka tarkastelee aihetta suuren suomalaisen teknologiayrityksen näkökulmasta. Tutkimuksessa erotellaan yksityinen ostosopimustieto luottamuksellisesta, sillä vain yksityistä tietoa saa jakaa kolmansille osapuolille. Yksityisen ostosopimustiedon kommunikoinnista voidaan tehdä ymmärrettävämpää hyödyntämällä visualisointia, typografiaa, modulaarisuutta ja tietynlaista kieltä. Tehokkaimmin vaikeasti hahmotettavaa tietoa voidaan kommunikoida kirjallisessa muodossa. Tämän tutkimuksen perusteella parhaat kanavat ostosopimustiedon kommunikointiin ovat täten tietojärjestelmät ja sähköposti, tai koulutustilaisuudet, joissa yhdistyvät kirjallinen ja suullinen viestintä. Ymmärrettävästi ja tehokkaasti kommunikoidun tiedon avulla organisaatiot voivat saavuttaa kilpailukykyisempiä arvoverkostoja ja vahvempia liiketoimintasuhteita.

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1. INTRODUCTION

It was noticed already in the early years of the twenty-first century, that technology companies must build strong relationships with the suppliers, with whom they can combine their core competencies (Kothandaraman & Wilson 2001, 382). Despite globalisation has increased the number of possible suppliers in general, the acquisition of complete assemblies has narrowed the available selection in the technology industry (Vesalainen & Vuorinen 2013, 92), where a considerable part of the value of production nowadays comes from outsourced assemblies. This has made networking crucial for businesses resulting in the formation of so-called value networks. These value networks compete to fill the needs of customers and to succeed, companies must be able to design and manage the networks (Holweg & Helo 2014, 230).

One way to manage the network and its risks as well as save in costs in procurement is purchase contracting. However, purchase contracts include critical and sometimes confidential business information that must be understood and communicated accordingly (Passera, Haapio & Barton 2013, 19). Especially an operating model, in which the contracting companies have agreed that their certain sub-contractors can purchase goods using the same contract prices or terms as the contracting parties, requires effective communication to succeed. In such situation, difficulties in the communication arise from understandability and confidentiality of the contract related information. As previous research on this type of operating model does not exist, this study analyses how information about purchase contracts can be communicated to related third parties in a value network with an understandable and effective manner.

1.1. PREVIOUS LITERATURE AND RESEARCH

The dynamics of a value-creating network are fundamentally defined in Kothandaraman and Wilson's (2001) conceptual model that introduces the building blocks of the network. Later studies have analysed the competitiveness of value networks from diverse perspectives, business relationships being the most relevant approach for this study. Kähkönen and Lintukangas (2018) highlights the importance of strategic supply management and argues that it can create value through strategic and collaborative supplier relationships as well as through unique supplier relationship management capabilities. Olkkonen, Tikkanen and Alajoutsijärvi

(2000) suggest that business relationships are formed by interaction processes. In these processes, especially trust and shared identity are found to be important factors that ameliorate communication (Chu, Chang & Huang 2012; Vesalainen & Vuorinen 2013; Välimäki 2013; Greenaway, Wright, Willingham, Reynolds & Haslam 2015).

The understandability of contracts emerged in the literature during the last decade from the perspectives of visualisation and information design (Passera & Haapio 2011; Passera et al. 2013; Haapio & Siedel 2013). Certain information design can result in the creation of more easily understandable contracts through structures that better support and clarify complex information (Passera et al. 2013, 58). These techniques could also be used when communicating complex purchase contract information in a value network. Previous research indicates that heretofore very few organisations have put efforts to ease the understanding of contracts among users with non-legal backgrounds (Passera & Haapio 2011, 5). Previous research related to the communication of complex information is mostly found in the field of educational psychology. Sweller (2010) discusses how novel information should be presented to maximise the learning of the recipient and therefore the effectiveness of the message. Singh, Marcus, and Ayres (2017) add to the theory by examining the differences in the effectiveness of written and verbal communication.

Communication of contractual information to third parties lacks previous research. Previous literature also lacks empirical contributions on the type of contractual arrangement, where certain non-contracting parties can use the terms or prices of a purchase contract made between two others. This case study intends to narrow that gap.

1.1. KEY DEFINITIONS

This chapter shortly defines the most important terms used in this study. The terms are sorted in alphabetical order.

COMMUNICATION

Communication is encoding, transmission and decoding of information (McCall 2018). A fundamental basis of business relationships is communication between organisations.

CONFIDENTIAL INFORMATION

Information is secret when it has not been shared with anyone. When secret information is purposefully shared with another party in a condition that the receiving party keeps it secret, the information becomes confidential. Basically, any information can be confidential. It is up to the agreeing parties what information they classify confidential. (Vapaavuori 2020, 511-512)

PRIVATE INFORMATION

If some confidential information can be shared with certain third parties, it is considered private. However, the third party is not allowed to share it forward. This means that while the distributor considers the information private, it is confidential from the perspective of the recipient. This study focuses on the communication of private purchase contract information.

PURCHASE CONTRACT INFORMATION

Purchase contract is an agreement that specifies the roles and responsibilities of the contracting parties when they make purchases. (Passera et al. 2013, 3-4). This study defines purchase contract information as any information that relates to purchase contracts, including the contents of the contract as well as the legal rights and obligations the contract creates. This also covers the practical procedures of utilising the contract, such as what information should be included in the purchase order when purchasing something that is under the contract.

VALUE

Kothandaraman and Wilson (2001) define value as the relationship between different companies' market offerings and prices outlined by the customer. For this study, a little wider perspective is considered. Value is also the surplus between obtained benefits and incurred sacrifices, including nonmonetary factors such as time or effort (Kähkönen & Lintukangas 2018, 980). The creation of value is determined as the companies' core capabilities that deliver benefits valued by the customer. Core capabilities are competencies in business processes or technology. (Kothandaraman & Wilson 2001, 381)

VALUE NETWORK

Value network is a dynamic network of companies consisting of partnerships and information flows, in which the partners operate collaboratively (Bovel & Martha 2000, 24). The purpose of a value network is to create value to the customers by effectively combining the core competencies of the companies in the network (Kothandaraman & Wilson 2001, 384).

1.2. SCOPE AND AIM OF THE STUDY

This study sheds the light on the competitiveness of value networks through purchase contracts and the communication of purchase contract information. The study concentrates on the communication methods that can be used in easing the understandability and sharing of purchase contract information to the relevant parties in a value network. The relevant parties are third parties (e.g. sub-contractors) who relate to the contract. Only private purchase contract information will be examined, as confidential information cannot be shared with third parties. The focus is on an operating model in which the contracting organisations have agreed that their sub-contractors can purchase goods using the same contract prices or terms as the contracting parties.

Outsourcing and business relationships play critical roles in the operating model and value networks. Therefore, they are shortly introduced with the help of supply chain management literature in the theoretical part of the study. In addition, the theoretical part connects previous research from the fields of business law and educational psychology in order to explain what purchase contracts are and how the information related to them can be communicated effectively and understandably.

The empirical study examines the topic from the perspective of a large Finnish technology company. Contributions will be made to the literature of supply chain management and business communication. The aim of this study is to guide organisations in communicating purchase contract information understandably and effectively in their value network. The desired outcomes are more competitive value networks and stronger business relationships.

1.3. RESEARCH QUESTIONS

Based on the scope and aim of the study, the main research question is:

How to communicate understandable purchase contract information to related third parties in a value network?

The following three sub-questions support in answering the main question:

- 1. In a value network, what purchase contract information can and what cannot be shared with third parties who relate to the contract?*
- 2. How to ensure the understandability of the communicated purchase contract information in a value network?*
- 3. What are the best channels to share purchase contract information with related third parties in a value network?*

1.4. STRUCTURE OF THE STUDY

The paper is structured as follows. This section has introduced the topic and aim of the study as well as presented the research questions. The theoretical background of the study is examined next, while the third section introduces the research methods and data for the empirical study. The results of the study are discussed in section four. Finally, the fifth section concludes the study and gives suggestions for future research.

2. COMMUNICATING UNDERSTANDABLE PURCHASE CONTRACT INFORMATION IN A VALUE NETWORK

This section introduces the theoretical background of the study. First, the concept of a value network is introduced. Next, purchase contracts and their relation to trade secrets are explained. The third chapter examines the ways to make complex information more understandable. Finally, the best channels to effectively communicate complex information are introduced. By combining the theoretical aspects from in this section, companies should be

able to effectively communicate understandable purchase contract information in their value networks without making mistakes that might result in legal actions.

2.1. COMPETITIVE VALUE NETWORK

According to Bovel and Martha (2000, 24), value network is a dynamic network of companies consisting of partnerships and information flows, in which the partners operate collaboratively. Customer demand is a key component that activates the network, as also highlighted by Kothandaraman and Wilson (2001, 384). Among many aspects, a well-designed network offers benefits such as cooperative problem-solving, rapid responding to customer demands and building of stronger brands based on valuable services (Bovel & Martha 2000, 26). In comparison to the companies outside a successful value network, the ones in it also gain additional competitive advantage (Vesalainen 2013, 20). Kothandaraman and Wilson (2001) introduce a model of value-creating networks, where the main concepts are core capabilities, relationships, and superior customer value (Figure 1). The concepts form a reciprocal model in which the building blocks are all connected (Kothandaraman & Wilson 2001, 384).

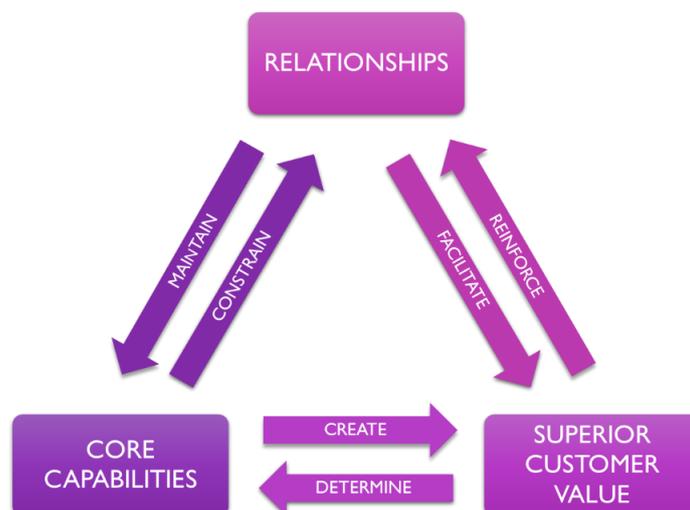


Figure 1: The Model of Value-Creating Networks (Kothandaraman & Wilson 2001,384)

Value-creating network aims to create superior customer value. To create superior customer value, companies in the network must combine their core competencies, while the relationships between the companies define how well they do that. Superior customer value determines which core capabilities are valued by the network whereas the quality of the

relationships is constrained by the combined core capabilities. Relationships also restrain the network in place. The value-creating network boosts the members resulting in reinforced relationships. (Kothandaraman & Wilson 2001, 384) Two main ways to build a competitive value network; successful outsourcing and strong business relationships, are discussed next.

