



Managing the contract between Gelre Ziekenhuizen and their laboratory supplier

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Acknowledgements

This thesis is written based on an internship at Gelre Ziekenhuizen, located in Apeldoorn (the Netherlands). It is the final assignment of the Master Business Administration at the University of Twente. A real company problem has been clearly identified in the thesis. With the help of an in-depth research, an appropriate advice has been provided.

During the Purchasing lectures in the Master program, I became interested in healthcare purchasing. The most interesting about the healthcare sector in my opinion is that you can contribute to people's life when purchasing very complex and diverse goods and services. The aforementioned products and services also need to be of the highest quality, because it concerns human lives and contributes to their healing process.

In this thesis, contract management and buyer-supplier relationships are researched. The thesis is written for Gelre Ziekenhuizen, one of the bigger hospitals in the Netherlands. Gelre Ziekenhuizen is going to privatise their laboratories and wants to know how the contract could be managed and how the relationship with the supplier could be fulfilled. This thesis will provide an answer to these questions.

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Abstract

Introduction: Gelre Ziekenhuizen wants to integrally privatise their four laboratory services. When looking at existing literature, there is a lack of scientific literature about buyer-supplier relationships in the healthcare sector, while this is a highly relevant topic in the current healthcare sector. Therefore, this thesis aims to add value by offering theoretical and practical insights into how to get started with contract management and a buyer-supplier relationship in the context of outsourcing laboratory services.

Purpose: This study aims to investigate how buyer-supplier relationships could improve the relationship between Gelre Ziekenhuizen and its suppliers, specifically focussing on laboratory services. Therefore, the research question of this thesis is: 'How can Gelre Ziekenhuizen ensure to get the expected results with their partner, after privatising the laboratories, to accomplish their goals?'

Methodology: In order to answer the research question, both a literature review and a qualitative study are conducted to collect the required information. The theoretical scope is developed through an integration of literature from agency theory, relational view theory and contract management. Fifteen respondents of the case company, Gelre Ziekenhuizen, and four contract managers of the external hospitals participated in a semi-structured interview.

Findings: Two theories are used in the literature review to understand and explain various types of relationships in organisations. The agency theory consists of aspects more related to the contract, while the relational view theory consists of aspects more related to the relationship. Furthermore, there are aspects found in literature for the strategic, tactical and operational level which are important to take into account for contract management. It is important to have these three levels because only then a transparent and uniform contract management process can be established. The aspects of a buyer-supplier relationship and contract management are used during the interviews to explore which type of relationship suits best and to explore what elements are most important to take into account when establishing contract management. The results of the interviews show that cost reduction and quality improvement are the most important goals to privatise the laboratory. One of the opportunities is scale enlargement, while a risk is that the privatised laboratory could go bankrupt or that the project could fail. The most important aspects for contract management mentioned by the respondents are strategic goals and desired results; responsibilities and tasks; processes, procedures and policy; process and quality control; and performance management. The most important aspects for a buyer-supplier relationship are trust between members; agreed goals and performance measures; efficient and effective communication; and top management commitment and support according to the respondents. Flexibility and formality are both important to take into account when composing a contract. The respondents also indicated a framework agreement should be developed, where the Service Level Agreement should be a part of. The supplier should proactively watch developments and innovations in the market and adopt an advisory role, while the hospital should facilitate in support services, information and infrastructure. Lastly, sufficient knowledge about the

content of the contract could be maintained according to the respondents by hiring an external specialist, someone who has been trained as a clinical chemist or a specialist in-house.

Conclusion: The following recommendations are provided for Gelre Ziekenhuizen. First, it is recommended to start a partnership with the supplier, because with a partnership both parties can benefit most from each other. According to the respondents, trust, shared goals, investing in each other and innovation are aspects that are important in the relationship with the supplier. The researcher therefore recommends to have a long-term partnership, as these aspects could be achieved by having a long-term relationship. The contract should be formal and detailed with clear agreements. According to literature, a close, collaborative and long-term relationship could be promoted by having a long-term and detailed contract with clear defined responsibilities, expectations and performance. Furthermore, a basis for a Service Level Agreement is presented, that should be further composed by the hospital and supplier. Thirdly, the researcher advises to develop a limited set of Key Performance Indicators for customer chains, instead of per department. When examining more Key Performance Indicators, there will be a lack of focus and alignment. The indicators should be developed for customer chains, because in this way the indicators could be more effective controlled and are more stimulating than indicators per department. Lastly, the researcher recommends to focus on sustainability after implementing the contract. This would probably be after one or two years, because the respondents indicated that performance management, strategic goals, clear tasks and responsibilities and processes, procedures and policy have more priority than sustainability.

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1. Introduction

This chapter introduces the subject of this study. The first section presents one of the topics of this study, that is buyer-supplier relationships. Secondly, a description of the case company of this thesis is presented. The following section explains the problem that the study will address. Next, the goal of this research is discussed. The central research question and subresearch questions are presented after the research goal. Lastly, the structure of the rest of the study is illustrated.

1.1 Introduction of buyer-supplier relationships

This section introduces one of the topics of this study, that is buyer-supplier relationships in general. Thereafter, buyer-supplier relationships in the healthcare sector are discussed.

1.1.1 Buyer-supplier relationships

In the 21st century, there has been a shift in purchasing from traditional arm's-length relationships towards developing a long-term relationship between buyer and supplier (Bensaou, 1999). Collaborative long-term relationships are of growing importance for buyers and suppliers. These strategic collaborations and partnerships are important for buyers and suppliers in order to stay competitive (Ulaga, 2003).

In literature, the definitions of buyer-supplier relationships are formulated around the features that are most essential in this type of relationships. The features which are mentioned in the definitions of buyer-supplier relationships are: collaboration, commitment, communication, information sharing, interdependency, long-term relation, sharing goals, sharing risks and trust (Anderson & Narus, 1990; Han et al., 1993; Mohr & Spekman, 1994; Ellram & Hendrick, 1995; Ploetner & Ehret, 2006).

1.1.2 Buyer-supplier relationships in the healthcare sector

Purchasing in the healthcare sector differs from purchasing in other industries for several reasons. These include a high level of complexity (Rivard-Royer et al., 2002; De Vries and Huijsman, 2011), numerous distribution channels (Rivard-Royer et al., 2002; De Vries and Huijsman, 2011; Miah et al., 2013), a high level of rules and regulations (Porter & Olmsted Teisberg, 2004; Herzlinger, 2006), a high proportion of government investment (Porter & Olmsted Teisberg, 2004; Herzlinger, 2006), and the lack of a focus towards customer benefit (Herzlinger, 2006).

Healthcare organisations represent an interesting case within semi-public procurement because these organisations must comply with their clients' needs, which is less important for private sector companies. Besides that, complexity exists because of the large and diverse number of products and services which need to be purchased. The physical products consist of material with high value, which requires special treatment due to safety reasons and the risk of spoilage and obsolescence (Gobbi & Hsuan, 2015). These complex products and services also need to be of the highest quality, as it concerns human lives and contributes to their

healing process. The buyer and supplier often pursue a strategic partnership when purchasing these complex items, such as the laboratories of a hospital (based on Kraljic, 1983; Olsen & Ellram, 1997; Bensaou, 1999).

In healthcare research and practice there is limited research on the concept of buyer-supplier relationships (Romero and Molina, 2011; Francis et al., 2014). The tradition in contracting in the public sector has been to implement arm's length relationships (Erridge & Greer, 2002; Eriksson 2008). Purchasers in the healthcare sector were expected to attain the best price for the goods and services needed in the hospital. This led to a weak relationship between buyers and suppliers with little to no trust (Mettler & Rohner, 2009). The characteristics of many public services, for example health services, would benefit from the long-term relational stance of purchasing (Lian & Laing, 2004). Hospitals become more open-minded and it is getting noticed that the purchasing department of the hospital increasingly contributes to add value to the organisation (Mettler & Rohner, 2009). To achieve these changes, the purchasing department should have - among other things - a better cooperation with the supplier, by providing better communication via information systems and by coordinating processes and systems (Mettler & Rohner, 2009).

The aim of this thesis is to investigate how buyer-supplier relationships could improve the relationship between Gelre Ziekenhuizen and its suppliers, specifically focussing on laboratory services. Scientific literature about buyer-supplier relationships and tools how to provide a successful partnership are scarce, especially in practice. Therefore, this thesis might offer more practical insights into how to get started with contract management and a buyer-supplier relationship.

1.2 Description of the company

This study is conducted for Gelre Ziekenhuizen which is one of the bigger hospitals in the Netherlands. Gelre Ziekenhuizen has 3,560 employees, 270 medical specialists, 300 volunteers and an annual sales volume of €327 million. The service area of Gelre Ziekenhuizen includes more than 280,000 inhabitants. In conjunction with the first and third line health care, it forms a transmural care network in the region Apeldoorn-Zutphen (Gelre Ziekenhuizen, 2017).

Gelre Ziekenhuizen has the status of a Cooperating Top Clinical Teaching hospital (in Dutch: Samenwerkende Topklinische opleidingsZiekenhuizen). There are two locations: Zutphen and Apeldoorn. Besides that, there are outpatient clinics in Lochem, Epe, and Dieren and there is a Diagnostic Centre in Apeldoorn (Gelre Ziekenhuizen, 2017).

The Purchasing department comprises eleven employees. The tasks of the Purchasing department consists of some operational (ordering, logistics and after care), tactical (inventory, specifying, selecting and contracting) and strategic aspects (policy, service and presentation contracts and positioning) (Gelre Ziekenhuizen, personal communication, May 2017)¹.

1.3 Problem statement

The multiannual policy of Gelre Ziekenhuizen has a lot of developments and changes which will have impact on the care demand, the care offer and the way in which the hospital is arranged. The developments include the substitution of second to primary care, the emergence of regional and national care networks and other requirements for hospital care by government, the health insurer and the patient. These future developments and changes will result in a strongly fluctuating demand for care. To respond to these challenges, Gelre Ziekenhuizen has chosen to focus on primary care and to be flexible in the way in which care is offered and organised.

The change towards a more flexible and efficient organisation has consequences for the way in which the General Support Department within Gelre Ziekenhuizen is arranged and the way services are delivered to the customer. It is important to ensure that the management organisation complies with all the requirements imposed on the hospital and the General Support Department. Thus, the quality on the part of Gelre Ziekenhuizen should be ensured or should even improve. The guarantee of quality is very important in hospitals as it concerns human lives and contributes to their healing process. The support services should be arranged in such a way that it could be scaled up or down when this is necessary. Besides, it is important to determine if the services could be organised in an efficient way, so that they can contribute to the savings objectives of Gelre Ziekenhuizen. The strategy of Gelre Ziekenhuizen will therefore be to outsource the current services (if possible) to flexible and efficient suppliers, to optimise the processes and to transform towards a management organisation.

Gelre Ziekenhuizen wants the least number of service providers, that can provide a wide range of integrated services. Other reasons for Gelre Ziekenhuizen to outsource or privatise the laboratories are that health insurers are cutting costs and stimulate integral diagnostics. Furthermore, the expectation that in the future only concentrated medical diagnostic centres exist (Engelenburg, 2013). It depends on what is available in the market whether outsourcing is a possibility. In any case, the services will be privatised. In the laboratories of Gelre Ziekenhuizen body material (for example blood) is collected and analysed. The results of these investigations are relevant for doctors and medical specialists to diagnose and treat patients. There are four different types of laboratory services: Clinical Pathology, Medical Microbiology and Infection Prevention, Clinical Chemistry and Haematology, and the Clinical Pharmacology and Toxicology Laboratory.

¹ Source from the Intranet (not publicly accessible) of Gelre Ziekenhuizen.

Gelre Ziekenhuizen has developed a business case to see if outsourcing or privatisation of the laboratories can succeed. In the business case, a distribution of separating laboratory activities are presented and the related incomes and expenses were analysed to investigate if outsourcing or privatising the laboratory services would be feasible. An operating overview presents that there is a potential for saving costs and that the (financial) results are positive. Therefore, the result of this business case shows that privatisation is feasible and necessary instead of outsourcing. Therefore, in the rest of this thesis privatising the laboratory services will be discussed. The reasons for privatisation are that laboratory diagnostics in its current form become priceless and that production on a larger scale and regional integral embedding are necessary. Furthermore, the advantage of the privatisation of the laboratories is guaranteed quality which remains affordable.

Managing a buyer-supplier relationship is complex in practice. The buyer and supplier both have their own goals which might lead to a conflict. From mutual interests at present, in the future the buyer and supplier might have divergent interests which might lead to an unravelling of the relationship. Besides, the buyer and supplier are now colleagues, but in the future a business relationship will exist between both, as they are two separate organisations with separate interests. It is important when growing towards a buyer-supplier relationship to prepare future developments together and to have good price agreements, process agreements, a proper cooperation structure and a healthy partner. In practice it could be difficult to arrange this. A possible threshold for organisations to start a buyer-supplier relationship is a lack of knowledge about and experience on managing such a relationship. Furthermore, laws and regulations could change the relationship with the supplier or could make it complex to have a long-term relationship with the supplier, especially for laboratory services. This study will provide Gelre Ziekenhuizen with practical insights into how to start with contract management and how to manage the relationship with their suppliers.

1.4 Research goal

While there is a lot of research on buyer-supplier relationships, there is a lack of scientific literature about buyer-supplier relationships in the healthcare sector. This study will contribute to the current literature as it will provide a better understanding of how a hospital can start with a partnership with a supplier to accomplish its own goals when it opts for the privatisation of laboratory services. The results will be provided in the form of a roadmap. Each step in the roadmap will provide activities which will lead to good contract management and a healthy buyer-supplier partnership. It might be that for some activities a checklist or Service Level Agreement will be set-up, but this is not always the case. An answer will be provided on the question of how to address contract management, by setting up goals which need to be taken into account to achieve good contract management. Furthermore, the results based on literature research and interviews will present how contract management could be improved.

This study can offer all types of organisations an understanding about contract management and a buyer-supplier relationship. In this study a complex service, the laboratory services, is

privatised. Therefore, the results are especially interesting for healthcare organisations, as all healthcare organisations have to deal with this type of complex services. The healthcare organisations, especially those who outsource or privatise their laboratory services, could learn with the help of this study how to manage contracts and a buyer-supplier relationship.