2.1.1. OUTSOURCING

Companies in the value network must be able to focus on their core competencies. As a result, outsourcing becomes mandatory. According to Van Weele (2014, 176), outsourcing means a transfer of business activities from in-house to a third party. Companies outsource to increase their competitiveness and achieve strategic goals. The improvements in customer satisfaction and efficiency, as well as reduction in costs, are seen as the main reasons for outsourcing. Other advantages include increased flexibility, more focused primary processes and increased amount of cash released for the core activities. Functions that do not differentiate the company from its competitors and that are strategically less important are often outsourced (Van Weele 2014, 174-180). One of the ways to understand and determine the value network is to decide where the organisation wants to focus in terms of value creation. This in practice means choosing which functions to outsource and which to keep in-house. (Holweg & Helo 2014, 236)

One of the characteristics of successful outsourcing is that it will form a long-lasting relationship between the parties. However, risks are always associated with such actions. Outsourcing makes companies more dependent on their suppliers. Supplier relationships also require continuous monitoring and maintenance. When business functions are being outsourced, many types of information (e.g. demand forecasts, strategic information, contract related information) might be shared and exchanged with the sub-contractors. Major communicational risks include losing essential strategic knowledge or the supplier leaking confidential information to third parties. (Van Weele 2014, 176-180)

2.1.2. BUSINESS RELATIONSHIPS

A strategic network that delivers high value to the customer also requires the developing of strong relationships with partners, who at the same time add value to the market offering but display low risk as a partner (Kothandaraman & Wilson 2001, 382). Therefore, key supplier

management should ensure that the external resources are available for mutual value creation (Kähkönen & Lintukangas 2018, 991). Business relationships often result in the creation of shared social capital. It consists of three dimensions: communication, shared identity, and trust, which are all essential in persistent collaboration. Social capital is a sensitive element, and its balance can be easily shaken even by small changes, such as an interchange of a single buyer. (Vesalainen 2013, 26; Vesalainen & Vuorinen 2013, 94-95) Supplier relationship management should create value by using the company's relational capabilities in developing trustful relationships and obtaining knowledge of supplier networks (Kähkönen & Lintukangas 2018, 991). Brief discussions of the three dimensions follow.

Organisations are social structures that are formed by human behaviour. Business relationships are always based on interpersonal relationships of the employees working in different organisations. (Välimäki 2013, 128) As a consequence, relationships require strong communication skills from the employees to succeed (Passera et al. 2013, 5). To understand the relationships, knowledge of the communication processes occurring within them is needed (Olkkonen et al. 2000, 405). The conceptual model presented by Olkkonen et al. (2000, 406) defines the role of communication in business relationships and deepens the understanding of the relationships and networks by proposing that the relationships are formed by interaction processes to which the context and outcomes of the relationship affect. The context refers to the environment where the relationship is observed, including outer contexts (*macro environment and network*) and inner context (*characteristics of the buyer and the seller*). The outcomes include performance, bonds and atmosphere obtained by the relationship. (Olkkonen et al. 2000, 405-406) This means that for example the established network and obtained trustful relationship affect the communication in the relationship.

Vesalainen (2013, 27) defines shared identity as value alignment and a sense of community between the interacting parties, including collective goals and ways to achieve them. The people with whom one shares an identity are referred to as *ingroup* members, while others are classified as *outgroup* members. Shared identity does not have to be in a relationship from the beginning; the identity can be recategorised in different situations. For example, supporters of opposing football teams might first consider each other as outgroup members. Later, the same person can be categorised as an ingroup member if the social identity in question is a football supporter in general. (Greenaway et al. 2015, 172)

Olkkonen et al. (2000, 406) suggest that trust greatly depends on communication. Trust in inter-organisational relationships is defined as a conviction that one party will not take advantage of the other party's vulnerability in any situation (Välimäki 2013, 126). Effective, open, and honest communication creates trust, and it can be displayed for example by sharing benefits and information in the relationship as well as reducing control and regulation over the other party (Vesalainen 2013, 29; Välimäki 2013, 126). According to Chu et al. (2012, 119), trust is a prerequisite of sharing common values and goals, indicating that trust is also needed for a shared identity. In addition, a higher level of trust corresponds to the willingness to share confidential information (Chu et al. 2012, 119) and diminishes the incidence of opportunistic behaviour (Vesalainen & Vuorinen 2013, 95). From the financial perspective, trust decreases the costs of self-protection as the need for strict monitoring and use of various suppliers is reduced (Vesalainen & Vuorinen 2013, 95), making the value network more competitive.

2.2. PURCHASE CONTRACT INFORMATION

Business relationships gain juridical significance through contracts (Annola 2013, 49). Well-communicated contracts strengthen business relationships, lead to innovation and support value creation (Passera et al. 2013, 19). The next two sub-chapters introduce purchase contracts and trade secrets. The third sub-chapter combines the information from the first two and explains the difference between private and confidential purchase contract information.

2.2.1. PURCHASE CONTRACTS

According to the Contracts Act (1929/228), an offer and an acceptance to the offer forms a contract that legally binds the offeror and the acceptor. The formation is a bilateral legal act, that requires a mutual agreement of two or more distinct parties for the contract to be enforceable (Jaakkola & Sorsa 2005, 38). Typically, non-contracting parties do not receive any rights or obligations from a contract made between two others (Hemmo 2003, 408).

Most of the contract types used in business have no peremptory provisions in legislation meaning that the agreed terms regulate the contract (Kiskonen 2013, 164). A purchase is an agreement in which a buyer takes the possession of a specified good or service by paying the predetermined amount of money to the seller (Jaakkola & Sorsa 2005, 111). A purchase

contract is made between at least two organisations and it specifies the roles and responsibilities of the contracting parties as well as nominate the dispute resolution methods (Passera et al. 2013, 3-4).

A legally binding contract can either be written, verbal or tacit. Tacit agreement means that the agreement has been made silently and is based on the parties' conduct. However, it is safest to make the contract in written form to protect the rights of both contracting parties. (Hemmo & Hoppu 2020) A purchase contract does not have to follow any specific format and usually, the contents of the contract depend on the goods or services that are included in the contract. In addition, conditions such as purchasing policies, company culture and market situation cause differences in the commercial and legal terms and conditions of the contract. (Van Weele 2014, 35-36) In Figure 2, the contents of a purchase contract are divided into four categories that all include some examples of what they could include. The examples are collected from Hemmo and Hoppu's (2020) book and then classified under the superordinate categories by the author.

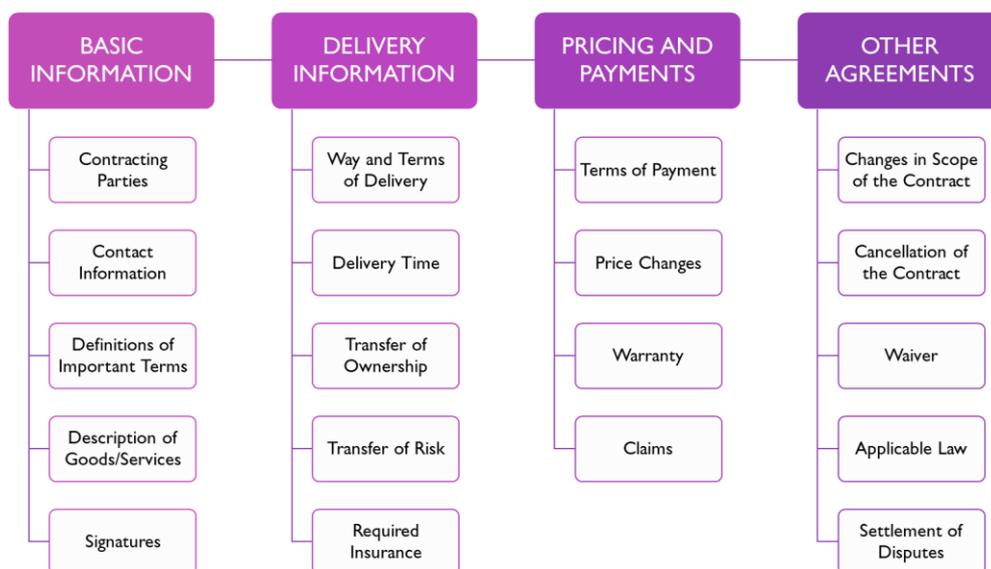


Figure 2: Possible Elements of a Purchase Contract

A third-party beneficiary is an entity receiving legal rights from a contract made between two others (Hemmo 2003, 409). However, cases of such contracts are mostly found in the field of insurances and not from purchase contracts. A third party can still relate to a contract without being either one of the contracting parties or a third-party beneficiary. This type of situation can occur if the contracting companies have agreed that certain sub-contractors can purchase

goods using the same contract prices or terms as the contracting parties. The name of the third party can be mentioned in the contract for example the following way:

“Purchaser’s sub-contractors, which are entitled to purchase the Goods and/or Services from the Supplier with the prices and other terms agreed under this Purchase Contract are listed below. “ (Grönholm 2020)

The situation could be called as an operating model that is based on collaboration, trust and given opportunity rather than to legal aspects. The model does not include any sharing of contract documents or the contents of a contract and the use of the opportunity is voluntary. The purpose of the model is to decrease the total costs and increase the quality of purchases resulting in the increased competitiveness of the entire value network. (Grönholm 2020)

Moon and Phillips (2020, 21) suggest that companies with many purchase contracts are better able to reduce their operating leverage because of having fewer fixed costs. Furthermore, the lower leverage results to retained value of contracts and better contractual terms due to decreased financial concerns (Moon & Phillips 2020, 3). However, Välimäki (2013) argues that in trust-based relationships the transaction costs can be even lower. If the other party can be trusted to keep their promises, there is no need to put time and money for making and managing official contract documents (Välimäki 2013, 125).

2.2.2. TRADE SECRETS IN PURCHASE CONTRACTS

Contracts often include confidential information referred to as trade secrets. Trade secrets are commercially valuable information that companies keep secret to preserve their competitive advantage (EU 2017, 1-2) and they are a significant part of the intellectual property in organisations (Vapaavuori 2020, 23). Trade secrets are regulated by the Trade Secrets Act (2018/595). Information is classified as a trade secret when it meets all the following requirements:

- a) *“it is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;*
- b) *it has commercial value because it is secret;*

c) *it has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret.” (Trade Secrets Act 2018/595 § 2)*

Trade secrets can either be technical or commercial, and they can be in any form including documents, electronic information, products, or prototypes (Vapaavuori 2020, 116). Examples of both types are condensed in Table 1. Especially commercial trade secrets, such as sales prices and discount rates, are often included in purchase contracts. However, they are not automatically trade secrets. If the information is not kept secret by sufficient actions, it might lose the trade secret status. (Vapaavuori 2020, 61) It is notable though, that the protection does not inhibit other companies from using the information if they have obtained it in a lawful manner (EU 2017, 8). On the other hand, the same type of information, such as sales prices, can be a trade secret to one company and public information to another. Therefore, the classification is done case by case. (Vapaavuori 2020, 68)

Table 1: *Examples of Trade Secrets (Vapaavuori 2020, 61-62)*

TECHNICAL TRADE SECRET	COMMERCIAL TRADE SECRET
Production, manufacturing, and assembly drawings	Information related to customer and supplier relationships
Experimental research data	Sales and purchase prices
Manufacturing quality requirements and tolerances	Discount rates
Prototypes	Sales and pricing information

According to the Trade Secrets Act (2018/595 §2), sufficient steps must be taken to keep the information secret. This can be done for example by including a confidentiality clause in a purchase contract (EU 2017, 5). The clause protects confidential information and is often used in collaborative business relationships. It forbids the parties to disclose confidential information to third parties. The existence of a whole contract or only the contents can be agreed to be confidential. (Vapaavuori 2020, 473-476) Another way to prevent the breach of confidential information is employee training. The employees should be familiar with the company’s trade secret policy and the handling of confidential information in order to be able to protect the information (EU 2017, 6).

A basic feature of the confidential information is that once it has been revealed, it cannot be made back to secret (Vapaavuori 2020, 494). When communicating contractual information,

companies must carefully identify if the information is confidential and therefore cannot be shared with third parties. A breach or disclosure of a trade secret can cause considerable economic losses for an organisation (EU 2017, 3). A violation of the confidentiality clause also violates the Trade Secrets Act and it means that confidential information has been shared with external parties or used to the recipients own purposes. Typically, the penalty for such breach includes monetary penalty and compensation for the damage caused to the trade secret holder. It can also lead to the termination of the contract. (Vapaavuori 2020, 490) Of course, the trust in the relationship will also be lost.

Besides trade secrets, other types of information can also be agreed to be confidential. In principle, the contracting parties can bilaterally agree almost any information to be confidential exactly in their business relationship. Often the definition of confidential information should be determined in the contract if other information than trade secrets has been classified confidential. (Vapaavuori 2020, 511-512)

2.2.3. PRIVATE AND CONFIDENTIAL INFORMATION IN PURCHASE CONTRACTS

Based on the previous sub-chapters, purchase contract information can be divided into private and confidential. Confidential information must stay between the contracting parties (Vapaavuori 2020, 511-512), while private can be shared with certain third parties. For example, the operating model where a third party relates to the contract without being a third-party beneficiary might include some sharing of private purchase contract information (Grönholm 2020).

Because the existence of a purchase contract or only the contents can be classified confidential, it depends on the contract whether information can be shared with a third party or not (Vapaavuori 2020, 476). If the existence of the whole contract is confidential, no purchase contract information can be shared with any third parties. In turn, if only the contents of the contract are confidential, the existence of a contract, including the names of the contracting parties, can be revealed to certain third parties. It again depends on the agreement if other contract contents, such as the terms of payment or delivery, can be revealed.

2.3. UNDERSTANDABILITY OF PURCHASE CONTRACT INFORMATION

Business success rely upon the implementation of contracts. Therefore, those who share information about the contracts should understand the roles and responsibilities of them. (Haapio & Siedel 2013, 155) However, if the mechanism of learning and problem solving is not understood, the chances of communicating understandable information are limited (Sweller 2010, 45).

New information is processed in the short-term memory in the human mind (Sweller 2010, 37). The capacity is limited, and it is argued that the short-term memory can only hold approximately seven pieces of novel information at a time (Miller 1956, 95-96). The limited cognitive resources are easily overloaded when the brain is processing complex information (Passera et al. 2013, 9). Cognitive overload occurs when the capacity of the short-term memory is exceeded, and it should process a larger amount of information than it actually can. Therefore, to understand complex information, it must be carefully structured in a manner that prevents cognitive overload. (Sweller 2010, 37-44) In other words, intricate texts, such as contractual information, often require more than text-only guidance to be understood (Keller, Gerjets, Scheiter & Garsoffky 2006, 46). Passera and Haapio (2011, 58) and Passera et al. (2013, 9) argue that visual and conceptual structures clarify complex information and create more easily understandable contracts. In other words, text and visual elements together distribute information processing among different information processing systems (Keller et al. 2006, 46). The structures could also be used in guidance materials containing complex information.

2.3.1. INFORMATION DESIGN

Information design aims to define, plan, and shape the contents of a message and its environment in a way that satisfies the information needs of the intended recipients (idX 2007, 8). It consists of visualisation, typography, and layout design, and the ultimate goals are clear communication and the enablement of valuable interaction (Passera et al. 2013, 8-9).

Since visualisation utilises for example figures and colours to clarify the text, the understandability of complex information can be eased with visual aspects. In addition, large amounts of information, even a whole book, can be compressed into a one-page figure through

visualisation (McCall 2018). In many situations, the vital information provided in organisations is targeted to the management, that already experiences information overload (Patrick 2003, 5). Visual cues also help to create an attention hierarchy, that ensures that the important points get noticed (Passera et al. 2013, 9).

Patrick (2003, 7) encourages writers to enliven messages with illustrations and even humour to keep the attention of readers when dealing with complex topics. Passera and Haapio's (2011) example of visually represented contract clause is illustrated as flowcharts in Figure 3. In the example, the termination clause had been understood differently by the contracting parties, which resulted in confusion. From the perspective of this study, a similar type of visual clarification for complex purchase contract information could be used when sharing the information in a value network. This would also help the parties to articulate their tacit knowledge and assumptions into an understandable form (Passera et al. 2013, 10).

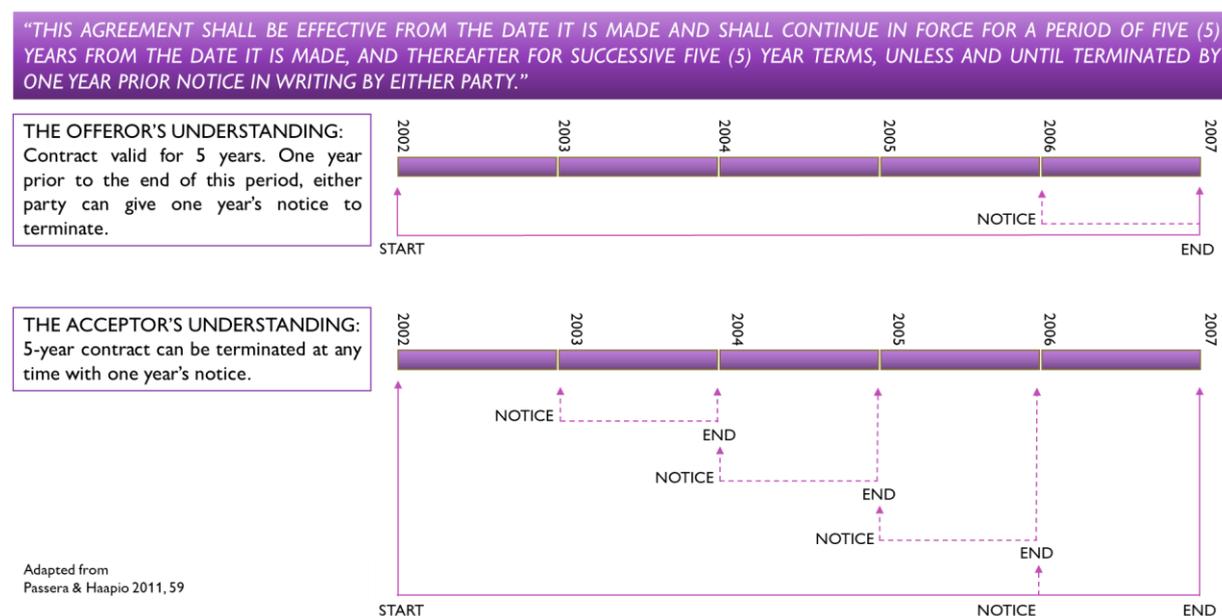


Figure 3: Visual Representation of a Termination Clause (Adapted from Passera & Haapio 2011,59)

Complex information should be expressed in clear, ordered, and expressive structure (Passera & Haapio 2011, 58). Typography relates to structures, such as lists, headings, summaries, indexes, and diagrams, that help to construct documents. It helps the readers to locate the relevant parts efficiently (Waller 1979, 176). Patrick's (2003, 4-5) suggestions for such typographic features in the business environment include summaries for important parts, separate headings for required actions or deadlines, different types of text (e.g. bolding,

underlining, italics), as well as colours, tables, and charts. Especially flow charts are practical in the business environment as the audience is typically very familiar with the method (Passera et al. 2013, 12). If a complex message is not further developed with typographic elements, it might be difficult for the readers to see the relevance of the text to their needs (Waller 1979, 183). In other words, typographic features help to ensure that the message receives the desired attention. However, this should only be done within certain boundaries. Too many different visual elements might turn the message back to incomprehensible (Patrick 2003, 5).

Modularity as a layout design is argued to make the communication of complex information more understandable. It means that the contents are systematically organised in modules, which helps the reader to navigate and explore the contents. In addition, it makes the finding of relevant information easier. (Passera & Haapio 2011, 58) Use of such design would also ease the communication of purchase contract information.

2.3.2. USE OF LANGUAGE

Correct grammar and spelling are vital when sharing crucial information, as such errors are likely to decrease the credibility of the author and therefore also the impact of the message. Keeping the message clear by using specific language and avoiding redundant words also makes them more effective. Using lists instead of narrative language as well as highlighting the important information has been seen beneficial. (Patrick 2003, 6-7)

An overly ambiguous language in contracts might cause trouble if disputes arise (Hemmo & Hoppu 2020). However, the legal language used in contracts easily make them seem complex and difficult to communicate. Due to such language, people with non-legal backgrounds often find them complicated. (Passera et al. 2013, 7) Therefore, when communicating contractual information to people with non-legal backgrounds, the legal language should be replaced with practical and unambiguous language to maximise the understanding.

In many large organisations, different people negotiate the contracts, and different people actually utilise them in their daily work. This can lead into misunderstandings and information gaps related to the purpose or terms of the contract also making the implementation difficult. (Haapio & Siedel 2013, 45-46) If the contents of the contracts are understood differently among

the different teams, some misunderstandings are likely to be forwarded when communicating the information in a value network. Visual contracts, common organisational guidance materials, or clarifying conversation between the teams could help in avoiding that.