1.5 Research question

This thesis seeks to provide Gelre Ziekenhuizen insights on and strategies for a good and long-term relationship with their partner, who will take care of the laboratories after privatising these. Furthermore, an answer will be formulated in the field of contract management on how and with which resources this could be accomplished by Gelre Ziekenhuizen.

The central research question is as follows:

How can Gelre Ziekenhuizen ensure to get the expected results with their partner, after privatising the laboratories, to accomplish their goals?

The central research question will be answered by making use of four sub-questions:

- 1. What are the most important goals for Gelre Ziekenhuizen when it comes to the contract management of the laboratories?
- 2. Which form of contract management is most suitable for Gelre Ziekenhuizen according to their goals?
- 3. How can contract management be distributed towards the partner at strategic, tactical and operational level?
- 4. How can Gelre Ziekenhuizen ensure to have sufficient knowledge to manage the content of the contract?

With the help of these research sub-questions, a suitable answer to the problem statement will be provided. Two research approaches will be used to analyse the central research question and research sub-questions. Both a critical literature review and a qualitative research will be conducted. The qualitative research exists of interviews with employees of Gelre Ziekenhuizen and employees of four other Dutch hospitals. By combining the literature with practical information, a comprehensive analysis could be presented for the thesis.

1.6 Thesis structure

The thesis continues with the literature review which results in a theoretical framework of two theories with both a different perspective towards a buyer-supplier relationship and how this could be managed. Furthermore, the literature review also identifies another valuable concept in this study, contract management, and reports the results of the empirical research. The thesis next explains the research methodology in detail, elaborating on the research strategy, sample selection, measurement, data collection and data analysis. After the research methodology, the results of the qualitative interviews are presented. In the discussion, the

interpretation of the results and limitations of this study are reviewed. The thesis concludes with identifying the key findings, theoretical contributions, practical recommendations and directions for future research. More details of this study such as the interview guide and additional results can be found in the Appendices.

2. Literature review

In this chapter, two theoretical frameworks and the main concept of the research questions are discussed. These two theories both provide a different view on how a buyer-supplier relationship could be managed. The elements of the theories mentioned in Section 2.1 and the aspects mentioned in Section 2.2 are utilised in the interviews and will contribute to answering the research (sub-) question(s). In Section 2.2.4 the elements of the theories are linked with the aspects of contract management. In Section 2.3 document analysis is conducted to investigate the most important goals for contract management.

2.1 Conceptual models

Two theoretical frameworks, the relational view theory and agency theory, are used to answer the research questions. This section takes a closer look at these theories. Elements of both theories are elaborated and applied in the interviews. The agency theory and relational view theory are both used to understand and explain various types of relationships in organisations. Both theories have another perspective of managing a buyer-supplier relationship. The relational view theory is more about trust and long-term relationships, while the agency theory focuses on efficiency and control and is concerned with resolving problems that can occur in agency relationships. By analysing these two different theoretical frameworks, the central research question is explored more thoroughly and from different perspectives. Agency theory is more focused on contractual aspects, while the relational view theory is more focused on the (long-term) relationship. Therefore, both theories could give a different but valuable perspective.

2.1.1 Relational view theory

The first theoretical perspective discussed in this study is the relational view founded by Dyer and Singh (1998). The relational view provides a good fit with the buyer-supplier relationship studied, as the organisations are trying to establish an on-going relationship that can create value which otherwise could not be created by any of the organisations independently. Thus, the relational view theory has the potential to clarify the relation between buyers and suppliers (Chen & Paulraj, 2004). The relational view theory has successfully been used to explore buyer-supplier relations. In previous research of Paulraj et al. (2008) the relational view theory has been applied to an examination of buyer-supplier relationships in which buyers cooperate with suppliers to improve the performance of their supply chains. The results of this study provide strong support for the notion of inter-organisational communication as a relational competency that enhances buyers' and suppliers' performance.

The perspective of the relational view theory is that organisations can increase their profit by depending on a smaller number of suppliers, which results in increasing the incentives of suppliers to share knowledge and make performance-enhancing investments (Dyer & Singh, 1998). Besides, the relational view theory could be used by organisations who would like to generate rents jointly together. The relational view assumes that relationships with other firms (such as suppliers) could give organisations competitive advantages (McIvor, 2005). These

advantages are called relational rents. According to Dyer and Singh (1998, p. 662) relational rent can be defined as: "a supernormal profit jointly generated in an exchange relationship that cannot be generated by either firm in isolation and can only be created through the joint contributions of specific alliance partners."

The hereafter summed up actions could contribute to achieving the goals of creating sustained competitive advantage and earning relational rent through inter-organisational relationships (Dyer & Singh, 1998). These forms of inter-organisational relationships are for example a partnership, strategic alliance or joint-venture. The probability of earning relational rents increases when all four of the relational rents are being carried out simultaneously. The four ways to generate relational rents is discussed one after the other.

Investments in relation-specific assets

The first aspect of investments in relation-specific assets is member commitment. Commitment to a relationship can be defined as an enduring desire to maintain a valued relationship. The more attractive a buyer is to a supplier, the greater is the commitment of the supplier (Ellegaard, 2003). A committed partner wants the relationship to endure indefinitely and is willing to work at maintaining it. Therefore, member commitment can be considered as important for collaboration as it leads to acquiescence and cooperation (Morgan & Hunt, 1994).

The second aspect is trust between members. Trust influences the area of co-operation and will increase the benefits of the relationship (Dyer, 1996). Thus, the expectation is that a buyer-supplier relationship will become more successful when there is a trust-based relationship (Gulati, 1998).

Substantial knowledge exchange, including exchange that results in joint learning

From a relational view, it is important that there is efficient and effective communication between group members. In practice, proper communication is often difficult in a relationship. Cooperation can often lead to communication problems for new and existing projects, which may result in increased lead times (Laing & Cotton, 1997). Uncertainty can be reduced by more intensive and frequent communication between members of the cooperation (Hoegl & Wagner, 2005).

Second, better understanding through collective learning is a success factor. Collective learning is "a situation in which two or more people learn or attempt to learn something together" (Dillenbourg, 1999, p. 1). Collective learning among group members can result in joint decision making and problem solving and acquiring new knowledge which could lead to a better relationship between buyer and supplier (Wuyts & Geyskens, 2005).

Combining complementary but scarce resources or capabilities

The first success factor concerning combining complementary but scarce resources or capabilities, is the use of complementary expertise, skills and resources. According to

McQuaid (2010), the engagement of organisations that complement each other's resources and expertise is important to maximise the advantages of a successful partnership.

The second aspect is standardised procedures and processes. According to Erridge and Greer (2002), members should establish standardised procedures and processes while encouraging joint selection of goods and services. Standardisation of procedures and processes enables collaboration in the field of providing joint information and it makes it easier to share knowledge and experiences, which can lead to greater efficiency. Therefore, standardised procedures and processes could be a success factor of the relational view theory.

Effective governance mechanisms resulting in lower transaction costs

Top management commitment and support is viewed as one of the most important success factors of an alliance. Clear strategic leadership and support for a partnership are essential within each organisation (McQuaid, 2010). Without top management commitment and support a successful partnership may fail (Brown, Hitchcock & Willard, 1994). When there is lack of commitment and support of the top management, it may be hard to gain commitment and credibility along the rest of the organisation. Therefore, support and commitment of the top management is important as it is noticeable in the rest of the organisation.

Another success factor is the existence of agreed goals and performance measures. Organisations can share goals, risks and rewards and achieve higher performance through collaboration. A lack of clear and agreed goals may be a major cause of the failure of partnerships as goals may be unclear or both organisations may have different interpretations of what these goals mean (Mitchell & McQuaid, 2001).

2.1.2 Agency theory

The agency theory is one of the major theoretical frameworks which offers an understanding about contracted provider accountability (Breaux et al., 2002; Romzek & Johnston, 2005). It examines the relationship between two parties: the principal, who delegates work to the agent, and the agent, who performs the work on behalf of the principal (Jensen & Meckling, 1976; Eisenhardt, 1989). The basic idea of agency theory is to give the agents incentives to act in conformity with the interest of the principal. Buyer-supplier relationships are a form of principal-agent relationships that the agency theory could address and explain. In the case of buyers and suppliers, a buying firm represents the principal who has contracted the supplier, the agent, for work.

The focus of the agency theory is to examine contracting problems in order to determine the most efficient contract type that will satisfactorily decide the relationship between the principal and agent (Eisenhardt, 1989; Bergen et al., 1992; Tate et al., 2009). Agency problems can be mitigated through monitoring or bonding as well as through the contractual choice (Jensen & Meckling, 1976). The different contractual and resource aspects which could be used in a buyer-supplier relationship are further elaborated now.

2.1.2.1 Contractual aspects

Written contracts

The term 'contract' is used to describe the agreement between the principal and the agent "that specifies the rights of the parties, performance criteria on which agents are evaluated, and the payoff functions they face" (Fama & Jensen, 1983, p. 302).

In most cases, both parties are having different self-interests, bounded rationality and to some extent shared interests in their firm strategic collaboration (Jensen & Meckling, 1976). The principal-agent should make sure that none of the parties is able to secure better information on the management of strategic collaboration than the other parties. This should be arranged by a contract. Besides, the principal-agent relationship draws attention to the fact that a contract could bring a range of rights and responsibilities to the partner firms in a strategic collaboration (Yan, 2005).

In this situation where a contract brings a range of rights and responsibilities, it is vital that the strategic partners should create a contract that frames the principal-agent relationship (Yan, 2005). Another reason why the contract between both parties should play an important role, is to avoid the risk that one of the parties benefits at the expense of the other (Bresser, 1998). Without contractual agreements, it is also more likely that the agent will pursue his own interests instead of the interests of the principal.

Risk allocation

Risk allocation is an important aspect of procurement to take into account when discussing contract performance (European Commission, 2003). In practice, defining the risk allocation is difficult and complex. According to Hall (1998) it is important to know how big the risk is and what the type of risk is.

In the agency theory, the agent is supposed to be risk-averse, whereas the principal is assumed to be risk neutral (Amihud & Lev, 1981; Williamson, 1998). One of the possibilities is that the risks could be allocated to the partner who is best able to manage them (Bult-Spiering & Dewulf, 2006). The more risks occur, the higher the costs, the less the performance and the less the agent is paid. With incentives the agent could be motivated to allocate risks and risk occurrence could probably be reduced. For this reason, the principal-agent theory suggests that the risks should be allocated to the agent to the extent he manages the risk (Weber, 2014; Oudot, 2005).

A second possibility is to exploit the risk bearing cost differential between partners, which stipulates that risk should be assigned to the least risk-bearing party (Oudot, 2005). Higher risk aversion leads to higher risk-bearing costs. The agent's attitude towards risk should influence the contractual choices concerned with risk allocation. Therefore, risks should be allocated to the least risk-bearing party (Weber, 2014; Oudot, 2005).

Lastly, the principal could support some risks in order to support the development of the agent (Oudot, 2005). The agent could utilise the resources of the principal. In this case, the agent is incurring little to no risk because all losses are the burden of the principal.

Market knowledge

According to Wilhelmy (2012), the exchange of (market) knowledge between the agent and the principal is an important mechanism which is meant to improve the agency relationship. It can result in reducing information asymmetries and agency costs.

2.1.2.2 Resources

The relationship between the principal and agent is largely determined through incentives and the availability of information. There are three resources to avoid opportunistic behaviour of the agent: monitoring, bonding and incentive alignment. These resources are discussed below.

Monitoring

Monitoring is one of the mechanisms of the principal to reduce agency problems. It can be defined as the observation of the agent's effort or actions over some period of time (Jensen & Meckling, 1976). Monitoring is important in a partnership as the added value of the partnership's work can be made visible. With monitoring, the amount of information the principal has available increases, which results in reduced information asymmetry (Eisenhardt, 1989). This will result in a reduced tendency of the agent to provide incomplete information prior to signing the contract. On the other hand, Sappington (1991) and Sharma (1997) state that it is often difficult for the principal to observe everything the agent does and to assess how the agent performs.

Bonding

Bonding limits the tasks and responsibilities of the agent and with this the conflict of interests and information-asymmetry (Jensen & Meckling, 1976). By the means of bonding agreements the agent can provide guarantees that he will act in accordance with the principal's interests or provide compensation if he does not. This will reduce both the risk of moral hazard and adverse selection. Jensen and Meckling (1976, p. 325) distinguish an interesting type of bonding agreements; "contractual limitations on the manager's decision making power." According to Verhoest (2000, p. 10), "Moral hazard behaviour becomes impossible by shifting decision-making power to the principal or by the introduction of compulsory procedures. The principal can check the compliance of the agent to these limitations rather easily."

Incentive alignment

Incentive alignment is defined as "the degree to which the reward structure is designed to induce managers to make decisions that are in the best interests of stockholders" (Bresser, 1998, p. 77). It reduces the conflict of interests by giving the agent incentives to behave in a way that suits the goals of the principal. This in turn might reduce the agency costs.

In the agency theory, incentives are considered primarily as being monetary, but several theorists recognise the importance of non-monetary rewards or sanctions, such as promotions, formal punishments and reputation loss (Eccles, 1991; Bouma & Van Helden, 1994). The principal can provide incentives or sanctions to stimulate the agent.

One of the ways of incentive alignment is the 'bonus/malus-principle'. The bonus/malus-principle is a contractual mechanism to stimulate the agent to leave behind opportunistic behaviour. A better performance can be stimulated with a bonus, while a drop back in quality or undesirable actions are made unattractive by a malus. The agent is stimulated to perform well, as the risk is shifted to the agent. There is less control needed by the principal, because the principal can rely on the quality control of the agent, as it is now more important for the agent to perform his own control properly. This leads to more aligned goals between both parties, because the interest of the principal also becomes the interest of the agent (Miller & Whitford, 2006).

It is important to find a good balance in the contract between the principal and the agent to provide the agent sufficient performance incentives. This could be accomplished by taking up measurable and verifiable incentives in the contract.

2.1.3 Summary of elements proposed by both theories

In this section the aspects of a buyer-supplier relationship of both the relational view theory and agency theory are summarised in Table 1. An explanation is provided on how these elements are used during the rest of the thesis.