Both problems explained above slightly relates to the concept of knowledge asymmetry. Knowledge asymmetry occurs when information is communicated between people that have different (e.g. occupational, cultural) backgrounds. Technical terms that are unfamiliar to the recipients, as well as jargon or difficult examples, decrease the understandability of complex information. (Eppler 2004, 13) As a result, the recipient's level of prior knowledge related to the topic should be kept in mind when communicating purchase contract information (Keller et al. 2006, 47). It is also suggested to include contact details in the complex written messages to give the reader a possibility to ask for more information if needed (Patrick 2003, 7).

Many contracts are written in English despite it is not the native language of either contracting party. Thereby, some clauses or sentences may be difficult to translate to other languages resulting in confusion (Haapio & Siedel 2013, 38). A similar risk arises when contractual information is communicated in a value network. If the native language of the contracting parties is common, this risk could be minimised by favouring that language when making contracts or when sharing information about them. In other cases, visualisation and clarifying conversations could reduce the risk.

2.4. CHANNELS TO SHARE PURCHASE CONTRACT INFORMATION

This chapter discusses the most effective communication channels of complex information. The topic is examined from the perspectives both written and verbal communication. Channels of written communication are email and information technology (IT) systems. Fax and letters are considered to be slightly outdated in today's business world and therefore not included in the discussion. Verbal communication includes phone calls, remote meetings, and personal visits.

It is argued that shared identity motivates people to listen better and act upon effectively (Greenaway et al. 2015, 172), therefore making it important in business relationships. Greenaway et al. (2015, 172) suggest that the messages communicated by ingroup members are more influential than those communicated by outgroup members. If a purchasing

organisation wanted the supplier to act on a certain way, it would be smartest to communicate the message through an ingroup member to maximise the impact of it.

Regardless of the channel of communication, one major challenge must be considered: *the broken telephone effect*, that occurs when information is transferred from one person to another in a chain. It often results in distortions of the communicated information (Lucas & Wigmore 1989, 225). Lucas and Wigmore (1989) have analysed the distortion of complex information between scientists and lawyers in a chain of four transfers. That number of transfers is already enough to change the information remarkably. The same effect is likely to occur in any transfer of complex information. In organisations, if the information is transferred in a chain of employees, the message might also change before it reaches its final destination.

2.4.1. CHANNELS OF WRITTEN COMMUNICATION

Communication in business relationships often takes place in the form of emails or mutual collaboration platforms in IT systems. The greatest benefit of written communication is the possibility to revisit the given information as many times as needed. The processing of new information that is in a written form does not require as much capacity from our short-term memory as the same information in a verbal form (Singh et al. 2017, 241).

Nowadays most of the written information is in an electronic form in organisations. Emails are a convenient and easy way to share information. However, they are not always able to reach all the relevant persons needing the information especially if the employees in organisations change. The occurrence of the problem can be limited by sharing information through IT systems such as supplier portals, in which the information is easy to distribute to a large audience in a short time while it does not disappear even if the employees in the organisation change. However, in large organisations, the information is often locked in separate IT systems creating “Isolated Islands of Information”, making the sharing of the information difficult (Madenas, Tiwari, Turner & Woodward 2014, 336). Allowing more data exchange between the systems or storing the same type of information in one system could improve the sharing process.

2.4.2. CHANNELS OF VERBAL COMMUNICATION

In some cases, verbal communication methods (phone calls, remote meetings, personal visits) might be more effective than written communication (Patrick 2003, 9). It retains the possibility to ask questions and solve arising problems immediately. However, when it comes to complex information, relying on verbal communication only is not the most effective way.

Transient information effect occurs when new information disappears from the short-term memory before it has been adequately processed. It is argued that when complex information is only verbally communicated, it easily disappears because of such effect. (Singh et al. 2017, 239-241) The study of Singh et al. (2017) indicates that in comparison to verbal communication, significantly more learning with a lower level of cognitive load can be achieved through written communication. From the perspective of this study, when the purpose is to effectively communicate purchase contract information and ensure that the receiving party can further utilise the information, it is recommended to communicate it not only verbally, but rather in written form or as a combination of verbal and written communication. For example, a training session could result in the desired outcome.

3. EMPIRICAL STUDY

This section introduces the background of the empirical study. The study is conducted as a single case study, so the case company and the case problem are introduced first. Next chapters give detailed information about the research method as well as the data used in this study.

3.1. CASE DESCRIPTION

Valmet is a Finnish technology, automation and services developer and supplier operating in the pulp, paper, and energy industries. It has over 13,000 employees around the world and its net sales were approximately 3,5 billion euros in 2019. (Valmet 2020) This research investigates the communication of purchase contract information in the value network of Valmet. The case company have outsourced some of the assemblies (i.e. specific parts of paper machines) to their sub-contractors (later *assembler*), who purchase components to the assemblies from certain component suppliers. Valmet and their component suppliers have bilaterally agreed

that the assemblers can utilise the same contract prices and, in some cases, even the same contract terms (e.g. terms of payment) as the case company. In this case, the assemblers are third parties, who relate to the contracts made between the case company and the component suppliers. An illustration of the situation is presented in Figure 4.

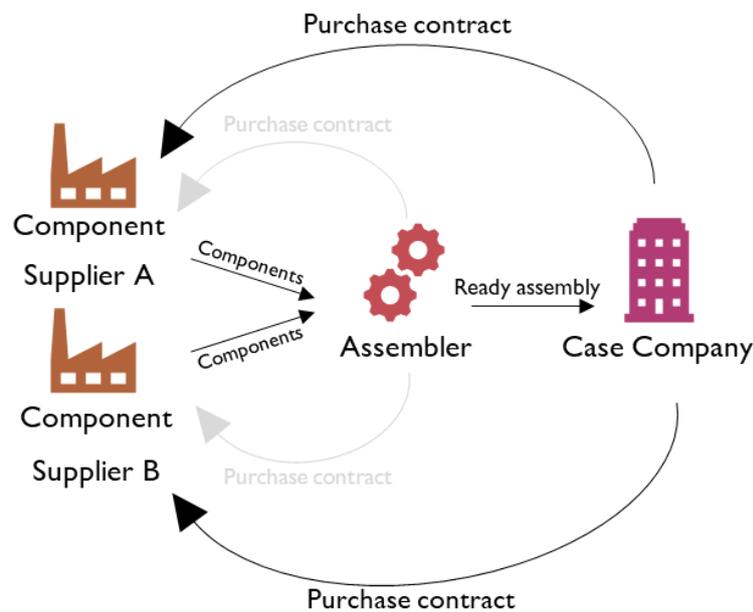


Figure 4: Scope of the Case Study

The assemblers place their orders independently and have their own purchase contracts with the component suppliers (grey in Figure 4). Those contracts determine the legal aspects that are not applicable from the contracts made between the case company and the component suppliers (e.g. terms of delivery). However, this study only focuses on the contracts marked with black in Figure 4. As the case company has aimed to increase its efficiency, flexibility and the volume of their component purchases, the assemblers have been given an opportunity to collaborate with the case company's component suppliers and to utilise the more competitive contract prices. This also directs new customers to the component suppliers resulting in a win-win-win situation. Even though the existence of the contracts has been shared with the assemblers, the contract documents are confidential and therefore cannot be shared with third parties. As a result, the assemblers do not know which component suppliers have agreed to sell them with the mutual contract prices and terms. The case company is also unable to provide a list of such component suppliers to the assemblers as the information is hidden under assembly structures and should be manually collected one product at a time from several IT systems.

A previous investigation in Valmet has indicated that the value network lacks information, which is why the assemblers are not able to efficiently utilise the most competitive contract prices when purchasing components. This study intends to clarify the complex situation and broaden the case company's and its value network's knowledge related to the communication of the purchase contract information by collecting the uncommunicated or unclear information into one document and suggesting more efficient communication methods and channels. The communication is only examined from the perspective of the case company.

3.2. RESEARCH METHOD

This research is conducted as a qualitative single case study. That is the most suitable method as the purpose is to understand a specific phenomenon on a deeper level from the perspective of the case company (Metsämuuronen 2011, 223). As a method, case study research is flexible and well suitable for different environments (Piekkari & Welch 2020, 198). The purpose is to maximise the understanding of the specific case instead of making critical generalisations (Stake 2000, 435). Eriksson and Kovalainen (2008, 117) also state that case study research can present complex business issues in an understandable and practical way.

Case studies can be used to build new, elaborate current or test existing theory (Piekkari & Welch 2020, 200). This study intends to gain understanding of the case problem by applying previous theories into a new context and solving the problem through them. Stake (2000) divides case studies into intrinsic and instrumental. The ones mentioned first are interested in the particular case because of the case itself and not because of a problem or trait related to it. Instrumental case studies, on the contrary, are more interested in an external issue or more universal generalisations. The role of the case is only supportive even though it is looked at in depth. (Stake 2000, 437-439) This study is a mixture of both. The case itself is in the leading role and the purpose is to give detailed information about the topic by describing the specific case. Some case-specific generalisations are drawn in conclusions.

Case studies have been criticised for their limited possibility to draw generalisations. Piekkari and Welch (2020, 197) mention that a single case is not the most reliable source to build scientific theory as that case might be an exception to the rule. Generalisations are better to be drawn from comparisons (Stake 2000, 439). However, this empirical study aims to solve the

problem in the case company and the results are mainly targeted to them. The purpose is to understand and solve the problem in its own context and clarify the complex situation. The results can still be useful for example for other companies struggling with the same type of situation or for researchers willing to develop the theory.

3.3. RESEARCH DATA

The research data consists of three interviews and six supplier meeting memorandums that are evaluated using abductive content analysis. The purpose of the interviews was to obtain detailed information about the conduct of each value network party while the meeting data highlights the current case related targets for development in the conduct of the case company. The author is also an employee of the case company. Therefore, some observations about the conduct of the case company and their suppliers have been made by the author. However, no observations have been written down to anywhere else than to this paper.

The case company is a major customer for many of the organisations. Hence, the author's position as an employee of the case company might have influenced the given answers in the interviews or meetings. The level of trust between the author and the interviewees cannot be determined from the perspective of the interviewees. Therefore, it should be considered that rather than being fully truthful, some of the answers might have been given in a way that favours the supplier-buyer relationship between the suppliers and the case company. In addition, because the topic of the study is somewhat sensitive and misconduct in contract related actions might result in legal actions, it is possible that certain aspects have not been told in the interviews because of the interviewee's fear of getting caught in misconduct. The significance of honest answers and the purpose of enhancing the business processes that affect both on the case company and the suppliers were emphasised in the beginning of the interviews and meetings in order to decrease the risk explained above.

3.3.1. DATA COLLECTION

Interviews are the most popular way to collect data for qualitative research (Puusa & Juuti 2020, 99). They were chosen for this research to obtain detailed information about the conduct of the interviewed parties. The possibility to ask further questions was seen as important.