Table 1 – Aspects of a buyer-supplier relationship for the relational view theory and agency theory

Relational view theory	Agency theory
Member commitment	Contract
Trust between members	Risk allocation
Efficient and effective communication	Market knowledge
between members	
Better understanding through collective	Monitoring
learning	
Complementary expertise, skills and	Bonding
resources	
Standardised procedures and processes	Incentive alignment
Top management commitment and	
support	
Agreed goals and performance measures	

As exhibited in Table 1 for both theories a number of elements are mentioned which characterise the theory. During the interviews the interviewees are asked to rank these aspects from most important to least important from their point of view, with the situation of a privatised laboratory in mind. This will show which elements the interviewees think are most important and which elements may need extra attention. Furthermore, it can be concluded whether the interviewees think a relational view perspective or an agency perspective is more fitting for the privatised laboratory. The rankings are compared with each other and an overall conclusion is provided.

2.2 Contract management

Besides the more general elements arising from the relational view theory and the agency theory, more specific elements are proposed in contract management literature that also require attention when managing a buyer-supplier relationship.

Contract management has different forms which fulfil different goals. There are elements at the strategic, tactical and operational level which are important to take into account for contract management. It is important to have these three levels because only then a transparent and uniform contract management process can be established. The elements are mainly based on the book of De Jong et al. (2010) and the paper of Van den Hoven (2015). The three levels are elaborated per level and used in the next chapters.

2.2.1 Strategic level

At the strategic level, the focus is on the long-term. The policy for contract management is formulated at this level and strategic choices regarding desired contractual forms need to be chosen (De Jong et al., 2010).

Roles clearly described in terms of responsibilities and tasks

At the start of outsourcing or privatising, it is necessary that all relevant parties are aware of their roles and responsibilities. The management is responsible for ensuring that the employees know what their tasks and responsibilities are and how to perform these tasks (De Jong et al., 2010). When having frequent disputes about input in the collaboration (responsibilities) and tasks, this hinders potential benefits from the collaboration (Hoffmann & Schlosser, 2001). Therefore, clearly described responsibilities and tasks can benefit the collaboration between buyer and supplier. This can result in more efficiency and a decrease in duplication.

Innovation

Since the 1990s, innovation is a new purchasing objective. In the first place, to ensure the flow of innovation from suppliers into the buying organisation and second, to establish the conditions and to manage buyer-supplier collaborative innovation. A collaborative partnership is more likely to produce beneficial innovative solutions than either party acting alone (Roy et al., 2004; Wiengarten et al., 2013). This results in that innovation can be considered as a success factor in a buyer-supplier relationship.

Processes, procedures and policy

Procedures and processes must be clearly defined. An organisation can guarantee its quality by defining these procedures and processes unambiguous. In addition, these descriptions can provide input for further optimisation of the operation. When determining the procedures, a responsible must be designated. It is important that all parties and employees are familiar with the rules of procedures (De Jong et al., 2010).

Sustainable purchasing

It is important to consider the position of the organisation in society. Sustainability can complement the three P's: people, planet and profit. When an organisation has incorporated sustainability in her mission or strategy, this contributes to the maturity (De Jong et al., 2010). Relationship management increases the sustainability performance of the supply chain and reduces resistance towards sustainability adoption. Therefore, a buyer-supplier relationship can play an important role in improving sustainability of the supply chain (Kumar & Rahman, 2015).

Strategic goals and desired results

Beforehand, it is important to consider the goals that need to be accomplished, the expected business benefits and value for money which should be realised. The strategic goals and desired results should be aligned with the strategic goals and desired results of the supplier. It is also good to check if the agreed strategic goals and desired results are met (De Jong et al., 2010).

2.2.2 Tactical level

At the tactical level, the strategic policy is translated into manageable processes. The right suppliers are selected and contracted. Furthermore, developments in the supplier market needs to be monitored and the impact of these developments should be determined (De Jong et al., 2010).

Performance management

In performance management, monitoring the performance and making adjustments when necessary are the core business. With the help of Key Performance Indicators and scorecards, the performance is being measured and actions can be taken to ensure improvement. The buyer and supplier are able to quickly manage and prevent mistakes by monitoring and analysing the performance agreements. Transparency in performance is important. It enables the buyer and supplier to improve to the agreed level. At the tactical level, especially the Key Performance Indicators are prepared (Van den Hoven, 2015). It is important that the performance management instrument is implemented together with the supplier, so that it is supported by both parties (De Jong et al., 2010).

Supplier management

Supplier management consists of all activities in an organisation that are aimed at exploring, starting, maintaining and further developing the collaborative relationship with the supplier. The supplier should be co-operative and responsive (Van den Hoven, 2015).

Risk management

Risk management in the contract comprise the activities associated with identifying, assessing and controlling the risks that may potentially affect the successful fulfilment of the contract (Van den Hoven, 2015). The risk between buyer and supplier could be shared. Decreasing procurement risk will help strengthen buyer-supplier relationships. This includes thinking of sharing the financial risks where profit and loss can be divided when a certain turnover is

achieved or applying the bonus-malus principle when a certain performance is achieved (De Jong et al., 2010).

Relationship management

Successful contract management consists of building a relationship with all stakeholders involved, effective communication and thus laying the foundations for a successful collaboration between a buyer and supplier (Van de Hoven, 2015). Decreasing procurement risk will help strengthen buyer-supplier relationships. Only in a collaborative relationship both parties can come to an agreement in which the goals of both parties could be achieved. The quality of the relationship depends on credibility, trust and commitment (De Jong et al., 2010). Handley and Benton (2009) found that suppliers provided higher quality results when acting as a partner in a collaborative relationship, which ultimately results in the buyer's ability to produce a better product or service. Therefore, relationship management is seen as an important aspect in a buyer-supplier relationship.

2.2.3 Operational level

The operational level is about managing the contractual supplier relationship and the related contractual agreements. This is achieved through measuring, evaluating and reporting the performance on basis of Key Performance Indicators in order to stimulate the continuation and improvement of the agreed service and risk management. At this level, it needs to be ensured that contracts are continuously in alignment with the choices and objectives created at higher levels (De Jong et al., 2010).

Process and quality control

It is important to document the procedures and agreements that are made. The utilisation of the budget can be monitored and important notification times such as reports and evaluation meetings are monitored. At all times, accountability should consider the progress or budget through management reports (Van den Hoven, 2015).

Monitoring and reporting the quality of the services provided by the supplier

When an organisation implements their strategic choices and goals, it must monitor, on a regular basis, to which extent it achieves its goals and needs to adjust them if necessary. With the help of scorecards and the relevant Key Performance Indicators, the performance can be monitored and actions can be taken to improve them wherever possible (De Jong et al., 2010). Monitoring can provide a report to check whether the level of service has been achieved, whether the organisation achieves compliance or whether improvements need to be made (Van den Hoven, 2015).

Software used to manage/store contracts

Organisations have a lot of contracts to manage. This could be a problem when setting contract management since all the existing contracts should be stored or mapped. The most recommendable approach is to select all the contracts which should be included and scan them into an electronic format. This allows contracts to be easily viewed by the authorised staff (van den Hoven, 2015).

2.2.4 Summary of contract management aspects and combining the aspects with theory

In this section, the aspects of contract management are summarised in Table 2. An explanation is given on how these elements are used during the rest of the thesis.

Table 2 – Aspects of contract management at strategic, tactical and operational level

Strategic level	Tactical level	Operational level
Description of	Performance management	Process and quality control
responsibilities and tasks		
Innovation	Supplier management	Monitoring and reporting the quality of the services
Processes, procedures and policy	Risk management	Software used to manage/store contracts
Sustainable purchasing Strategic goals and desired	Relationship management	
results		

As shown in Table 2 some elements were mentioned for three different levels; strategic, tactical and operational. During the interviews the interviewees are asked to rank these aspects from most important to least important from their point of view, with the situation of privatised laboratory in mind. This shows which elements the interviewees think are most important and which elements might need extra attention.

Finally, the elements that are found in the theories for a buyer-supplier relationship and aspects of contract management are related to each other in the table below (Table 3). This distribution is discussed with the Purchasing manager of Gelre Ziekenhuizen for a better consistency.

Table 3 – Aspects of contract management and theories combined

Contract management aspects	Theories
Relationship management	Membership commitment
	Trust between members
	Efficient and effective communication
	Top management commitment and support
Risk management	Risk allocation
	Bonding
	Incentive alignment
Innovation	Better understanding through collective
	learning
	Market knowledge
Processes, procedures and policy	Standardised procedures and processes
Software	Contracts
Sustainable purchasing	
Tasks and responsibilities	
Monitoring / Reporting	Monitoring
Performance management	Agreed goals and performance measures
Strategic goals/desired results	Complementary expertise, skills and
Process- and quality control	resources

2.3 Document analysis

In this section, documents of Gelre Ziekenhuizen are reviewed to explore the most important goals/measures of contract management.

As mentioned before, Gelre Ziekenhuizen has to deal more and more with external developments. Customers will be more demanding because of all the choices in the area and care providers demand lower costs. These developments result in that Gelre Ziekenhuizen will arrange the care offerings in a different way. Gelre Ziekenhuizen will develop towards a core hospital. The focus is on primary care and the general support services should be organised more efficiently so that it could contribute to the goals of the hospital.

The general support services formulated the following four goals that could contribute to the goals of the organisation: optimal flexibility, optimal cost level, risk control and maintain current quality and if possible improve quality (Gelre Ziekenhuizen. Personal information, June 2017)². The goals of the general support services could be translated into four goals for the contract management of the privatised laboratory services. These goals/measures are based on an analysis of documents of Gelre Ziekenhuizen and on a discussion with the external supervisor.

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² Source from the Intranet (not publicly accessible) of Gelre Ziekenhuizen.

First, documenting activities, processes and agreements are an important goal for the contract management of the laboratories. According to documents of Gelre Ziekenhuizen, there is not a clear policy or standard processes or procedures for contract management. There is a lack of structure (Gelre Ziekenhuizen, personal information, June 2017)². For the new situation with the privatised laboratory it is important to have clear processes, procedures and agreements. This is important because Gelre Ziekenhuizen and the privatised laboratory will have separate interests in the new situation. With clear processes, procedures and agreements all issues can be covered and both parties will have knowledge of what is agreed and can comply with the agreements.

Secondly, a flexible and adjustable contract should be composed, because of the changing environment within Gelre Ziekenhuizen. When preparing the contract, it should be taken into account that small adjustments in the contract are possible, for example in the amount of work.

Thirdly, it is important to determine annual goals with the supplier of the laboratory and to evaluate and realise the goals together. It is necessary to determine the responsibilities. Based on the annual goals, Key Performance Indicators could be prepared and measured to contribute to performance management. The goals should be formulated SMART. Documents of Gelre Ziekenhuizen indicate that in the current situation this is not always well-arranged (Gelre Ziekenhuizen, personal communication, June 2017).²

Lastly, risks should be controlled. Gelre Ziekenhuizen should continue the dialogue with the supplier of the laboratory to discuss the opportunities and threats together. It is important to appoint the risks to manage them properly.

2.4 Aspects of a Service Level Agreement

In this section, literature is reviewed to explore what aspects are important to take into account when composing a Service Level agreement.

Kandukuri et al. (2009) explained that a Service Level Agreement should include a number of elements:

- <u>Introduction and purpose:</u> the purpose and objectives are mentioned here. The commencement and duration of the contract, relevant information about parties and key aspects of the agreements are presented.
- <u>Services to be delivered:</u> this chapter is considered as one of the most important chapters of the Service Level Agreement. The services could be divided into standard services and customised services. There should be a detailed specification about the delivered services.
- <u>Performance-, monitoring- and reporting management:</u> it is important to monitor, measure and report the service level performance, as it prevents problems when the service performance levels are monitored, measured and reviewed regularly.

- <u>Problem management:</u> in this chapter there should be agreements about minimising the impacts of incidents and problems. This is important when two independent parties collaborate with each other, to minimise and resolve the problems.
- (Customer) duties and responsibilities: it should be stated what duties and responsibilities the customer and service provider should have. An example for a responsibility of the customer is arranging adequate training for the employees to meet health and safety requirements.
- <u>Warranties and remedies:</u> the warranties are often characterised in terms of service quality and violations of the agreement. It is important to include agreements about warranties and remedies in the Service Level Agreement as it sometimes occurs that the promised standards are not achieved by one of the parties.
- <u>Legal compliance</u>: informal methods for dispute resolution and the use of arbitration.
- Escape clauses and constraints: agreements by which the Service Level Agreement may be ended. It should cover arrangements about termination at end of initial term, termination for convenience, termination for cause and termination for payments. A wrong termination process could occur costs for both parties.

Mohamed et al. (2015) mentioned a list of ten elements for a Service Level Agreement.

- <u>Description of agreements:</u> purpose of the Service Level Agreement should be described and the contracting parties should be introduced. Furthermore, the duration of the contract should be defined.
- Scope and availability of services: this element describes the scope of the services that the service provider should deliver. The services should be specified and the availability of services should be noted.
- <u>Performance, measurement, and evaluation of services:</u> the performance required for the services should be measured and evaluated to ensure that an acceptable service level is provided. The service level measurement and Key Performance Indicators are presented here.
- <u>Feedback and reporting:</u> problems and complaints between the contract period should be stated.
- <u>Payment:</u> the payment process and agreed costs between the customer and service provider should be defined in this chapter.
- <u>Change management and renegotiation:</u> agreements about the effects of changes within the organisation and procedures of renegotiation are explained.
- <u>Penalties:</u> in case the agreed service levels are not complied with, the service provider will receive a penalty. The procedure of what happens in case of non-compliance will be described in this chapter.
- Responsibilities and rights in the agreement: the responsibilities and tasks of both the customer and service provider will be stated to make sure that both parties deliver the agreed level.
- <u>Disputes and termination:</u> this chapter defines the disputes in the contract and the termination procedure.

•	Terms and conditions of the agreement: the limitation in the contract is elaborated in
	this chapter, that gives direction to both parties to ensure that the service delivery is
	well performed.

3. Research methodology

This chapter presents the methodology of the research which will be used to provide an answer on the research questions.

3.1 Research strategy

This section discusses the research strategy and provides an explanation per research subquestion to illustrate what will be researched and how the research will be conducted.