Purposeful sampling was used when selecting the interviewees in order to form a comprehensive picture that includes the perspectives of all relevant parties in the value network. All interviewees work in different organisations; one in the case company, one in the assembler company and one in the component-supplying company. Dealing with the purchase contract related topics is a part of all interviewees' daily work, which was one of the reasons they were chosen to be interviewed. What is meant by the relevant parties is that in addition to the case company, the assembler was interviewed because the information is communicated to them. Their perspective on the situation is remarkably important. The component supplier's answers cross-validate the answers given by the case company and the assembler. In addition, as the assemblers have reported that the component suppliers have communicated some of the purchase contract information to them, it was also seen as important to examine the component supplier's point of view. The sampling also ensured that all the interviewed organisations collaborate with each other forming a reciprocal model (Figure 4).

Due to the different perspective of each interviewee, the questions were not similar in all interviews. Instead, the topics discussed were similar, including discussion about the practical procedures of utilising the contracts and communication between the value network parties. The interviews were semi-structured, meaning that the main themes discussed were determined in advance, but the order and the extent of the questions were different in each interview. The method was chosen to retain the possible emergence of extraordinary findings and perspectives that the researcher would not be able to predict. The topics were formed keeping the scope and aim of the research in mind and they are presented in Appendix 1. Summary of the interview data is presented in Table 2.

Table 2: Summary of the Interview Data

IN-TEXT REFERENCE	ENTITY	INTERVIEWEE	DURATION OF THE INTERVIEW
I1	Assembler	Sales Coordinator	45 minutes
I2	Case Company	Category Manager	25 minutes
I3	Component Supplier	Sales Director	75 minutes

The interviews were held in November 2020. Due to the current world situation with COVID-19 pandemic, the interviews were held remotely in the mobile phone or Microsoft Teams. The speech was recorded and later carefully transcribed into clean verbatim transcriptions in Finnish by the author. The quotations chosen for this research were translated and are presented in English in this paper. The European Union's General Data Protection Regulation (GDPR) was considered when collecting the interview data. The data protection notification giving detailed information about the data processing and preservation was sent to all interviewees in a written form. All interviewees participated in the interviews voluntarily, received information about their legal rights related to the interview, and gave their permission to use the answers for this research. Data analysis tools were not used in the analysing phase.

The meeting data is part of a previous investigation conducted by the author for the case company. The purpose of the investigation was to examine the usability of the purchase contracts from the perspectives of the assemblers, and the findings that emerged from the meetings formed the research problem of this study. As it was discovered that the value network lacks information, further examining was seen beneficial in the case company. The data consists of six written meeting memorandums from assembly supplier meetings held in June and August 2020. Table 3 summarises the data.

Table 3: Summary of the Meeting Data

IN-TEXT REFERENCE	ENTITY	NUMBER OF ATTENDEES (excluding the case company employees)	DURATION OF THE MEETING
A1	Assembler 1	3	40 minutes
A2	Assembler 2	1	20 minutes
A3	Assembler 3	1	35 minutes
A4	Assembler 4	1	20 minutes
A5	Assembler 5	2	20 minutes
A6	Assembler 6	1	20 minutes

The author and one other case company employee were in charge of the meetings meaning that the author also has some observations that are not in a written form in the data. One of

the meetings was held with the same assembly supplier (A5) as who was interviewed in I1. All the persons who attended the meetings are working with the purchase contracts on a daily basis in their organisations. The topics discussed in the meetings are listed in Appendix 2. The in-text references presented in both Tables 2 and 3 will be used when referring to a certain interview or meeting in the results section.

3.3.2. CONTENT ANALYSIS

Content analysis in general is attempting to identify core consistencies and meanings from qualitative data by reduction and sense-making (Patton 2015, 541). According to Tuomi and Sarajärvi (2018, 87), content analysis aims to form a compressed and generalised description of the researched phenomenon. The data is disassembled, contextualised, and then reassembled into a coherent whole through logical deduction (Tuomi & Sarajärvi 2018, 89).

Content analysis can be conducted inductively, deductively, or as a mixture of both: abductively. In an inductive analysis, the findings emerge out of the data without being based on previous theory. Deductive analysis instead is the opposite, as the data is analysed according to an existing framework. (Patton 2015, 542) In the abductive analysis, the previous theory has a supporting but not fully guiding role (Tuomi & Sarajärvi 2018, 80). On the first round, the data is coded without necessarily utilising previous theory. In the next phase, the data is coded and categorised based on the previous theory. New categories can be later created if some findings do not fit to any of the predetermined categories. (Hsieh & Shannon 2005, 1281-1283) This study utilises abductive content analysis. The method supports comprehensive answering to the research questions by retaining the possibility of context related findings to appear.

The analysis process in this study was conducted as follows. After transcribing, all the available data was read and reduced. As the purpose was to focus on *what* the interviewees said and not *how* they said it, some redundant or repeated words were removed from the interview data to ease the readability. Then, both the interview and meeting data were read a couple of times again. All findings that appeared to relate to the research questions were highlighted with different colours. At this point, the theories from Section 2 were recalled to mind and the author chose some possible categories that could be searched from the highlighted parts of the data. All marked quotations were transferred to Microsoft Excel, where they were

reordered and further categorised. The categorisation tables with references for each sub-question are presented in Appendices 3-5.

4. COMMUNICATION OF PURCHASE CONTRACT INFORMATION – A CASE STUDY

This section introduces and discusses the results of the empirical study by first answering the research questions and then pointing out the meaning of the results to the case company. The operating model where the assemblers are entitled to purchase components using the same purchase contract prices as the case company is examined in this section from the perspective of the case company. All purchase contracts in the case company have been made in written form and it has been agreed that the existence of the contracts can be revealed to the related assemblers (Contract Database 2020). When discussing the purchase contracts, only the ones that relate to the model are considered. Using the theoretical implications and the results, the study intends to help the case company to guarantee a flow of adequate purchase contract information throughout their value network.

All chapters in this section are structured as follows. At the beginning of each chapter, the research question to which the findings relate is recalled. The first sub-chapters present the findings from the empirical data, while the second sub-chapters compare the results to the previous literature and give suggestions for enhancing the processes in the case company.

4.1. PRIVATE AND CONFIDENTIAL PURCHASE CONTRACT INFORMATION

This chapter answers the first sub-question: *“In a value network, what purchase contract information can and what cannot be shared with third parties who relate to the contract?”* To answer the question, it was first analysed what information has and what has not been shared with the assemblers by the case company. As the purchase contract information was earlier divided into private and confidential, the findings from the empirical data were also categorised accordingly. The analysis path is illustrated in Appendix 3. Another dimension used to classify the results is if the case company have shared the certain type of information with the assemblers or not. Figure 5 summarises the results.

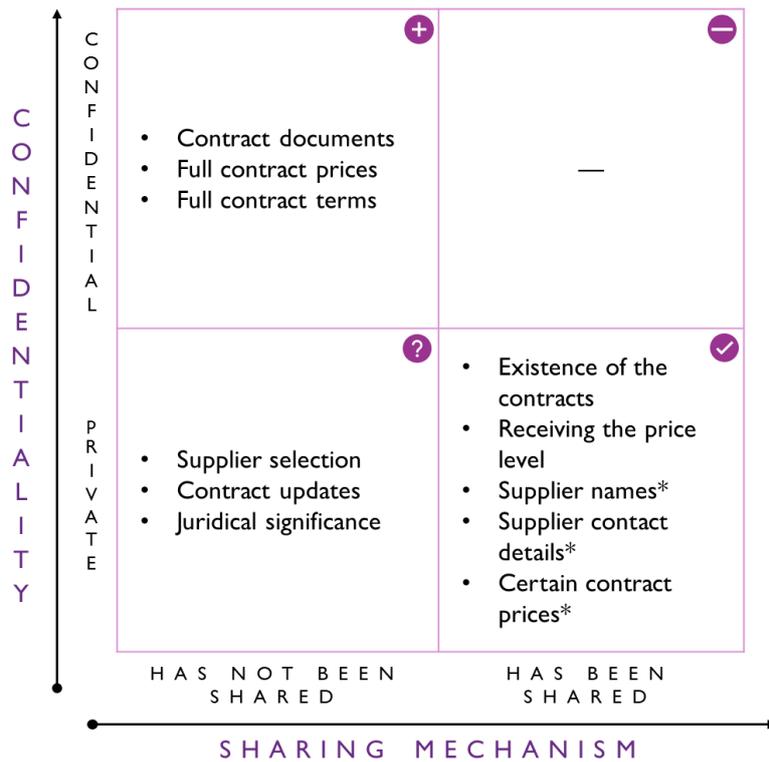


Figure 5: Summary of the Results for Sub-question 1 (Based on Appendix 3)

Starting from the confidential information, the top leftmost column presents the types of purchase contract information that should not be shared with any third party and in which the case company has acted accordingly. If some confidential information were shared, it would be presented in the top rightmost column of the matrix. The bottom leftmost column contains the types of information that the case company would be allowed to share but they have not done so, while the bottom rightmost column lists the types of information that can be and have been shared with the assemblers.

4.1.1. CURRENT SHARING OF PURCHASE CONTRACT INFORMATION

According to the interviews I2 and I3 and meeting with A1, contract documents or full contract prices or terms have not been shared with the assemblers (Appendix 3). In other words, none of the research data indicated that the case company would have shared any confidential information with their assemblers. It is acceptable for the case company to share private purchase contract information. Nevertheless, none of the assemblers reported in the meetings

that they would have received any written information about the purchase contracts. Only assemblers A1, A2, A4 and A5 reported that at least some information had been verbally shared with them by the case company (Appendix 3).

Private information that has not been shared with any of the assemblers includes supplier selection, contract updates and juridical significance of the purchase contracts. The one mentioned first indicates that if a certain component has more than one possible supplier, the assemblers have not been informed which supplier has the purchase contract with the case company. A1 reported that the information about updated or terminated contracts has not reached them on time, resulting in financial losses in the assembler company:

“The information about contract updates does not always reach us on time, which has caused some unexpected price increases to our products after submitting our quotation to the case company.” (A1, Appendix 3)

A2 also mentioned that it would be great to receive notifications about updated contracts. I1 revealed that juridical significance of the contracts has not been discussed with the assemblers. (Appendix 3)

According to the author’s observations in the meetings, the existence of the contracts has been shared with all assemblers (A1-A6), meaning that they are aware of the operating model and the opportunity that the case company is offering. All assemblers also reported in the meetings that the case company had given instructions for the concrete actions they must take in order to receive the correct price level. Most of the variation between the assemblers’ replies related to the supplier and price information. Only I1 addressed that the case company had given the names and contact details for certain component suppliers upon their request (Appendix 3). The same assembler claimed that prices for certain components had been given to them (Appendix 3). The price information can also be directly asked from the component supplier, but the case company is permitted to give it for the components that the certain assembler is purchasing (I3, Appendix 3). The full price lists are not given because they often include components that the assembler in question is never purchasing (I2, Appendix 3). Prices for such components are trade secrets for the case company and the component supplier, and therefore confidential (I3, Appendix 3).

All other assemblers, excluding I1, claimed that they had not received any lists of the supplier names (Appendix 3). This means that they must ask each component supplier if they have a different price level for the components purchased for the case company's assemblies. The problem is closely related to the supplier selection, as the assemblers should in practice ask the question from every possible supplier for every component to be sure to use the correct supplier. From the author's own experience, providing the list would require some collaboration with the assemblers as creating the lists by only using the case company's IT systems would require an enormous amount of work. The components used for each assembly are hidden under the assembly structures so the information cannot be easily printed from the IT systems and it should be manually collected product by product. Then the supplier names for each collected component should be searched from different IT system and keeping in mind that each assembly has a different structure, the supplier lists should be separately made for each assembler. The supplier contact details are easy to find from the IT systems if the name of the supplier is known. Suppliers contact details, in general, are public information that anyone can find from the internet. Therefore, also the case company can give such information to the assemblers if they find it helpful.

4.1.2. SUGGESTIONS FOR FUTURE SHARING OF PURCHASE CONTRACT INFORMATION

Based on the author's own experience, employee training has been quite little used in the case company to inform the new employees about the company's trade secret policy or handling of confidential information. As EU (2017, 6) argued, to protect confidential information the employees must be familiar with the organisation's trade secret policy and handling of the information. Even though this study did not detect any confidential information that would have been unauthorisedly shared with third parties, it would be beneficial for the case company to proactively decrease the risk, as the consequences of such information breach are often expensive (Vapaavuori 2020, 490). This could be done for example by requiring all new employees to complete an online course that familiarises them with the company's trade secret policy and prepares them for the handling of confidential information.

Even though the existence of the contracts has been shared with all key assemblers, supplier selection and component supplier names should also be shared with as many assemblers as

possible, otherwise making it difficult for them to utilise the more competitive prices offered by the contracts. If the assemblers are not informed which supplier has the purchase contract with the case company or if they do not know the names of the suppliers, the case company might purchase overpriced assemblies. The assemblers who have a limited amount of information about the contracts are likely to offer their assemblies with higher prices than those who effectively utilise the contracts. The unaware assemblers cannot take the advantage of more competitively priced materials. Figure 6 illustrates the consequences.

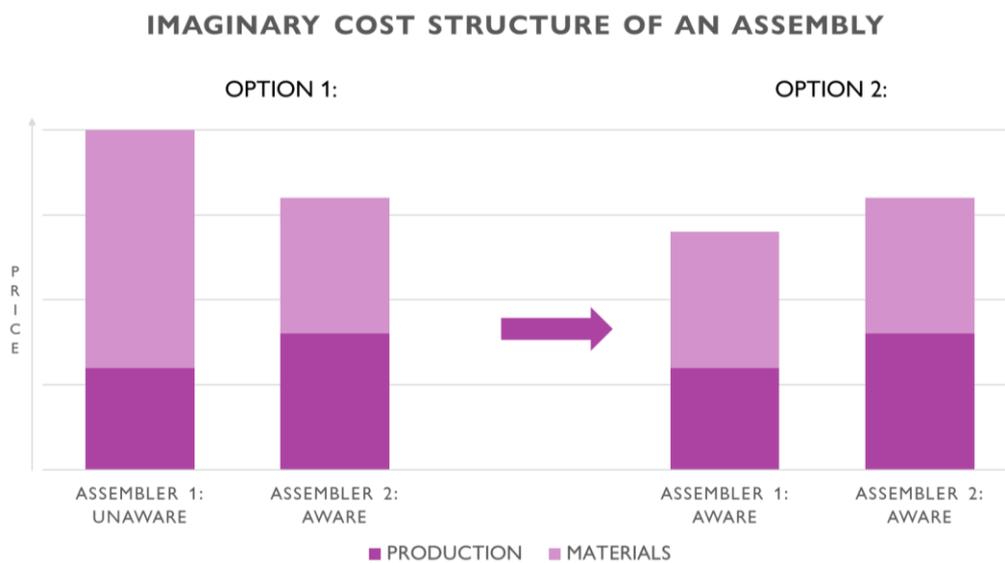


Figure 6: The Effect of an Equal Opportunity

An imaginary cost structure of an assembly consists of production and materials. Option 1 in Figure 6 shows that the unaware assembler might be able to produce the assembly at lower costs but is selling at a higher price because of not having the needed information. Option 2 reveals that when both assemblers are aware of all information, the material costs are equal and the one whose price was previously higher would actually be the most cost-effective.

In the interview (I3), the component supplier suggested that the case company could give the purchasing prices for the components in a certain assembly when submitting an inquiry to the assembler so that the quotation would be based on the work done by the assembler and not on materials. This would result in a similar outcome as explained above (Figure 6).

The case company should consider notifying the assemblers about updated or terminated contracts as not sharing it has previously resulted in financial losses (A1, Appendix 3). This does

not mean that they should submit the contract documents to the assemblers, but to inform them that the price level has changed. The assemblers could then take this into account when purchasing components from the component supplier in question by for example asking the new price from the component supplier before submitting a quotation to the case company. In addition, even though the assemblers do not gain any juridical rights based on the purchase contracts between the case company and the component suppliers, this is also suggested to be clarified this to the assemblers. In both situations, open and honest communication creates trust (Vesalainen 2013, 29), so the sharing would result in a higher level of trust and transparency in the business relationship and increase the overall understanding of the used operating model. The created trust might diminish the incidence of opportunistic behaviour and reduce the need for monitoring resulting in financial savings (Vesalainen & Vuorinen 2013, 95).

4.2. UNDERSTANDABILITY OF PURCHASE CONTRACT INFORMATION

This chapter answers the second sub-question: *“How to ensure the understandability of the communicated purchase contract information in a value network?”* To ease the understanding, it was first examined what topics cause the most confusion and would need clarifying. Figure 7 summarises the results. The categorisation table for these results is presented in Appendix 4.

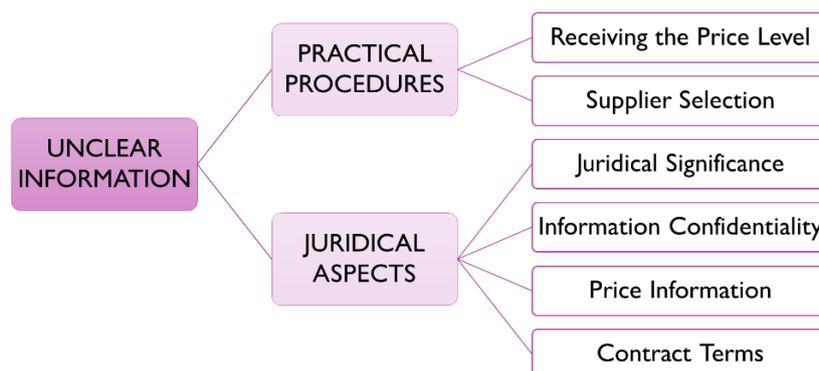


Figure 7: Summary of the Unclear Information (Based on Appendix 4)

4.2.1. UNCLEAR INFORMATION

Two types of information were found to be unclear to the assemblers: practical procedures and juridical aspects. Even though all the assemblers claimed that they had been informed about

the actions they should take to receive the correct price level from the component suppliers, the reason for doing so seemed to be unclear at least to assembler A4 (Appendix 4). According to I3, the reason relates to the contents of the contracts as it has been agreed that the assemblers must be able to prove that the purchased components are used for the case company's assembly. This prevents the misuse of the contracts and therefore protects the rights of all assemblers in the market. Another unclear practical procedure is supplier selection, that was claimed to be unclear by assemblers A1 and A3 in the meetings and I1 in the interview (Appendix 4). Because the assemblers are unsure which supplier to use, they might purchase components with less competitive prices from suppliers who have not agreed to sell them with the same prices as to the case company. The consequences were illustrated in Figure 6.

According to I1, the juridical significance of the purchase contracts has not been discussed with the assemblers, which might cause confusion and decrease the transparency of the process (Appendix 4). Information confidentiality has similar status (A2). As explained earlier, full contract documents and price lists are confidential information that cannot be shared with the assemblers. Nevertheless, at least assembler A2 has asked the case company to submit the price lists for them to make their pricing process easier (Appendix 4). The reasons for not sharing the price lists should be made clear to the assemblers. On the other hand, despite the full price lists are confidential, prices for certain components the exact assembler is purchasing can be given to them. Assemblers A1, A3 and A5 expressed that they were uncertain if they receive the correct price level as it cannot be verified from anywhere (Appendix 4).

The final aspect causing unclarity is contract terms. It is not clear whether the assemblers are applicable to utilise only the prices or also the other contract terms such as terms of payment.

“Even though we should, we do not always receive the same contract terms as the case company.” (A1, Appendix 4)

This is also problematic to the case company, as it depends on the contract if the other terms than prices can be utilised by the assemblers. However, based on a random sample from the Contract Database (2020), most of the purchase contracts only allow the use of the prices.

4.2.2. SUGGESTIONS FOR INCREASING THE UNDERSTANDABILITY

Before sharing purchase contract information to the assemblers, one internal risk in the case company should be minimised. According to I2, the employees negotiating the purchase contracts and the ones communicating them to the assemblers are different in the case company. It would be remarkably important that the employees communicating the purchase contract information would understand it, and still Eppler's (2004, 13) problem of knowledge asymmetry might arise. In addition, as Haapio and Siedel (2013, 45-46) highlighted, such conduct might result in misunderstandings and information gaps. This study suggests the creation of common organisational guidance materials or employee training related to complex purchase contract information. This would ensure that the information is understood similarly inside the case company therefore preventing the sharing of misleading information.

This study highly recommends the case company to create a written guidance document that would inform the assemblers about the general use of the purchase contracts. This would allow the information to be revisited an unlimited number of times and ensure that it can be easily shared with all assemblers at once. Complex purchase contract information that is mostly shared verbally easily overloads the cognitive capacity of the recipients (Singh et al. 2017, 241), which might be one of the reasons that much of the already communicated information is still unclear to many of the assemblers. Visualisation has not been used in the current contract documents (Contract Database 2020). However, visual aspects, typographic elements and modular layout design should be added to the guidance material or other documents that are handed to the assemblers to clarify especially the complex parts of the operating model. An emphasis should be put on plain, clear, and brief language that does not use legal terms as suggested by Passera and Haapio (2011, 58), Passera et al. (2013, 9) and Patrick (2003, 4-5). To explain the operating model itself, the explanation from Chapter 2.2.1 could be used.