3.1.1 Research type

The type of research conducted in this thesis is mainly qualitative research. According to Hennink et al. (2011, p. 10), qualitative research is useful for "exploring new topics or understanding complex issues; for explaining people's beliefs and behaviour; and for identifying the social or cultural norms of a culture or society." This type of method is most suitable for this research for Gelre Ziekenhuizen, because with qualitative research, complex and sensitive topics can be discussed. With 'why questions' issues may be explained and understood, and 'how questions' describe processes or behaviour (Hennink et al., 2011). Qualitative research is more interpretative. The researcher seeks to interpret the meanings that respondents give to their views and experiences (Hennink et al., 2011; Blumberg et al., 2014). Therefore, the method is useful for this research, as it provides views and experiences to answer the research questions. With quantitative research larger amounts of data will be identified and, for instance, averages and patterns in the data are analysed, which is less suitable for this research (Bryman & Bell, 2015; Blumberg et al., 2014). In qualitative research there is greater interest in the point of view of the interviewee and the interviewer can depart significantly from any guide that is being used (Bryman, 2004).

3.1.2 Research sub-question 1

What are the most important goals for Gelre Ziekenhuizen when it comes to the contract management of the laboratories? – The most important goals are formulated based on documents of Gelre Ziekenhuizen in combination with interviews. In the interview, one of the questions is about which goals are most important for Gelre Ziekenhuizen according to the respondents. This question may show possible similarities between the goals based on the information in the documents and the view of the respondents.

3.1.3 Research sub-question 2

Which form of contract management is most suitable for Gelre Ziekenhuizen according to the goals? – Literature research is conducted to explore different types of a buyer-supplier relationship. In the interviews with Gelre Ziekenhuizen, the different types of a buyer-supplier relationship are presented. In the interviews with the other hospitals in the Netherlands, the type of relationship for laboratory services which is used in their hospital is discussed. The benefits and pitfalls of these types of a buyer-supplier relationship are analysed to discover whether they might be applicable for Gelre Ziekenhuizen. The option that fits best to the goals determined in research sub-question 1 is selected.

3.1.4 Research sub-question 3

How can contract management be distributed towards the partner at strategic, tactical and operational level? – Literature is searched for possibilities on how contract management could be distributed at strategic, tactical and operational level. Furthermore, in the interviews with respondents of Gelre Ziekenhuizen and in the interviews with respondents of the external hospitals there are questions about how the respondents think the contracts could be managed for these different levels.

3.1.5 Research sub-question 4

How can Gelre Ziekenhuizen ensure to have sufficient knowledge to manage the content of the contract? – For the fourth research sub-question, the internal and external respondents are asked how to maintain sufficient knowledge to manage the content of the contract and how to overview the supplier market.

3.2 Sample selection

Purposive sampling is a non-probability sampling method and most suitable for this thesis. With purposive sampling, the elements for the sample are not randomly selected, but selected based on the judgment of the researcher (Bryman & Bell, 2015). The probability of selecting population elements is unknown (Blumberg et al., 2014).

For this method, there are only a limited number of data sources who can contribute to the study (Bryman & Bell, 2015). It enables the researcher to select respondents with acquaintance and expertise, which will provide the best results. The purposive sampling method identifies and selects the information-rich cases for the most proper utilisation of available resources (Patton, 2002). Individuals who are proficient and well-informed with the topic of the research are identified and selected (Creswell & Plano Clark, 2010).

In this thesis, Gelre Ziekenhuizen is selected as the sample where the interviews are conducted. Furthermore, four other hospitals in the Netherlands are selected based on their acquaintance and expertise with contract management and the outsourcing process for the laboratory services.

3.3 Measurement procedure

As mentioned before, interviews will be conducted to collect the required information to answer the research questions. According to Blumberg et al. (2014, p. 247), "Qualitative interviews are very useful if the objective of your study is to detect the meanings respondents attach to a phenomenon." In-depth interviews provide much more detailed information than what is available through other data collection methods, such as surveys (Bryman & Bell, 2015; Blumberg et al., 2014). Another advantage of in-depth interviews is that respondents may feel more comfortable having a conversation than filling out a survey (Boyce & Neale, 2006).

A semi-structured interview will be used. The idea of a semi-structured interview is that the researcher wants to gain insight into what the respondents consider relevant and how they interpret the situation (Blumberg et al., 2014). A semi-structured interview usually start with a list of specific questions, but allow the interviewee to follow his or her own thoughts later on (Blumberg et al., 2014). The advantage here is that there is more freedom to discuss other questions than during structured interviews, in which all questions and topics are set in stone (Bryman & Bell, 2015). Another advantage of this method is that the content of the interview is clear (Bryman & Bell, 2011). With the help of the formulated questions beforehand a proper response can be given on the question during the interview so that the research questions could be answered adequate afterwards. The interviewer may ask follow-up questions on things said by the interviewees which were initially not included in the interview guide (Bryman & Bell, 2015).

The respondents will be interviewed individually. It is expected that this will result in the best information. The advantage of a personal interview is that it provides the opportunity for feedback and clarification (Zikmund et al., 2013). For example, if an answer is too brief or unclear, the researcher may request a more comprehensive or clearer explanation (Zikmund et al., 2013). If not everything is clear during the interview, the interviewer is in the position to ask more questions to get a clear answer on the question (Blumberg et al., 2014; Brotherton, 2015). The interviews will be conducted face-to-face and approximately last 60 minutes. This is the amount of time that is expected to be necessary to cover all topics, but not lose concentration of the interviewee. Based on the recommendations made in Opdenakker (2006) and Bryman and Bell (2015), the interviews, with permission from the interviewee, will be recorded. This enables the researcher to focus on the answers of the interview instead of having to take notes and possibly missing important information.

The respondents of the interviews are informed per e-mail. In this e-mail the thesis is briefly introduced and the respondents are asked to contribute to the interview. After receiving the agreement of the respondent to contribute, a meeting is arranged to conduct the in-depth interview. The interviews start with a brief introduction about the interviewer, the purpose of the interview, the level of confidentiality, the use of a voice recorder and the time needed for the interview. The most important information of each interview will be summarised. These summaries will be submitted to the interviewees for approval.

In semi-structured interviews, the researcher uses an interview guide containing a list of specific questions to ensure that the interviewer covers the necessary topics and asks the questions in a similar wording in all interviews. The researcher is, however, free to ask additional questions and to change the order of the questions (Blumberg et al., 2014). The questions in the interview guide are formulated in Dutch because the selected respondents are speaking Dutch. Therefore, conducting the interviews in Dutch makes it more accessible and easily understandable for the interviewees (Blumberg et al., 2014). The interview guide in Dutch can be found in Appendix A and the interview guide translated in English can be found in Appendix B. Per research sub-question some interview questions were prepared, which could provide a complete answer per research question.

For the aspects of a buyer-supplier relationship and contract management that are elaborated in Chapter 2, the ranking response strategy is used. A ranking question is ideal when the relative order of alternatives is important (Blumberg et al., 2014). A 12-point and 13-point Likert scale will be used. Likert (1932) uses a scale to refer to a number of items selected to measure people's attitude towards a single object. The respondents rank all the items from 1 till 12 or 13. Hereby, 1 is used to indicate the most important factor, 2 the next most important factor, and so on. This scale is used to see the importance per item, to see if there are similarities or differences between the ranks of all the respondents.

3.4 Data collection

According to Sandelowski (1995), "In general, sample sizes in qualitative research should not be so small as to make it difficult to achieve data saturation, theoretical saturation or informational redundancy. At the same time, the sample should not be so large, due to time and capacity limitations, that it is difficult to undertake a deep, case-oriented analysis." For this thesis, fifteen interviews within Gelre Ziekenhuizen and four interviews with other hospitals in the Netherlands will be conducted to acquire information needed to provide an answer on the research questions. This is assumed to be the right sample size considering the recommendations that Sandelowski (1995) made.

The fifteen interviews within Gelre Ziekenhuizen are planned in cooperation with the external supervisor to ensure that the most suitable employees of Gelre Ziekenhuizen are selected. The expectation is that these fifteen respondents cover all the aspects which are related to the thesis.

Furthermore, the other hospitals in the Netherlands are selected based on the contacts of the external supervisor (Purchasing manager of Gelre Ziekenhuizen). A network of hospitals in the Netherlands received a request per e-mail with the question whether they were willing to share their knowledge about and experience with the topic of the thesis. Only hospitals who outsourced or privatised their laboratories are taken into account in this thesis. With all the hospitals (four) that replied to the e-mail, an appointment is planned. The employees of Gelre Ziekenhuizen and the external hospitals who participate in an interview are mentioned in Table 4.

Table 4 – Respondents of Gelre Ziekenhuizen and the external hospitals for the interviews

Case	Organisation	Position	Name
1.			
2.			
3.			
4.			
5.			
			<u></u>
6.			
7.			
0			
8.			
9.			
9. 10.			
10. 11.			
11. 12.			
12. 13.			
13. 14.			
15.			
16.			
10.			
17.			
1/.			
18.			
10.			
10			
19.			

3.5 Data analysis

The scientific literature and interview outcomes will be analysed in a multi-criteria analysis. A multi-criteria analysis uses a set of techniques, with the goal of providing an overall order of options, from the most preferred to the least preferred option (Dodgson et al., 2009).

For research sub-question 1 and research sub-question 2 a multi-criteria analysis will be used. First, data about the goals of Gelre Ziekenhuizen will be collected to provide an answer on research sub-question 1. Documents will be analysed and employees of Gelre Ziekenhuizen will be asked about the goals for contract management.

For research sub-question 2, these goals could be used for a multi-criteria analysis to find the best form of contract management. The theories mentioned in Chapter 2 will contribute to this, by providing criteria for a buyer-supplier relationship and contract management. The

criteria found in the literature research will be presented during the interviews and conducted in a multi-criteria analysis. A rank per criteria could be appointed in the interview and the important and less important criteria could be distinguished. In the multi-criteria analysis the most important criteria will be presented to see what form of contract management is best fitting.

Research sub-questions 3 and 4 will be answered by reviewing the literature and conducting interviews with key informants. Based on the review of the literature, a list with aspects for contract management will be derived. These elements will return in the interviews in the form of interview questions. The information from the interviews are categorised per element.

A systematic analysis of the collected data is essential, even if the research objective is more exploratory. As the amount of information collected is often immense, data reduction and categorisation is a major concern in the analysis of observational data (Blumberg et al., 2014). Therefore, the interviews are transcribed and categorised per interview question. The most relevant information about these interviews is presented in the results chapter. The elaborate interviews are merged in an external document that can be obtained from the researcher.

4. Results

In this chapter, the most important results arising from the interviews are clarified. First, the most important goals, opportunities and risks of the outsourcing process are mentioned in this chapter. Thereafter, the type of contract management and a buyer-supplier relationship that fits best with Gelre Ziekenhuizen or the external hospitals is presented. Furthermore, the distribution of contract management at strategic, tactical and operational level is described. Lastly, it is stated how sufficient knowledge can be provided to manage the content of the contract. A more elaborate explanation of some aspects can be found in Appendix C.

The results of both the employees of Gelre Ziekenhuizen as the results of the respondents of the external hospitals are presented in this chapter. Fifteen interviews were conducted with employees of Gelre Ziekenhuizen. The employees were selected based on their position and relationship that they will have with the privatised laboratory and cover all kinds of departments dealing with the laboratory. The respondents consist of managers of the laboratory services, internal customers, director of the laboratory, board of directors, purchasing manager, financial manager, manager hotel, business controller, contract manager, and external customer. Besides the interviews with employees of Gelre Ziekenhuizen, four contract managers of hospitals in the Netherlands were interviewed. A description of the external hospitals is presented in the table below (Table 5). In the case of all four hospitals, the outsourced or privatised party employed all the employees of the laboratory.

The respondents are divided in three groups to see if there are differences or similarities between the different groups. In the tables, the three groups are divided in: respondents who serve the interest of the (privatised) laboratory (*purple*), respondents who serve the interests of Gelre Ziekenhuizen (*orange*) and (contract managers of) external hospitals (*green*).

Position of the respondents

Hospital A

Hospital C

Hospital D

Hospital D

Table 5 – Description of the external hospitals

4.1 Most important goals, opportunities and risksIn this subsection, the most important goals, opportunities and risks that were mentioned by the respondents of Gelre Ziekenhuizen and the external hospitals are described. Table 6 summarises who mentioned which goals, opportunities and risks.

Table 6 – Results of the most important goals, opportunities and risks per respondents

ot or still be too small not share the same could fail for the future interests
X
X
X
X X
X
X
Y/
X X
X
X
X
Λ
X
Λ

There are two goals mentioned by the respondents. The first one is cost reduction, which is mentioned by 15 of the 19 respondents. The second goal is quality improvement, mentioned by 12 of the 19 respondents. The most remarkable finding is that the respondents related to the laboratory mentioned more often that cost reduction is the most important goal instead of quality improvement, while the expectation is that this group gives quality improvement priority above cost reduction.

Scale enlargement was by far mentioned most often in all three categories as an opportunity for privatising the laboratories. Furthermore, mainly the respondents related to the laboratory argued that another opportunity is that the privatised laboratory is more attractive for other partners.

The most often mentioned risk, mentioned in all the three categories, is that the privatised laboratory can go bankrupt or that the project could fail. Furthermore, only one internal respondent thinks that it might be that the hospital and privatised laboratory not share the same interests.

For the most important opportunities and risks a short explanation is presented below.

Opportunities

The following opportunities were mentioned by the respondents during the interviews:

Scale enlargement

- 'Manager of the laboratory services 1' explained that the opportunity of scale enlargement is that automation of processes and more research and innovation are possible, because of more (financial) resources.
- 'Internal customer 2' mentioned that with scale enlargement it is possible to invest in knowledge and expertise.
- The 'Contract manager of Hospital D' indicated that it is possible to turn a larger volume, because there are more partners. The 'Contract manager of Hospital C' added to this that scale enlargement makes it possible that the laboratory can deliver services, which would not be possible to deliver alone.

Integral diagnostics

• 'Manager of the laboratory services 1' mentioned that services could be combined and performed together, which can result in more efficiency and effectivity.

More attractive for other partners

• 'Manager of the laboratory services 4' mentioned that other parties often do not want to do business with Gelre Ziekenhuizen, because of competition. When the laboratory is privatised, it becomes more attractive for other partners to co-operate with.

Risks

The following risks were mentioned by the respondents during the interviews:

Privatised laboratory can go bankrupt or project could fail

• The 'Business controller' explained that a risk is that the privatised laboratory cannot succeed in scale enlargement and attracting own funding. This could result in that other organisations (for example hospitals or doctors) do not want to become a partner. Another reason could be that there are bigger or cheaper players in the market. 'Internal customer 1' added that there are already a lot of players in the market, also internationally, what might be risky for the privatised laboratory. It could also be that another party will take over the laboratory, which results in that the privatised laboratory will have no control anymore.

Privatised laboratory might still be too small for the future

• 'Manager of the laboratory services 3' mentioned that the privatised laboratory might still be too small for the future. There are a lot of other commercial laboratories in the Netherlands. When the laboratory attracts only one or two partners, this might not be sufficient to guarantee long-term continuity.

Privatised laboratory and hospital might not share the same interest

• The 'Contract manager of Hospital C' indicated that the hospital and the privatised laboratory might not share the same interests, as the privatised laboratory will also have a commercial interest. This might result in that both organisations face each other when making agreements.

4.2 Type of contract management

In this sub-section, (theoretical) aspects of contract management and a buyer-supplier relationship are discussed. With one of the respondents of Gelre Ziekenhuizen a telephone interview was arranged. Due to time constraints, it was not possible for the respondent to send the ranked aspects per e-mail. Therefore, the rank of fourteen of the fifteen internal respondents of Gelre Ziekenhuizen and four respondents of the external hospitals for the aspects of contract management and a buyer-supplier relationship is presented in this section. An explanation of the aspects of a buyer-supplier relationship could be found in Chapter 2.1. The aspects of contract management are elaborated in Chapter 2.2. In Appendix C (C2) is illustrated in detail how the respondents have ranked the aspects.

Theoretical aspects of contract management

In Table 7, the most important aspects of contract management are presented for both the internal and external respondents. There is less consensus between the most important aspects of contract management. Strategic goals and desired results is the only aspect that was ranked in the top three of both the internal and external respondents. The internal respondents indicated two aspects more related to the contract, which are Responsibilities and tasks and

Processes, procedures and policy, while the external respondents indicated two aspects that are more related to performance and quality.

Table 7 – Most important aspects of contract management

Top 3 most important – internal	Top 3 most important – external
1. Responsibilities and tasks	1. Strategic goals and desired results
2. Processes, procedures and policy	2. Performance management
3. Strategic goals and desired results	3. Process and quality control

In Table 8, there is consensus about the least important aspects of contract management. Both the internal as the external respondents mentioned that Software used to manage and store contracts is least important for contract management. Thereafter, Sustainable purchasing and Supplier management were indicated as least important, only the ranking differs.

Table 8 – Least important aspects of contract management

Top 3 least important – internal	Top 3 least important – external
1. Software used to manage and store contracts	1. Software used to manage and store contracts
2. Sustainable purchasing	2. Supplier management
3. Supplier management	3. Sustainable purchasing

The 'Director of the laboratory' and 'Contract manager of Hospital D' added that flexibility in the contract is important. When certain issues or agreements change or when developments occur, it should be possible to deal with it in an appropriate way.

Theoretical aspects of a buyer-supplier relationship

In Table 9, there is more or less consensus about the aspects of a buyer-supplier relationship. Trust between members and Agreed goals and performance measures are both mentioned by the internal and external respondents in their top three as most important aspects of a buyer-supplier relationship. The internal respondents mentioned Efficient and effective communication as an important aspect of a buyer-supplier relationship, while the external respondents mentioned that Top management commitment and support is important.

Table 9 – Most important aspects of a buyer-supplier relationship

Top 3 most important – internal	Top 3 most important – external
1. Trust between members	1. Trust between members
2. Efficient and effective communication	2. Agreed goals and performance measures
3. Agreed goals and performance measures	3. Top management commitment and
	support

In Table 10, the least important aspects for a buyer-supplier relationship are mentioned. Mainly contractual aspects were mentioned as least important aspects. Both the internal and external respondents mentioned Monitoring and Market knowledge in their top three. The internal respondents also mentioned Incentive alignment as a least important aspect, while the external respondents mentioned Collective learning and Contracts.

Table 10 – Least important aspects of a buyer-supplier relationship

Top 3 least important – internal	Top 3 least important – external
1. Monitoring	1. Monitoring
2. Market knowledge	2. Collective learning
3. Incentive alignment	3. Contracts and Market knowledge

4.3 Ideal distribution between strategic, tactical and operational level

In this sub-section, at strategic, tactical and operational level is presented how the respondents of Gelre Ziekenhuizen and the external hospitals think that each level should be arranged. The aspects of contract management that are discussed in Chapter 2.2 are applied in this section.

In Table 11, the ideal distribution at strategic, tactical and operational level is presented.

Table 11 – Most often mentioned distribution at three levels

·	Strategic level	Tactical level	Operational level
Responsible person at	Board of directors of the	Contact person:	Team heads of the major
the hospital	hospital and business manager	contract manager of the hospital or Purchasing department	consumers
Responsible person at	Board of directors of the	Contact person: manager of	Manager of the laboratory
the laboratory	laboratory	the laboratory (customer manager)	(customer manager)
Frequency of meetings	In the beginning every quarter, later once a year	Once a month or once in two months	Daily or weekly
Responsible organisation	Hospital	Hospital and laboratory. In the future possibly the responsibility of the laboratory	Laboratory

Strategic level

At strategic level, the following aspects are discussed: Responsibilities and tasks; Innovation; Processes, procedures, and policy; Sustainable purchasing; Strategic goals and desired results.

Responsibilities and tasks

The following aspects are the responsibility of Gelre Ziekenhuizen/the hospital:

- The 'Director of the laboratory' explained that Gelre Ziekenhuizen should facilitate in support services, information and infrastructure by delivering materials correct and on time.
- 'Manager of the laboratory services 2' indicated that Gelre Ziekenhuizen is responsible for controlling and monitoring the Key Performance Indicators and agreements.

Innovation

In Table 12, there are two main innovations mentioned by the internal and external respondents. The most often mentioned innovation is self-management (diagnostics could be performed closer to and by the patient). This aspect was mentioned by all the three categories. Almost all the respondents related to the laboratory think that self-management (closer to the patient) is an important innovation. Furthermore, digitisation was mentioned. For this

innovation, again all three categories consider this as an important innovation, especially the respondents related to the laboratory.

Table 12 – Perspective of the respondents on innovations

Innovation	Manager of the laboratory services 1	Manager of the laboratory services 2	Manager of the laboratory services 3	Manager of the laboratory services 4	Internal customer 1	Internal customer 2	Internal customer 3	Director of the laboratory	Manager hotel	Contract manager	Purchasing manager	Business controller		manager of	Contract manager of Hospital B	manager of	manager of
Self- management and closer to the patient	Х	Х	Х		Х		X	Х	X	X	Х		Х	X			Х
Digitisation		X		X	X			X	X				X				X

The following innovations in the near future were mentioned during the interviews by the respondents:

- 'Manager of the laboratory services 3' mentioned that one of the innovations is that the diagnostic tests could be performed closer to the patient and the possibility of self-management increases. Point-of-care testing and lab-on-the-chip make it possible to perform tests closer to and faster for the patient.
- The 'Director of the laboratory' explained that another development is digitisation. The patient should have easier access to diagnostics and the database/dossier in which their own health cycle is stored. The 'Contract manager of Hospital D' added that more robots and more ICT are used in the future. Furthermore, the use of applications and software will increase.
- The 'Financial manager' indicated that it is important to take into account how fast the developments can occur and what costs and benefits this entails. Therefore, flexibility in the Service Level Agreement is important, as Gelre Ziekenhuizen could then anticipate on the developments in the near future.

Processes, procedures and policy

Table 13 presents which aspects were mentioned by the respondents as important to take into account in the Service Level Agreement. The agreements are divided in general agreements and service related agreements. The following aspects are all considered as important to take into account in a Service Level Agreement by all three categories: financial agreements, description of the products and services and service times, delivery times and respond times. Furthermore, it is remarkable that the quality agreements and risk and control measures are only mentioned by the respondents of Gelre Ziekenhuizen and not by the respondents of the external hospitals.

Table 13 – Perspective of the respondents about the aspects for the Service Level Agreement

Service Level Agreement	General:	General:	Service:	Service:	Service:	Service:
	Duration of the	Financial agreements	Description of the	Service times, delivery times	Quality agreements	Risk and control
	contract		products and services	and respond times		measures
Manager of the laboratory			SCI VICCS	X	X	
services 1						
Manager of the laboratory						
services 2						
Manager of the laboratory					X	
services 3						
Manager of the laboratory						
services 4						
Internal customer 1						
Internal customer 2		X	X	X	X	
Internal customer 3						X
Director of the laboratory					X	
Manager hotel		X		X	X	
Contract manager				X	X	X
Purchasing manager						
Financial manager						
Business controller	X	X	X		X	
Board of directors						
External customer			X	X	X	
Contract manager of Hospital A		X	X	X		
Contract manager of Hospital B				X		
Contract manager of Hospital C	X		X	X		
Contract manager of Hospital D						

Sustainable purchasing

In Table 14, the results of the respondents about sustainable purchasing are presented. 10 out of the 19 respondents mentioned that sustainable purchasing is important to take into account, while 9 out of the 19 respondents mentioned that sustainable purchasing has no priority in the organisation. The respondents related to the laboratory are equally distributed. The majority of the respondents related to the hospital mentioned that sustainable purchasing is important to take into account, while the majority of the respondents of the external hospitals mentioned that sustainable purchasing has no priority in their organisation.

Table 14 – Perspective of the respondents on sustainable purchasing

Sustainable purchasing	Manager of the laboratory services 1	Manager of the laboratory services 2	Manager of the laboratory services 3	Manager of the laboratory services 4	Internal customer 1	Internal customer 2	Internal customer 3	Director of the laboratory	Manager hotel	Contract manager	Purchasing manager	Financial manager	Business controller	Board of directors	External customer	Contract manager of Hospital A	Contract manager of Hospital B	Contract manager of Hospital C	Contract manager of Hospital D
Sustainable purchasing is important to take into account Sustainable	Х	х	v	х	х	х	Х	х	Х	Х	х	х	Х	Х	х	х	х	х	х
purchasing has no priority in the organisation			A		A	A		Α				Α			^	A	Α	Α	

The most important results about sustainable purchasing are:

 The 'Manager of the laboratory services 1' mentioned that a sustainability consultant could be hired. This consultant can consider sustainable ideas for the transport for example.

- The 'Purchasing manager' explained that the goals for sustainability for the privatised laboratory should be complementary to the goals Gelre Ziekenhuizen has composed for sustainability.
- The 'Financial manager' mentioned that sustainability could be defined in the framework agreement. It can be stated in the contract that sustainability will be discussed over two years, because priority should be given first to other aspects.

Strategic goals and desired results

• The 'Purchasing manager' stated that the strategic goals of Gelre Ziekenhuizen should be found in the strategy of the privatised laboratory and both goals should be aligned.

Tactical level

At tactical level, the following aspects are discussed: Performance management; Supplier management; Risk management; Relationship management.

Performance management

In Table 15, the most important Key Performance Indicators are mentioned by the internal and external respondents. Lead times is by far mentioned most often as an important Key Performance Indicator, by 9 out of the 19 respondents. This performance indicator is mentioned by all three categories. Furthermore, financial indicators and quality indicators are mentioned by all three categories. Absence of employees is only mentioned by two respondents related to the laboratory. The expectation is that this is an aspect that is frequently used in a Service Level Agreement for the laboratory services. The last remarkable finding is that (customer) satisfaction was not mentioned by the respondents related to the hospital, while the expectation is that satisfaction is especially important for this category because they are the customer of the privatised laboratory.

Table 15 – Perspective of the respondents on the Key Performance Indicators

Key Performance Indicators	General: Financial indicators	General: Absence of employees	Service: Lead times	Service: Quality indicators	Service: (Customer) Satisfaction	Service: Number of tests and urgency
Manager of the laboratory services 1			X			
Manager of the laboratory	X	X	X		X	
services 2						
Manager of the laboratory services 3			X			
Manager of the laboratory		X	X	X		
services 4						
Internal customer 1			X	X		X
Internal customer 2						
Internal customer 3					X	
Director of the laboratory						
Manager hotel	X			X		
Contract manager				X		
Purchasing manager			X	X		
Financial manager						
Business controller	X					X
Board of directors						
External customer			X			
Contract manager of Hospital A			X			
Contract manager of Hospital B			X		X	
Contract manager of Hospital C Contract manager of Hospital D	X			X	X	

'Manager of the laboratory Services 2' mentioned that the Key Performance Indicators should be SMART, concrete, tangible and achievable and the 'Contract manager of Hospital C' explained that when a Key Performance Indicator has a bad score, explainable data should be available.

The following Key Performance Indicators were mentioned once:

- Education and training (mentioned by the 'Manager of the laboratory services 1').
- Sustainability and ISO-standards (mentioned by 'Internal customer 2').

Supplier management

The following aspects are the responsibility of the privatised laboratory:

- 'Manager of the laboratory services 2' mentioned that the privatised laboratory should proactive watch developments and innovations in the market.
- The 'Board of directors' explained that the privatised laboratory should have an advisory role. If they see remarkable things in the application behaviour, this should be communicated and advice should be given.
- The 'Director of the laboratory' indicated that the privatised laboratory is responsible
 for (improving the) quality and for complying with agreements and Key Performance
 Indicators.

Risk management

The following things could be performed to manage risks:

• Most of the respondents indicated that a risk analysis could be performed to see what the risks are. The 'Contract manager' mentioned that the most important risks can be

- appointed and that per risk can be determined what actions could be taken when the risk occurs and who is responsible for it. The 'Financial manager' added that the following risks could be measured: image risks, financial risks, or operational risks.
- The 'Contract manager of Hospital C' mentioned that they assess the risks together with the outsourced laboratory. The risks are mapped and classified in an Excel document. Thereafter, projects are started to solve the incidents or risks.
- 'Internal customer 1' explained that for the operational incidents, the 'safe incident notifications' could be used to estimate the incidents and to take measures.

The following consequences could be taken into account in case of non-compliance:

- Most of the respondents prefer a soft and approachable way in case of non-compliance. The 'Manager of the laboratory services 2' mentioned that there should be a low-threshold complaints culture, and that the other party should be obliged to compose a plan of action how to solve the problem in case of non-compliance.
- The 'External customer' indicated that an incentive arrangement could be agreed. When the laboratory reduces the costs because of innovations for example, the laboratory could receive a percentage of the yield. The 'Contract manager' mentioned that instead of money, the reward could also be in the form of expanding the services.