Practical procedures could be clarified to the assemblers in the guidance document. The document could state the reasons for the procedures needed for the correct price level utilising the suggestions given above. Supplier selection is more complex from the perspective of the case company, as it cannot be easily shared with all assemblers similarly and the information is not easily available. However, this could be explained in the guidance document to increase the transparency.

Juridical aspects are expected to be more complex than the practical procedures and the previous knowledge related to these is not on the same level in the assembler companies. Information confidentiality could be explained for example by listing the confidential and private information categories from Figure 5 under separate headings and including a short explanation for the meaning of *confidentiality*. Illustration of such clarification is presented in Appendix 6. It is also suggested, that if the case company is at some point able to provide the supplier lists for the assemblers, the same list could include the information about the applicable contract terms. However, it could already now be stated in the guidance document that it depends on the supplier whether other terms than prices can be utilised.

Some of the purchase contracts are written in English also in cases where the native language of both contracting parties is Finnish (Contract Database 2020). According to the case company (I2), the reason is their global business environment where the goal is to enable the utilisation of the contracts in all business units globally. However, when the information is translated from English to the native language of the user, misunderstandings and confusion might arise both between the case company and their suppliers, and internally in the case company (Haapio & Siedel 2013, 38). When the Finnish buyers must first translate the contents of the contract and then explain the private information to the assemblers, the risk of communicating incorrect or misleading information increases. Visual assistance, more internal communication, or preferably both are required in the case company.

4.3. BEST CHANNELS TO SHARE PURCHASE CONTRACT INFORMATION

This chapter answers the third and final sub-question: *“What are the best channels to share purchase contract information with related third parties in a value network?”* To answer the question, the current channels used in the case company were investigated. Based on those, suggestions for more effective ways to communicate in the future are given. The categorisation table for the findings from the interviews and meetings is presented in Appendix 5.

4.3.1. CURRENT COMMUNICATION CHANNELS

Verbal communication is currently used the most when communicating purchase contract information. The assemblers have received the information verbally for example besides

meetings or supplier visits. Only one assembler (I1) claimed that they had received written lists of component supplier names by email. (Appendix 5)

Much of the purchase contract information is also communicated in a chain, meaning that the information is not directly shared with the assemblers by the persons that negotiate the contracts. Firstly, A1 and A2 reported that they have acquired most of the purchase contract information from the component suppliers (Appendix 5). Secondly, the information that is shared internally in the case company does not reach the assemblers effectively. According to I2, while the category managers make the contracts, it is assumed that the buyers give guidance to the assemblers in the practical procedures and inform them for example about the contract updates (Appendix 5). However, according to the meetings with the assemblers A1 and A2, this rarely happens (Appendix 5). It might be due to unclear communicational responsibilities in the case company. Communicating information in a chain increases the risk of information distortion or a so-called broken telephone effect (Lucas & Wigmore 1989, 225). In addition to the unclear responsibilities, the case company has no organisational guidelines related to the communication of purchase contract information (I2, Appendix 5).

4.3.2. SUGGESTIONS FOR COMMUNICATION CHANNELS IN THE FUTURE

Firstly, organisational guidance material should be internally shared in the case company to reduce the broken telephone effect and increase the quality of the instructions given to the assemblers. Such information is suggested to be shared in written form (Singh et al. 2017, 241). When complex information is received verbally only, it is remarkably difficult to remember and understand resulting in fragmented information and misunderstandings (Sweller 2010, 37-44; Passera et al. 2013, 9). In addition, the information cannot be revisited later and if it is shared with other people, the risk of modification and incorrectness increase (Lucas & Wigmore 1989, 225). Email or IT systems are therefore seen as the best channels, while phone calls are the least effective. From more resource intensive options, a training session including both written and verbal communication could be useful.

It was suggested in Chapter 4.2.2 that the guidance document should include information about supplier selection, juridical significance, and instructions on how to receive the correct price level. This information is similar regardless of the assembler, which is why the written

document would also be the most effective way to share it. However, email is not the best channel to communicate important information that will be needed in the future, as the information quickly and easily gets lost if not saved immediately somewhere else. In addition, when the employees in an organisation change, the information is lost and cannot be forwarded to the new employees if only communicated by email. The interviewed assembler (I1) also pointed out that purchase contract information is needed in different parts of the organisation, at least in procurement and sales, so it might be difficult to reach all the relevant recipients by email. Therefore, such information should be shared through IT systems. Email notifications could be used for information that tends to change often, or that is not similar regardless of the assembler. This includes contract updates, supplier names and contact details as well as certain contract prices. However, attention must be paid to ensuring that all relevant functions in the recipient organisation receive the information. Contact details for further information or questions should always be included in the messages and documents (Patrick 2003, 7).

Suggestions for more effective channels were also directly asked in the interviews. The assembler (I1) and the component supplier (I3) looked forward to receiving purchase contract information through the case company's supplier portal in the future (Appendix 5). Email notifications about contract updates were suggested by A2 (Appendix 5). Currently, the IT systems are not efficiently utilised to share information to the assemblers in the case company. Based on the author's experience, purchase contract information is stored in many separate systems, which makes the gathering and sharing of relevant information difficult. Difficulties also arise from the confidentiality of the information. The same supplier information cannot be shared to all assemblers similarly as the agreed component suppliers are different to each assembler. Hence, it is very difficult to form a comprehensive list of the component suppliers. However, the guidance material could be shared through some of the IT systems.

4.4. DISCUSSION

This chapter highlights the relation of the findings to each other and their meaning to the case company. Heretofore, purchase contract information has not been shared with the assemblers with the most effective manner, which has resulted in confusion and inefficient procurement

processes. Private purchase contract information (Figure 5) can and should be communicated to the assemblers to increase understanding about the used operating model.

First, this study suggests that organisational guidelines for communicating the information as well as for the communicational responsibilities should be formed and clarified internally in the case company. It must be chosen whose responsibility it is to communicate the information and to who. It should also be ensured that the information is understood similarly in the case company, allowing the sharing of adequate and consistent information in the future. Based on EU (2017, 6), employee training for the handling of confidential information is also suggested to proactively avoid the risk of a confidential information breach and its expensive consequences.

Guidance materials should be written and sent to the assemblers to ensure that they receive all adequate information related to the purchase contracts. Some guidelines clarify the unclear information and as a result, increase the transparency of the processes in the value network. Supplier selection, juridical significance, an explanation for the contract terms, and instructions on how to receive the correct price level should be included. Based on the suggestions of Passera and Haapio (2011, 58), Passera et al. (2013, 9), Patrick (2003, 4-5) and Keller et al. (2006, 47), the language features listed next make the communication more understandable, which is why they should be utilised in the guidance material. The language should:

- be plain, clear, brief, and grammatically correct
- utilise visual and typographic elements
- utilise modularity
- take the readers' prior knowledge into account.

In addition, as stated by Haapio and Siedel (2013, 38), to reduce the risk of misunderstandings, it would be smart to write the material in Finnish for the Finnish assemblers. English can be used with foreign ones. The most effective channel to share the information would be through IT systems. However, if that is not possible with the current systems, this study sees email as the second best. Email should be used to communicate information about contract updates, supplier names and contact details as well as certain contract prices. The case company as a customer is likely to pay the consequences of the caused financial losses when information

does not reach the assemblers in time. Especially notifications about contract updates are important, as they decrease the uncertainty in the assemblers' pricing. The information should preferably be communicated by a trusted person who shares an identity with the recipient to maximise the effectiveness (Greenaway et al. 2015, 172). Based on the study of Singh et al. (2017), it is suggested to avoid communicating purchase contract information verbally only. Verbal and written communication can be combined in a training session or meeting. However, the method is quite resource-intensive and require more time and effort than sharing the information in written form only.

By utilising the suggestions given above, a more competitive value network can be achieved. The actions form a continuous spiral, where open and honest sharing of crucial information increases the trust in business relationships (Vesalainen 2013, 29). Trustful relationships decrease the costs of self-protection in the case company (Vesalainen & Vuorinen 2013, 95), making the value network more competitive. The number of overpriced assemblies purchased will be minimised and the network can provide better value to its customers. When all applicable assemblers effectively utilise the negotiated contracts, the volume of the case company's component purchases from the chosen suppliers increase and more cost-effective contracts can be negotiated in the future. Better contracts mean more competitive component prices, which again increase the competitiveness of the network.

5. CONCLUSIONS

This study has identified and explained what purchase contract information is confidential and what private, and therefore indicated what information can be shared with related third parties in a value network. In addition, various ways to make the information more understandable have been introduced. Lastly, the best channels to share purchase contract information have been recognised. These pieces of information together answer the main research question: *"How to communicate understandable purchase contract information to related third parties in a value network?"*

The case company uses an operating model in which their assemblers can utilise purchase contracts made between the case company and their component suppliers when making purchases to assemblies that are sold for the case company. However, current communication

methods and channels for sharing purchase contract information in the case company are rather ineffective and likely to cause misunderstandings as well as confusion in many situations. Previous literature about the similar operating model was not available. Therefore, it is not possible to compare this case to other cases. However, the case study intended to solve the problem of communicating understandable private purchase contract information from the perspective of the case company by searching, examining, and combining previous literature mostly from the fields of supply chain management, business law and educational psychology.

Especially the Trade Secrets Act (2018/595) and literature written by Vapaavuori (2020) were examined to determine what purchase contract information can and what cannot be shared with related third parties. The case study results were compared with the literature to identify the current situation in the case company. No confidential information has been unauthorisedly shared. On the other hand, some of the private purchase contract information that could have been shared has not been shared yet and much of the already shared information seemed to be unclear to the assemblers. Previous research conducted especially by Passera and Haapio (2011), Passera et al. (2013) and Haapio and Siedel (2013) suggest that understandability of contract related information can be increased through visualisation, typography, modularity and use of language. The case company have not used these methods in their communication or shared written information about purchase contracts with their assemblers. The methods were suggested to be used in the future.

Examined channels for sharing purchase contract information were email, IT systems, phone calls, remote meetings, and personal visits. The study of Singh et al. (2017) suggests that complex information should be shared in written form or as a combination of written and verbal communication to maximise the understanding, indicating that email, IT systems or training sessions (i.e. remote meetings or personal visits) would be the most effective. Heretofore, most of the information has been shared verbally in the case company. More internal communication and written guidance materials both internally and for the assemblers were suggested.

A more competitive value network can be achieved through effective communication of understandable purchase contract information by utilising the practices introduced above.

Therefore, this study has made contributions to the literature on supply chain management and business communication.