Relationship management

The following stakeholders should be involved in the new situation:

- 'Manager of the laboratory services 4' argued that the laboratory services should be involved, who will become an employee of the privatised laboratory.
- The 'Board of directors' mentioned that another stakeholder are the support services, such as Finance, Purchasing, HRM and ICT. The privatised laboratory will acquire these services from Gelre Ziekenhuizen and therefore some employees of these services will become involved.
- 'Internal customer 2' explained that the major consumers of the laboratories (Intensive Care, First Aid, Operating Room, Radiology and Cardio Care Unit) should be involved. The consumers frequently utilise the laboratory services and should be involved when composing requirements.
- The 'Business controller' mentioned that a customer manager or account manager of Gelre Ziekenhuizen should be appointed and functions as a contact person with the privatised laboratory.
- The 'Contract manager of Hospital C' indicated that Purchasing and contract management could be divided into two separate departments. Purchasing is responsible for the purchasing process and closing the contract, while the contract manager is responsible for the process after closing the contract.

Operational level

At the operational level, the following aspects are discussed: Process and quality control; Monitoring and reporting the quality of the services; Software used to manage/store contracts.

Process and quality control

The most important control mechanisms mentioned by the respondents are presented in Table 16. 12 out of the 19 respondents indicated that a management report is a way to control the process and quality with the laboratory. It is remarkable that the contract managers of the external hospitals did not mentioned this control mechanisms. Furthermore, Key Performance Indicators and a dashboard with supportive information are both more or less equally distributed amongst the three categories.

Table 16 – Perspective of the respondents on the control mechanisms

Control	Manager	Manager	Manager	Manager	Internal	Internal	Internal	Director	Manager	Contract	Purchasing	Financial	Business	Board	External	Contract	Contract	Contract	Contract
mechanisms	of the	of the	of the	of the	customer	customer	customer	of the	hotel	manager	manager	manager	controller		customer	manager	manager	manager	manager
	laboratory	laboratory	laboratory	laboratory	1	2	3	laboratory						directors		of	of	of	of
	services 1	services 2	services 3	services 4												Hospital	Hospital	Hospital	Hospital
																A	В	C	D
Management	X	X			X	X	X	X		X	X	X	X	X	X				
report																			
Key	X		X						X	X					X			X	
Performance																			
Indicators																			
Dashboard		X				X						X			X		X	X	
with																			
supportive																			
information																			

The following mechanisms could be used according to the respondents during the interviews to control the process and quality with the laboratory:

- 'Manager of the laboratory services 2' mentioned that a management report should be prepared once a month or per quarter.
- 'Manager hotel' indicated that Key Performance Indicators in a balanced scorecard for example should be controlled and reviewed once a year with the laboratory.
- The 'Financial manager' explained that a dashboard with supportive information, such as financial data and number of mistakes, could be used as a control mechanism. The dashboard can be reviewed every day or month to see developments and deviations.

Monitoring and reporting the quality of the services

• 'Internal customer 1' indicated that monitoring Key Performance Indicators could be improved. Suppliers should be discussed and at operational level improvements could be made in the field of monitoring. The shared goals should be monitored together with the laboratory, even as the content of the contract, process and quality.

Software used to manage/store contracts

• 'Manager of the laboratory services 2' mentioned that the contracts should be stored centrally. This makes it possible for other involved employees to review the contract.

4.4 Sufficient knowledge to manage the content of the contract

This section covers how the respondents think knowledge could be maintained to manage the content of the contract, aspects of the contract which might need extra attention and an overview of the supplier market. Table 17 summarises by whom and how often the information was mentioned.

Table 17 - Results about sufficient knowledge, aspects that require extra attention and overview of the supplier market

-	Sufficient knowledge:	Sufficient knowledge:	Sufficient knowledge: Compose and review	Aspects that require extra	Aspects that require extra attention:	Overview supplier market:	Overview supplier market:	Overview supplier
	External	Employee	the contract together	attention:	Non-medical	Benchmark/	Monitoring by	market:
	party or	in-house	with the laboratory	Service Level	services/	Market	internal	Newsletters
	specialist	111 110 4150	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Agreement	Support services	analysis	employees	and fairs
Manager of the laboratory		X			X			
services 1								
Manager of the laboratory	X			X			X	
services 2								
Manager of the laboratory								
services 3								
Manager of the laboratory	X							
services 4								
Internal customer 1		X		X				
Internal customer 2			X					
Internal customer 3		X		X				X
Director of the laboratory	X	X		X		X		
Manager hotel	X						X	
Contract manager	X							X
Purchasing manager						X	X	
Financial manager	X			X		X		
Business controller		X					X	
Board of directors		**	X		X	X		
External customer	37	X			X	X		
Contract manager of	X	X			X	X		
Hospital A			T 7					
Contract manager of			X					
Hospital B	W	V	v		v			
Contract manager of	X	X	X		X			
Hospital C		v			X			
Contract manager of		X			Λ			
Hospital D								

The two most preferable ways how knowledge could be maintained are with an external party or specialist or by maintaining an employee in-house. Both are mentioned by all the categories during the interviews. Especially the contract managers of the external hospitals indicated that the contract should be composed and reviewed together with the laboratory. The respondents related to the laboratory mentioned more often that the Service Level Agreement requires extra attention, while the respondents related to the hospital and external hospitals explained that the support services require extra attention. Lastly, a benchmark or market analysis is considered most often as a way how to overview the supplier market.

A short explanation for the most important aspects that are mentioned in Table 17 is presented below.

Sufficient knowledge to manage the content of the contract

The following ideas were mentioned to maintain sufficient knowledge about the content of the contract:

External party or specialist

- The 'Contract manager' explained that an external specialist should review the contract, who has sufficient knowledge about the content of the contract.
- The 'Contract manager of Hospital A' mentioned that they have someone who has been trained as a clinical chemist on consultancy basis. This person who has been trained as a clinical chemist can give advice during negotiations.

Employee in-house

- 'Internal customer 3' mentioned that the major consumers (for example departments such as Radiology and Orthopaedics) should be involved to discuss wishes and needs for the content of the contract. The employees are a good discussion partner for the content of the contract because of their medical background.
- The 'Director of the laboratory' indicated that the Purchasing department should have knowledge to manage the content of the contract.
- The 'Contract manager of Hospital D' explained that a specialist of the laboratory services should be maintained in-house, to have sufficient knowledge about the content of the contract.

Composing and reviewing together with the laboratory

• 'Internal customer 2' mentioned that the content of the contract should be discussed together with the privatised laboratory, as both organisations have their own expertise and knowledge about certain issues, which could be shared.

Aspects that require extra attention

The following aspects need extra attention when privatising the laboratory:

Service Level Agreement

• 'Internal customer 1' and 'Internal customer 3' mentioned that formulating Key Performance Indicators requires extra attention.

Non-medical services/support services

The 'Board of directors' indicated that the whole process around the privatisation of
the laboratories should require extra attention, as this is something in which hospitals
often do not have a lot of professionalism. These are the support services such as
Finance, HRM, juridical and ICT. Most respondents agree that these support services
are difficult and that there is less knowledge about it. Therefore, it should be managed
well in the contract.

Overview of the supplier market

The following ideas could be performed to maintain an overview of the supplier market:

Benchmark/market analysis

• The 'Financial manager' mentioned that once a year a market analysis should be performed by an external party, about developments in the market and market conformity for example.

Monitoring/overviewing the supplier market by one of the internal employees

• 'Manager of the laboratory services 2' indicated that an account manager or the Purchasing department should overview the supplier market, as this fits best in their portfolio.

Newsletters and fairs

• The 'Contract manager' explained that active monitoring of the supplier market could be accomplished by signing up for newsletters and journals and by going to fairs.

5. Discussion

The goal of this study was to provide an answer to the question how to get started with a partnership and contract management when privatising the laboratory services. In this chapter, the results of this research are analysed within the context of the literature. After interpreting the results, a few limitations of this study are presented.

5.1 Interpretation of the results

In this section, the results of the interviews with the respondents of Gelre Ziekenhuizen and the external hospitals are analysed upon considering existing literature.

5.1.1 Partnership

A multi-criteria analysis is performed for the five most important aspects of contract management, the goals/measures of contract management and for the five most important aspects of a buyer-supplier relationship (Table 18). An elaboration on the aspects of contract management and a buyer-supplier relationship can be found in Chapter 2.1 and 2.2, and the document analysis of the goals/measures of contract management is discussed in Chapter 2.3.

For contract management, the aspects Responsibilities and tasks, Processes procedures and policy, Strategic goals and desired results, Process and quality control, Documenting activities, procedures and agreements and Risk management are considered as aspects that are more related to agency theory because the focus for these aspects is on control and efficiency. The contract management aspects Performance management, Flexibility and Agreed and annual goals are considered as better fitting to relational view theory because the aspects are focused on a long-term relationship and trust. Overall, most contract management aspects better fit with the agency theory.

The buyer-supplier relationship aspects all fit best with the relational view theory. The aspects all focus on a trust and a long-term relationship. The aspect Agreed goals and performance measures is also related to agency theory, because it is about control when goals and performance measures are defined. Overall, it can be concluded that the buyer-supplier aspects better fit with the relational view theory.

When taking the aspects of contract management, goals/measures of contract management and aspects of a buyer-supplier relationship together, eight aspects better fit with the relational view theory against seven aspects that better fit with the agency theory.

In Appendix D, the aspects of contract management and a buyer-supplier relationship are analysed for both the internal and external interviews to see if there are similarities or differences. This analysis supports the conclusion mentioned here. For the aspects of contract management the agency theory is more preferred. Whereas for the aspects of a buyer-supplier relationship, the relational view theory provide a better fit.

Table 18 – Multi criteria analysis for the most important aspects of a buyer-supplier relationship and for the most important aspects and goals/measures of contract management

Aspects contract management	Relational view theory	Agency theory
Responsibilities and tasks		X
Processes, procedures and policy		X
Strategic goals and desired results		X
Performance management	X	
Process and quality control		X
Documenting activities, procedures and agreements		X
Flexibility	X	
Annual/agreed goals	X	
Risk management		X
Aspects buyer-supplier relationship		
Trust between members	X	
Efficient and effective communication	X	
Agreed goals and performance measures	X	X
Member commitment	X	
Top management commitment and support	X	

Based on Table 18, the contract should be more formal and detailed and clear agreements should be arranged. Some authors argue that detailed contracts can be interpreted as a lack of trust (Selviaridis & Spring, 2007). Poppo and Zenger (2002) support the opposite and point out that well-specified contracts diminish the amount of risk in exchange relationships, thereby promoting close, collaborative and long-term relationships. Also Qureshi et al. (2007) mention that a long-term and detailed contract with clearly defined responsibilities, expectations and performance forms a basis for a long-term relationship. Therefore, the contract should be formal, detailed and with clear agreements. This corresponds with the results of the interviews.

Flexibility in the contract was also mentioned during the interviews. Nystén-Haarala et al. (2010) mention that flexibility is often introduced to contracts with relational methods, relying on good personal relationships between business partners. Long-term cooperation requires flexibility and emphasises common interests and shared risks, instead of simply trying to assign the risks to the other party. Besides, Nystén-Haarala et al. (2010) explain that unpredictable contingencies in long-term contracting seem to demand flexibility.

Furthermore, it can be discussed if a short-term contract (maximum of 2 years) or a long-term contract (minimum of 5 years) should be applied. The goals of privatising the laboratory, cost reduction and quality improvement, are considered as goals that can be best achieved in the long-term. Cost reduction could be a goal for the short-term (a reduction in costs over one year) but often it takes a number of years for actual costs to be reduced. Therefore, cost reduction fits better to a long-term contract. For quality improvement, the same applies. For flexibility, a shorter contract better fit. When there are developments or changes in the environment, it is easier to switch when having a short-term contract and the hospital will be

less dependent. Besides, competitive parties can be earlier approached with a short-term contract. Formality on the other hand fits better with a long-term contract. As mentioned before, a long-term and detailed contract diminish the amount of risks and forms a basis for a long-term relationship.

Other aspects that the respondents mentioned in the interviews as important for a buyer-supplier relationship are trust, transparency, aligned goals and risks, investing in each other, collaboration, innovation and proactivity. These aspects are all considered as aspects that better fit with a long-term relationship between a buyer and supplier.

Based on the multi-criteria analysis, the literature, the interviews with the respondents and the discussion above, a long-term contract and relationship of a minimum of five years would be recommended, with the possibility to extend the contract. Due to the developments and changes in the healthcare sector that are unpredictable, the length of the contract is recommended to last five years. After five years, the partnership and contract should be evaluated to see if goals are accomplished and if it is profitable to continue the relationship. Flexibility and formality are important to implement in this contract.

5.1.2 Service Level Agreement

The respondents mentioned the following aspects to take into account when composing a Service Level Agreement: duration of the contract; financial agreements; description of the products and services; services times, delivery times and respond times; quality agreements and risk and control measures. A remarkable finding is that the respondents who are related to the laboratory mentioned almost only service-related elements. A possible reason for this is that these respondents value quality very high. The aspects mentioned by the respondents during the interviews are all relevant to record in the Service Level Agreement, but some aspects are missing according to literature.

The respondents did not mention legal agreements during the interviews. According to Kandukuri et al. (2009), legal agreements are a crucial part of a Service Level Agreement, since legal jurisdiction is needed in case of dissonances between the service provider and service recipient. A logical reason for not mentioning these legal aspects during the interviews, might be that legal aspects are not within the discipline of the respondents. This is supported by a few respondents who mentioned during the interviews that the hospital does not have a lot of professionalism for composing legal agreements.

In Chapter 2.4 an elaborate literature review about aspects of a Service Level Agreement is provided. The following aspects were mentioned by the respondents in the interviews and by Kandukuri et al. (2009) and/or Mohamed et al. (2015): description of the products and services that should deliver, performance agreements, financial agreements/payment and penalties. Therefore, these aspects are most important to describe in the Service Level Agreement.