5.1. MANAGERIAL IMPLICATIONS

Important implications for managers arose from the study. The increased importance of competitive value networks is emphasised in today's business environment especially in the technology industry. When using an operating model where third parties are allowed to utilise the contract prices and terms of the organisation, communication plays a critical role. One way to increase the competitiveness of the network is through the communication of adequate and understandable purchase contract information. This study has given several suggestions to enhance the communication.

The enhanced communication methods increase the competitiveness of the value network. The prices of purchases can be decreased, and more trustful and transparent business relationships achieved. As a result, financial benefits from decreased self-protection and lower purchase prices are obtained.

5.2. LIMITATIONS AND FUTURE RESEARCH

To increase the validity of the findings, data triangulation was utilised to capture different perspectives of the same phenomenon from various sources by interviewing different parties of the value chain. However, only one person from each organisation was interviewed. This might decrease the reliability of the results as some critical perspectives can be missing.

Scientifically significant generalisations cannot be drawn from one case. However, as Stake (2000, 442) has stated: *"how we learn from the singular case is related to how the case is like and unlike other cases."* This study has addressed the specific problem from the perspective of a single case company so that it could later be compared to other cases. More reliable generalisations can be drawn after further research, that could examine the topic in other organisations and industries. The case company could later examine if the written guidance material has made any difference to the utilisation of purchase contracts.

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CASE COMPANY'S INTERNAL MATERIALS AND SYSTEMS

Contract Database (2020) – Electronical storage for all contract documents.

APPENDICES

APPENDIX 1

INTERVIEW QUESTIONS: INTERVIEW 1/3 – THE ASSEMBLER

Interviewee:

- Current position
- How long has the interviewee worked for the company

Purchase Contract Information:

- Typical purchasing process for the components under the purchase contracts
 - Juridical information needed in the use of purchase contracts
 - Supplier, delivery, or other information needed in the use of purchase contracts
 - Is the process monitored by the assembler or the case company? How?
- How could the communication of purchase contract information be enhanced by the case company?
- If the communication has already been on a satisfying level, what particularly is good?
- Communication of contractual information from or to the component supplier
- Problems, misunderstandings, or trouble related to the purchase contracts

Channels for Communicating the Information:

- Who is contacted in the case of trouble?
- What would be the best channel (e.g. email, supplier portal, other IT system) to receive purchase contract information?
- Who should the information be communicated to in order to ensure that it reaches all the relevant persons?

Others:

- Is there anything else coming to the interviewee's mind that was not discussed but relates to the topic?

INTERVIEW QUESTIONS: INTERVIEW 2/3 – THE CASE COMPANY

Interviewee:

- Current position
- How long has the interviewee worked for the company

Purchase Contract Information:

- Juridical aspects related to the purchase contracts
 - Legal rights related to the purchase contracts
 - Confidentiality
- Communication process after signing a new contract
 - What contractual information is shared with the buyers? Why?
 - What contractual information is shared with the assemblers? Why?
 - If some information is not shared with the buyers or the assemblers, why?
- Discussion with the component suppliers about the practical procedures related to the purchase contracts
- Problems, misunderstandings, or trouble related to the purchase contracts

Channels for Communicating the Information:

- What channel (e.g. email, supplier portal, other IT system) is currently used to communicate purchase contract information?
- Some of the contracts are written in English with Finnish suppliers, why?

Others:

- Is there anything else coming to the interviewee's mind that was not discussed but relates to the topic?

INTERVIEW QUESTIONS: INTERVIEW 3/3 – THE COMPONENT SUPPLIER

Interviewee:

- Current position
- How long has the interviewee worked for the company

Purchase Contract Information:

- How often does the interviewee deal with the purchase contracts?
- Typical process of selling the components under the purchase contracts
 - Special actions taken
 - Identification of applicable assemblers
- Is contract related information often asked by the assembler companies? What kind of information?
- Discussion with the case company about the practical procedures related to the purchase contracts
- Problems, misunderstandings, or trouble related to the purchase contracts

Channels for Communicating the Information:

- What channel (e.g. email, supplier portal, other IT system) is currently used to communicate purchase contract information?

Others:

- Is there anything else coming to the interviewee's mind that was not discussed but relates to the topic?

APPENDIX 2

MEETING DATA – DISCUSSION TOPICS

The following topics were discussed in all the supplier meetings:

- Communication by the case company related to the purchase contracts
- Supplier selection
- Easiness of use of the purchase contracts
- Need for updates in the purchase contract partners or items under the contracts
- Competitiveness of the contract prices
- The usability of the purchase contracts in the bidding process or pricing

Short notes of the assemblers' comments were saved electronically in written form.

APPENDIX 3

CATEGORISATION TABLE FOR SUB-QUESTION 1

Translated quotation	Theme	Category	
I1: The supplier information was sent to us by a case company's buyer.	Supplier information	Private Information	P u r c h a s e C o n t r a c t I n f o r m a t i o n
I1: I asked the name of the supplier for a couple of components from the case company's buyer.			
A1: All of the purchase contract information is verbal, we are not aware of all the component suppliers who the case company has a purchase contract with.			
A2: We only have verbal information about the purchase contracts, no lists of suppliers etc..			
A3: We have not received any list of suppliers or items that relate to the purchase contracts.			
A4: There is not any list of the component suppliers. It would be good for us to know who the case company has the purchase contracts with, currently all information is verbal and cannot be found from any IT systems.			
A6: We do not have a list of the component suppliers.			
A5: We have no evidence, that they (the contract prices) are used.	Price information for certain components	Private Information	P u r c h a s e C o n t r a c t I n f o r m a t i o n
I3: The case company can give the price information for certain components.			
I1: We do not know if the prices we pay are the same for us and the case company, as we cannot verify it from anywhere.			
I1: The identification codes of the components or a project key defined by the case company are sent to a component supplier.	Receiving the correct price level	Private Information	P u r c h a s e C o n t r a c t I n f o r m a t i o n
A6: Some (component) suppliers require the project key to ensure, that the components are going to the case company's assembly.			
A4: The (component) suppliers do not automatically offer the products using the case company's price level.			
I1: There were certain components that we had not ordered in the past two years. We received the updated price from the component supplier.	Contract updates	Private Information	P u r c h a s e C o n t r a c t I n f o r m a t i o n
A2: It would be great to receive information about updated or terminated contracts from the case company			
A1: The information about contract updates does not always reach us on time, which has caused some unexpected price increases to our products after submitting our quotation to the case company.			
I1: We have not discussed the juridical aspects of the contracts with the case company.	Juridical significance	Private Information	P u r c h a s e C o n t r a c t I n f o r m a t i o n
I2: The assembler does not gain any juridical rights (from the contracts).			
A6: There have occasionally been considerable price differences in the same component between different suppliers.	Supplier selection	Private Information	P u r c h a s e C o n t r a c t I n f o r m a t i o n
I1: Does the case company purchase all [certain brand's] fittings from [the certain component supplier]?			

I2: The contract between the component supplier and us should stay between us.	Contract documents	Confidential Information	
I3: We do not offer the same terms of payment and delivery to the assemblers as to the case company.	Full contract terms		
A1: We have not received any price lists.	Full price information		
I2: We might have 1000 items on one price list and a certain assembler uses 30 of them, so we have agreed that full price lists are not shared with the assemblers. (...) It is sensitive information and we do not want to share it.			
I3: The contract prices between the component supplier and the case company are not public. They have been agreed between us and the information is none of anyone else's business.			

APPENDIX 4

CATEGORISATION TABLE FOR SUB-QUESTION 2

Translated quotation	Topic	Category	
A4: We have had to prove it to the component suppliers, that the components are purchased for the case company's assembly.	Receiving the correct price level	Practical Procedures	U n c l e a r I n f o r m a t i o n
I1: For example, we have a certain supplier for certain fittings, but we do not know if the case company purchases them from the same supplier.	Supplier selection		
I1: What suppliers does the case company use, are our suppliers the correct ones?			
A1: More transparency is needed for the whole process.			
A3: It is unclear how the component suppliers are chosen.			
I1: We have not discussed the juridical aspects of the contracts with the case company.	Juridical significance	Juridical Aspects	
A2: It would be convenient to receive price lists and the names of the suppliers who the case company have the purchase contracts with.	Information confidentiality		
A1: Do we receive the correct price level for the components?	Price information		
A3: There was this situation earlier where the component supplier's price for us was higher than for the case company. It is still unclear if we should have been able to purchase it with the case company's price or not.			
A5: We do not have any evidence that the prices we pay are correct. They cannot be verified from anywhere.			
A1: Even though we should, we do not always receive the same contract terms as the case company.	Contract terms		
I3: Some assemblers assume that they should get the same terms of delivery and payment as the case company.			

APPENDIX 5

CATEGORISATION TABLE FOR SUB-QUESTION 3

Translated quotation	Theme	Category	
I1: The bill of material includes the standard or material that also indirectly indicates the supplier.	Communication in a chain	Used	C o m m u n i c a t i o n C h a n n e l s
I2: The information about updated contracts is internally shared with the relevant key stakeholders, including category managers in different business lines, procurement managers and some operational buyers.			
I2: It has been assumed that the buyers inform the relevant assemblers about the updates if necessary.			
A5: The purchase contract information we have has been collected by asking from the case company's buyers.			
I1: I have received information (about the updated contracts) from the component suppliers.			
A1: We have received the purchase contract information from the (component) suppliers.			
A2: We have rummaged information about the purchase contracts with the (component) suppliers.			
I2: The information (about updated contracts) is not forwarded to the assemblers (by the interviewee).			
I1: Approximately five years ago, we received a listing of the suppliers.	Email		
I1: They emailed us the supplier and contact information (when requested). They also encouraged us to ask other supplier information from them if needed.			
A4: It would be beneficial for the assemblers to know who the case company have the purchase contracts with. The information so far has only been communicated verbally and not for example saved to any IT system.	Verbal communication		
A1: Purchase contract information has only been communicated verbally; we have no information in written form.			
A3: We have briefly discussed about the contracts besides a business visit.			
A5. Pieces of information have been collected from the case company's buyers.			
I2: The work is done by people; they each give different instructions.	Organisational guidelines	Not used	
A2: Email notifications about contract updates would be useful.	Email	Suggested	
I1: I was wondering if it would be possible to get supplier information from the case company's supplier portal.	Supplier portal		
I1: It would be great (to receive information through some IT system). If you do not have time to immediately check (the email), it becomes easily forgotten.			
I3: I was actually wondering that there would be possibilities to develop the case company's supplier portal.			

APPENDIX 6

EXAMPLE OF A VISUAL SUMMARY



CAN BE COMMUNICATED

- Supplier selection
- Component supplier names & contact details
- Certain contract prices
- Contract updates



CANNOT BE COMMUNICATED

- Contract documents
 - Full contract prices
 - Full contract terms
-

Information that cannot be communicated is **confidential**, meaning that the case company **is not permitted** to share it forward to any third party.