Furthermore, Kandukuri et al. (2009) and Mohamed et al. (2015) mention in their description of a Service Level Agreement some legal agreements, such as warranties and remedies, termination, legal compliance, escape clauses and constraints and terms and conditions of the agreement that should be included in the Service Level Agreement. The researcher agrees with adding these legal agreements and in the researcher's opinion, a legal advisor should be involved to help with these legal agreements since there is no professionalism in the hospital.

Kandukuri et al. (2009) and Mohamed et al. (2015) also indicate that monitoring and reporting of the service level performance should be added. This aspect was not mentioned by the respondents, but a logical reason for not being mentioned is that the respondents have given a low priority to monitoring. This is supported by the interviews, where the respondents ranked monitoring as least important aspect. In the researcher's opinion it would be wise to include monitoring and reporting management as it will prevent problems and measure the performance. In this way, it is also clear if everything is going according to plan and if goals are met.

Another important aspect mentioned by Kandukuri et al. (2009) and Mohamed et al. (2015) are defining the responsibilities and tasks. The privatised laboratory and hospital will have different interests and therefore it is recommended to define the responsibilities to make sure that both parties deliver the agreed levels. The researcher recommends to add this element to the Service Level Agreement, as this aspect is also mentioned as most important aspect of contract management by the respondents in the interviews.

An introduction and description of the agreements were also mentioned in both papers of Kandukuri et al. (2009) and Mohamed et al. (2015) and should be included in the Service Level Agreement according to the researcher. The general agreements about for example duration of the contract and introduction of the parties should be presented.

Kandukuri et al. (2009) indicate problem management to include in the Service Level Agreement. This is comparable with the risk management that was mentioned by the respondents. This element should be included in the Service Level Agreement according to the researcher as it is important to minimise incidents and problems between both parties.

Mohamed et al. (2015) mention feedback and reporting and change management and renegotiation as elements for the Service Level Agreement. The contract should be revised once a year to review if there are problems or complaints in the contract. Therefore, this aspect should be included. Furthermore, change management and renegotiation was mentioned and should be included as it is important to know what to do in case of changes or renegotiations.

In the Service Level Agreement for another service of Gelre Ziekenhuizen, also frequency of meetings and contact persons were mentioned. This is important to take into account since it should be clear which persons are involved and how often meetings are arranged. This is supported by the fact that Responsibilities and tasks and Processes, procedures and policy are ranked as important aspects according to the internal respondents.

5.1.3 Key Performance Indicators

One of the aspects in a Service Level Agreement is the Key Performance Indicators. The respondents mentioned during the interviews the following Key Performance Indicators: financial indicators, absence of employees, lead times, quality indicators, (customer) satisfaction, and number of tests and urgency. Leondes (2010) state that organisations are often too much focused on the development of a set of financial indicators and not enough on operational measures such as quality. Parties do not prefer to have financial Key Performance Indicators, and they are reluctant in including them or bonuses or penalties. Kaplan and Norton (1996) recommend to have no more than twenty Key Performance Indicators. Parmenter (2007) mentions that Key Performance Indicators should be few in number. This is supported by Geelen (2016) who mentions that three till five Key Performance Indicators are preferable. In the researcher's opinion, the best fitting number would be between three and five Key Performance Indicators. When examining more Key Performance Indicators, there exists a lack of focus and a lack of alignment. Furthermore, there should be less emphasise on financial indicators and more on quality and performance measures, but these financial indicators should not be forgotten.

The traditional way of Key Performance Indicators is that there are a lot of Key Performance Indicators per department. According to Geelen (2016), this is the reason why organisations fail to perform better. When composing Key Performance Indicators per department, these indicators are often contradictive and are more perceived as control instruments that are demotivating instead of stimulating. According to Geelen (2016), 80 percent of the performance improvements is in transfer times. In organisations where the Key Performance Indicators have been translated into indicators for the department, the focus is often on what happens on the desk. Improvement opportunities in the customer chain remain unaffected, which result in that departments do not work well together. This leads to increasing lead times, failure costs and dissatisfied customers.

Geelen (2016) mentions that it is better to link the Key Performance Indicators to customer chains and to compose only a limited set of Key Performance Indicators. Key Performance Indicators for customer chains are the journey of the customer through the organisation. For example, the customer has a complaint and receives a solution. When linking Key Performance Indicators to customer chains, these can be controlled more effectively (Geelen, 2016).

5.1.4 Sustainable purchasing

Another remarkable result is that sustainable purchasing is seen as important in the interview, but that it has no priority for almost half of the respondents. One of the reasons that sustainability has no priority for these respondents, is because sustainability is seen as something that will add costs and will not immediate (within a year) deliver financial benefits. According to the respondents, the priority is to reduce the costs and improve quality rather than to have sustainable purchasing. This financial aspect is supported by Bratt et al. (2013), who states that an important obstacle for implementing sustainable purchasing is the cost component and the perception that sustainability is more expensive. The Board of directors of

the Radboudumc contradicts this and explained that sustainability may be expensive in the short-term but that in the long-term it reduces costs. In their hospital the advantages are, next to cost reduction, satisfied clients and employees and environmentally profit. Another obstacle is that the interests of the Purchasing department and the budget manager are divergent (Gelderman et al., 2015) and that there is often no clear framework for sustainable policies. This also seems to apply for Gelre Ziekenhuizen. A research amongst 257 companies concluded that companies with a sustainable purchasing policy perform better than competitors without a policy.

Since one of the core values of Gelre Ziekenhuizen is sustainability, the advice of the researcher is to take into account sustainability in the contract with the privatised laboratory (Gelre Ziekenhuizen, 2016). After one or two years, when the foundation is laid for the privatisation and other aspects (such as the aspects that got a high rank in Chapter 4.1 and 4.2) are arranged well, other ideas for sustainability can be discussed and documented in the contract. The contract managers of the external hospitals mentioned in the interview that no priority is given to sustainability in their organisations. Therefore, the privatised laboratory can have a distinctive ability when purchasing sustainable, that can result in being more interesting for other partners.

5.2 Limitations

This study is subject to various limitations that should be considered in the interpretation of the results. The first limitation is for literature review. The limitation is that only limited evidence could be found for contract management at strategic, tactical and operational level. Mainly Dutch journals or books could be found, which results in little support for the results. In literature, some aspects were found for contract management, but it might be that some other aspects are missing. Despite the fact that the distribution of the aspects at the three levels is based on founded literature, the interpretation at which level these aspects belong is subjective. The distribution of the aspects was discussed with the Purchasing manager and one of the internal customers to obtain more reliability.

The second limitation concerns the interviews. The interviews' structure and phrasing might have influenced the responses of the interviewees. Interviewer bias might have occurred because there is only one author who has written this research. Therefore, the results should be verified by follow-up talks by other interviewers with the interviewees to eliminate the bias. Next limitation is that during the interviews, the respondents were asked to rank some aspects of contract management and a buyer-supplier relationship. As this is a subjective question, it might be somewhat biased as the respondents can rank the aspects differently one week later. This results in that the reliability is slightly lower.

Furthermore, the conclusions are based on data from a specific case, Gelre Ziekenhuizen. Hereby it is difficult to say if the conclusions of this study could also be applied to other hospitals or organisations, as these hospitals or organisations might have another organisation structure. The results of the interviews with the contract managers of the external hospitals are

comparable with the results of the interviews within Gelre Ziekenhuizen. Therefore, it can be considered that the results are reliable and can more or less be generalised within the health care sector.

Whereas this study has several limitations, the stated goals have been achieved, nonetheless. It has addressed how a partnership to accomplish a hospital's objectives in the privatisation of its laboratories can be pursued. Furthermore, despite the fact that limited evidence was found for contract management, the results also present a basis for how contract management could be arranged at strategic, tactical and operational level. Previous research in literature supports the results in this study. Therefore, the results and conclusion in this study are valid and could give direction for future research.

6. Conclusion

This chapter summarises the main findings of this study, provides recommendations and indicates where future research should focus on.

6.1 Conclusion

This study aimed to provide an overview of how Gelre Ziekenhuizen can ensure to get the best possible results with their partner, after privatising the laboratories, to accomplish their goals. Fifteen interviews were conducted with employees of Gelre Ziekenhuizen and four with contract managers of external hospitals.

The most important goals for privatising the laboratories according to the respondents are cost reduction and quality improvement. One of the opportunities that was mentioned is scale enlargement. The respondents indicated that this can result in more research and innovation, turning a higher volume and investing in knowledge and expertise. One of the risks mentioned in the interviews is that the privatised laboratory could go bankrupt or the project could fail when not attracting own funding or partners. The goals/measures that Gelre Ziekenhuizen want to accomplish with contract management according to the document analysis are: documenting activities, processes and agreements; flexibility in the contract with the partner; annual aligned goals and controlling risks.

The most important aspects for contract management according to the respondents are responsibilities and tasks; strategic goals and desired results; processes, procedures and policy; performance management and process quality and control. Most of these aspects fit better with the agency theory. The respondents mentioned the following aspects as most important aspects for a buyer-supplier relationship: trust between members; efficient and effective information; agreed goals and performance measures and top management commitment and support. Most of these aspects fit better with the relational view theory.

At strategic level, Gelre Ziekenhuizen should facilitate in support services, information and infrastructure. An innovation that is expected in the near future is that the diagnostic tests are performed closer to the patient. Furthermore, digitisation will develop increasingly. A Service Level Agreement should be composed for general, service and legal agreements. Furthermore, sustainability should get attention in this contract, after implementing the contract. At tactical level, Key Performance Indicators should be defined SMART and should have explainable data when the indicator has a bad score. The supplier should proactive watch developments and innovations in the market and should adopt an advisory role. Risks should be analysed and per risk should be determined what actions can be taken to prevent or solve the risk. At operational level, a management report, Key Performance Indicators and a dashboard with supportive information should help with controlling the process and quality. The goals and content of the contract should be monitored together with the laboratory and contracts need be stored at a central location.

With the help of an external party or specialist, someone who has been trained as a clinical chemist or an employee in-house (Purchasing department, specialist of the laboratory services or major consumers) sufficient knowledge could be maintained to manage the content of the contract. Formulating Key Performance Indicators and implementing the support services are two elements which require extra attention because of not having enough professionalism in the organisation. The supplier market could be monitored by hiring an external party who performs a benchmark analysis. Furthermore, the account manager/contract manager or Purchasing department could overview this supplier market.

6.2 Recommendations

In this section some theoretical and practical recommendations are provided according to the findings.

6.2.1 Theoretical contributions

This study contributes to existing literature in several ways. It does not only support the results of earlier researches mentioned in the discussion, such as Poppo and Zenger (2002) and Qureshi et al. (2007), but it also extends the existing body of research by not only investigating contract management in general but also contract management at three different levels (strategic, tactical and operational). This study did a first attempt in identifying the aspects at the three levels. By identifying the aspects at these three levels, a transparent and uniform contract management process can be established. Three levels is considered by the researcher as the most ideal number of levels and the distribution at these three levels are often used in hospitals. At the strategic level, goals are determined and the way how the organisation wants to achieve the goals. At the tactical level, it is determined with what resources and methods the goals will be achieved and at the operational level, the performance of the activities occur. In this way, the organisation is structured. The operational level reports to the tactical level, and the tactical level reports to the strategic level. Based on this information, the higher level can make adjustments. Therefore, this distribution at these three levels can provide a useful basis for further research and might become a suitable reference for researchers or students.

Furthermore, this study combines two theories, the agency theory and the relational view theory. By using these two theories, the study aimed to contribute to literature by showing what aspects are derived from both theories and to which theory the aspects are fitting best.

6.2.2 Practical recommendations

The results of this study have several practical recommendations that are elaborated below.

Recommendation 1: Partnership of a minimum of five years with the supplier

The first recommendation of the researcher is that Gelre Ziekenhuizen should have a long-term partnership with the supplier of the privatised laboratory. A minimum of five years is recommended to sustain the relationship.

Gelre Ziekenhuizen and the privatised laboratory should compose agreed goals, strategies, and Key Performance Indicators, share risks and measure and monitor them together. Agreed goals provide a basis for a good partnership and the chance of a successful partnership will increase. Both parties should apply a soft approach instead of thinking in terms of winning or losing. When one of the parties does not meet the agreements, first a conversation should take place instead of directly giving a penalty. The relationship should be based on trust and investing in each other. This will add value to the partnership.

The contract and relationship should be both formal and flexible. First, formality in the contract could be accomplished by defining detailed roles and responsibilities, specifying procedures for monitoring and determining outcomes or outputs to be delivered. Formal contracts can help ensure that the early, and more vulnerable stages of the relationship are successful. The communication with the supplier should also be formal. This formality in communication will have a positive influence on the cooperation and it reduces distortion and withholding of information. One contact person should be assigned to maintain short communication lines. Furthermore, communication should be properly organised at each stage of the contracting process.

Flexibility could be accomplished by having flexibility in the contract in legal terms. Clearly stated legal agreements in a contract can provide a foundation of the expectations of both parties. However, flexibility could also be accomplished in other ways. One way is to have more diverse and enabling patterns of communication. Collaborative contracting can promote communication, cooperation and trust between the parties to a contract, but also between parties and lawyer who may be responsible for its drafting. Secondly, visualisation can promote more clarity and understanding among all those who are affected by a contract, by adding icons, tables, charts or images to text. This can benefit effective communication, which is the foundation of collaborative relationships and in turn can enable innovation, efficiency, and trust. Both collaborative contracting and visualisation can contribute to positive flexibility.

Recommendation 2: Compose a Service Level Agreement for general, service and legal elements

The second recommendation is to compose a Service Level Agreement. The researcher advises to establish a framework agreement, where the Service Level Agreement can be a part of. The advantage is that in case of adjustments, not the whole contract needs to be adjusted.

In Appendix E, a comprehensive Service Level Agreement for the laboratory services is presented. The Service Level Agreement is based on a variety of sources, such as literature, previous Service Level Agreements and results of the interviews.

The following approach could be used for composing a Service Level Agreement:

- 1. Setting up a project team for establishing the Service Level Agreement. This project team should consist of four managers of the laboratory services and a business manager or contract manager.
- 2. The Service Level Agreement in Appendix E could be used as a basis for the conversation. Every aspect in the Service Level Agreement should be discussed and the four managers of the laboratory services could present their ideas and wishes. The business manager writes down all the ideas and wishes and puts this together into one Service Level Agreement.
- 3. The concept Service Level Agreement must be reviewed by the managers of the laboratory services and the medical managers. If needed, additional information should be added.
- 4. It is recommended to check the final version of the Service Level Agreement together with a legal advisor. As mentioned before, Gelre Ziekenhuizen does not have a lot of professionalism about the legal aspects, therefore this legal advisor could check if all the agreements are transparent, clear and straight.
- 5. The project team should revise the Service Level Agreement every year to check if adjustments are needed. The functioning of the Service Level Agreement, the results of the performance and the expectations of both parties will be discussed.

Recommendation 3: Define a limited set of Key Performance Indicators based on customer chains

The third recommendation is to define a limited set of Key Performance Indicators that can measure if the performance and the mission, vision and strategy are accomplished. The researcher advises to define three up to five Key Performance Indicators. As mentioned in the discussion, Key Performance Indicators should be composed for customer chains instead of per department, as this is more stimulating and can be more effectively controlled. Furthermore, the Key Performance Indicators should be formulated SMART (Specific, Measurable, Acceptable, Realistic and Timely).

According to the researcher, the following approach could be used to define the Key Performance Indicators:

- 1. One contact person of the privatised laboratory and one contact person of Gelre Ziekenhuizen should be responsible for defining the Key Performance Indicators. The approach starts with a vision that the organisation wants to accomplish. This vision should be defined by both contact persons.
- 2. There should be defined no more than five goals. At strategic level, often too many goals and Key Performance Indicators are composed. If the goals and Key Performance Indicators are translated into secondary goals and Key Performance Indicators for departments and employees, this creates an overload of information. Therefore, between three and five goals is desired.

- The customer chains should be defined. This is the customer's journey through the organisation to information, a product or solution. It starts with a question and ends with the completion of the needs of the customer. An example of a customer chain is:
 Complaint Handling the complaint Handled complaint
- 4. The customer value and the internal value should be defined. An example of a customer value: installation on time. An example of an internal value: optimal stock in the warehouse.
- 5. The goals should be linked to the customer values and internal values.
- 6. A Key Performance Indicator tree should be developed per customer chain.
- 7. The Key Performance Indicators and performance should be visualised. This will affect the behaviour of employees. The consistency between Key Performance Indicators should be visualised in a dashboard. The trends should be presented to see if the performance is on track or is lagging behind.
- 8. The Key Performance Indicators should be available in a report, that is understandable for all the employees.
- 9. Both contact persons of Gelre Ziekenhuizen and the privatised laboratory should evaluate and measure if the Key Performance Indicators are still working. Besides, it should be discussed if the agreed goals are accomplished and if the role distribution and consultation structure is right. The tips and tops about the process should be discussed.

The following Key Performance Indicators can be taken into consideration:

- Financial indicator: this indicator could be about if the operating profit is achieved, or if the market share is increased.
- Quality indicator: this indicator could be about lead times or the quality of the staff.
- Satisfaction indicator: this indicator could be about the customer satisfaction or satisfaction about the relationship/partnership.

Recommendation 4: Start increasing focusing on sustainability after implementing the contract

The last recommendation of the researcher is to start increasing focusing on sustainability after implementing the contract. As mentioned before, the respondents indicated that first a basis for contract management and the relationship should be provided. When this is arranged well, a sustainable purchasing policy should be composed. This will probably take one or two years, as priority is first given to other aspects like Performance management, Processes, procedures and policy, Strategic goals and desired results and Clear tasks and responsibilities. A sustainable purchasing policy would be recommended according to the researcher because on the long-term costs could be saved.

The following benefits of increasing the focus on sustainability can be mentioned for People, Planet and Profit:

- People: a laboratory can provide safe and acceptable working conditions to their employees, that can result in an increased loyalty of the employees.

- Planet: a laboratory can be stimulated by sustainability to avoid chemicals and wastage.
- Profit: a laboratory can show that it not only focuses on economic profit, but also on the care for people and environment. This is beneficial for the corporate image and for attracting potential partners.

The researcher recommends the following approach for composing a sustainable purchasing policy:

- 1. Inform the (involved) employees of the privatised laboratory about the benefits of sustainability and stimulate them to come up with ideas for sustainability. It is important that employees acknowledge that sustainability should be taken into account.
- 2. Secondly, a project coordinator should be appointed who can transmit the concept of sustainability throughout the whole laboratory. In this way, the concept will achieve more support and sustainability could become a part of the corporate culture.
- 3. The project coordinator should compose a project team with two or three employees of the privatised laboratory and two or three employees of Gelre Ziekenhuizen. The interpretation of how this should be arranged should be more the responsibility of the privatised laboratory. This fits with the ideas of a partnership.
- 4. The project team should discuss together how sustainability could be implemented in their contract. The following activities should be discussed:
 - Gelre Ziekenhuizen and the privatised laboratory should together make an inventory of the expectations and wishes in the field of sustainable purchasing.
 - Developing a short-term and long-term strategy for sustainability and a plan of action.
 - Procedure for monitoring and reporting the progress of the plan of action.
 - Communication about the achieved results.
- 5. The sustainable purchasing policy should be composed, with at least the above mentioned activities. When the concept policy is completed, it should be reviewed to check if activities are missing. These missing activities should be added.

The following aspects of sustainability should be taken into consideration according to the researcher:

- Transportation: use alternative fuels for hospital vehicle fleets > electric cars.
- Preventing waste: reduce, re-use, and recycle.
- Energy efficiency: reduce hospital energy consumption and costs through efficiency and conservation measures.
- Re-use materials and machines (cradle-to-cradle).

6.3 Future research

This section will provide directions for future research that are able to address the existing gaps in the literature. The shortcomings discussed above provide important aspects that future research needs to take care of. First, due to time limitations this study was focused on contract

management and privatised laboratory services in the Netherlands. It would also be interesting to research how the outsourcing or privatising process of the laboratory services in other European or non-European countries is arranged and what the results would be in such a research. It might be that hospitals in other European or non-European countries have further developments in the field of outsourcing or privatising the laboratory services. The United States is more focused on competition for example, which might have impact on the type of relationship and contract that is closed. In the current structure of the Netherlands, competition is increasing between parties and health insurers. Therefore, this research could be very interesting for hospitals in the Netherlands.

Besides focussing on research abroad, it might also be interesting to interview potential partners (external customers who currently purchase the laboratory services from Gelre Ziekenhuizen for example) to explore what they think is important in a partnership and what they value as important in contract management. This is interesting for Gelre Ziekenhuizen as they will know what is important according to their potential partner and they can figure out how to attract these new partners.

Lastly, the literature for contract management at strategic, tactical and operational level is very scarce and the distribution in this study is subjective. Further research is required to establish the reliability of the distribution of the three different levels. This study could be used as a basis for future research where possibly more aspects could be identified or other insights on the distribution at the three levels could be provided. Qualitative research could be performed based on this research to check if the distribution is supported. With the help of interviews at a few hospitals in the Netherlands, aspects for all three levels could be defined. The aspects should provide a description of what the aspect means and how it could be best implemented in the organisation and at what level.

References

- Amihud, Y. and Lev, B. (1981). Risk Reduction as a Managerial Motive for Conglomerate Mergers. *The Bell Journal of Economics*, *12*(2), 605-617. http://dx.doi.org/10.2307/3003575
- Anderson, J.C. and Narus, J.A. (1990). A Model of Distributor Firm and Manufacturer Firm Working Partnerships. *The Journal of Marketing*, *54*(1), 42-58. https://dx.doi.org/10.2307/1252172
- Bensaou, M. (1999). Portfolios of Buyer-Supplier Relationships. *Sloan Management Review*, 40(4), 35-44.
- Bergen, M., Dutta, S. and Walker Jr., O.C. (1992). Agency Relationships in Marketing: A Review of the Implications and Applications of Agency and Related Theories. *Journal of Marketing*, *56*(3), 1-24. https://dx.doi.org/10.2307/1252293
- Blumberg, B., Cooper, D.R. and Schindler, P.S. (2014). *Business Research Methods (Fourth Edition)*. London, UK: McGraw-Hill.
- Bouma, J.L. and Helden, G.J. van. (1994). *Management Accounting en Economische Organisatietheorie*. Schoonhoven: Academic Service.
- Boyce, C. and Neale, P. (2006). Conducting In-Depth Interviews: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input. Watertown: Pathfinder International.
- Bratt, C., Hallstedt, S., Robèrt, K.H., Broman, G. and Oldmark, J. (2013). Assessment of Criteria Development for Public Procurement from a Strategic Sustainability Perspective. *Journal of Cleaner Production*, *52*, 309-316. https://doi.org/10.1016/j.jclepro.2013.02.007
- Breaux, D.A., Duncan, C.M., Keller, C.D. and Morris, J.C. (2002). Welfare Reform, Mississippi Style: Temporary Assistance for Needy Families and the Search for Accountability. *Public Administration Review*, 62(1), 92-103. http://dx.doi.org/10.1111/1540-6210.00158
- Bresser, R.K.F. (1998). Strategische Managementtheorie. Berlin: de Gruyter.
- Brotherton, B. (2015). *Researching Hospitality and Tourism*. London, UK: Sage Publications Ltd.
- Brown, M.G., Hitchcock, D.E. and Willard, M.L. (1994). *Why TQM Fails and What To Do About It.* Burr Bridge, IL: Irwin Professional Publishing.
- Bryman, A. (2004). *Social Research Methods (Fifth Edition)*. Oxford, UK: Oxford University Press.
- Bryman, A. and Bell, E. (2015). *Business research methods (Fourth Edition)*. Oxford, UK: Oxford University Press.
- Bult-Spiering, M. and Dewulf, G. (2006). *Strategic Issues in Public-Private Partnerships: An International Perspective*. Oxford: Blackwell Publishing Ltd.
- Chen, I.J. and Paulraj, A. (2004). Towards a Theory of Supply Chain Management: The Constructs and Measurements. *Journal of Operations Management*, 22(2), 119-150. http://dx.doi.org/10.1016/j.jom.2003.12.007
- Creswell, J.W. and Plano Clark, V.L. (2010). *Designing and Conducting Mixed Method Research (Second Edition)*. Thousand Oaks, CA: Sage Publications Inc.

- Dillenbourg, P. (1999). What do you mean by collaborative learning? In P. Dillenbourg (Ed.), *Collaborative-learning: Cognitive and Computational Approaches*, 1-20. Oxford, UK: Elsevier Publishing.
- Dodgson, J.S., Spackman, M., Pearman, A. and Philips, L.D. (2009). *Multi-Criteria Analysis: A Manual*. London, UK: Department for communities and Local Government.
- Dyer, J. (1996). Specialized Supplier Networks as a Source of Competitive Advantage: Evidence from the Auto Industry. *Strategic Management Journal*, *17*(4), 271-291. http://dx.doi.org/10.1002/(SICI)1097-0266(199604)17:4<271::AID-SMJ807>3.0.CO;2-Y
- Dyer, J.H. and Singh, H. (1998). The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage. *The Academy of Management Review*, 23(4), 660-679. https://dx.doi.org/10.2307/259056
- Eccles, R.G. (1991). Transfer Pricing as a Problem of Agency. In J.W. Pratt and R.J. Zeckhauser (Ed.), *Principals and Agents: The Structure of Business*, 151-186. Boston: Harvard Business School Press.
- Eisenhardt, K.M. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review*, 14(1), 57-74. http://dx.doi.org/10.5465/AMR.1989.4279003
- Ellegaard, C., Johansen, J. and Drejer, A. (2003). Managing Industrial Buyer-Supplier Relations The Case for Attractiveness. *Integrated manufacturing systems*, *14*(4), 346-356. https://doi.org/10.1108/09576060310469725
- Ellram, L.M. and Hendrick, T.E. (1995). Partnering Characteristics: A Dyadic Perspective. *Journal of Business Logistics*, 16(1), 41-64.
- Engelenburg, H. (2013, August 6). Medische labs aan vooravond van fusiegolf en forse saneringen. Het Financieele Dagblad. Retrieved 5 October 2017, from: https://www.diagned.nl/uploads/Bestanden/ezine/200813/FD-Medische-labs-aan-vooravond-van-fusiegolf-en-forse-saneringen.pdf
- Eriksson, P. (2008). Procurement Effects on Coopetition in Client-Contractor Relationships. *Journal of Construction Engineering and Management, 134*(2), 103–112. https://doi.org/10.1061/(ASCE)0733-9364(2008)134:2(103)
- Erridge, A. and Greer, J. (2002). Partnerships and Public Procurement: Building Social Capital through Supply Relations. *Public Administration*, 80(3), 503–522. http://dx.doi.org/10.1111/1467-9299.00315
- European Commission, directorate-general regional policy. (2003). *Guidelines for Successful Public Private Partnerships*. Retrieved 15 June 2017, from: http://ec.europa.eu/regional_policy/sources/docgener/guides/ppp_en.pdf
- Fama, E.F. and Jensen, M.C. (1983). Separation of Ownership and Control. *The Journal of Law and Economics*, 26(2), 301-325. https://doi.org/10.1086/467037
- Francis, M., Fisher, R., Thomas, A. and Rowlands, H. (2014). The Meaning of 'Value' in Purchasing, Logistics and Operations Management. *Internal Journal of Production Research*, 52(22), 6576–6589. http://dx.doi.org/10.1080/00207543.2014.903349
- Geelen, P. (2016). KPI's die wél werken. Deventer: Vakmedianet Management B.V.
- Gelderman, C., Semeijn, J. and Bouma, F. (2015). Implementing Sustainability in Public Procurement: The Limited Role of Procurement Executives and Party-Political Executives. *Journal of Public Procurement*, 15(1), 66-92.

- Gelre Ziekenhuizen (2016). *Jaarbericht 2016*. Retrieved 2 October 2017, from: http://gelreziekenhuizen-jaarbericht-2016#!/1-onze-strategische-programmas
- Gelre Ziekenhuizen. (2017). *Over de Organisatie*. Retrieved 24 February 2017, from: https://www.gelreziekenhuizen.nl/Gelreziekenhuizen/Welkom-bij-Gelreziekenhuizen/Over-Gelre/Over-Gelre.html
- Gobbi, C. and Hsuan, J. (2015). Collaborative Purchasing of Complex Technologies in Healthcare: Implications for Alignment Strategies. *International Journal of Operations and Production Management*, 35(3), 430-455. http://dx.doi.org/10.1108/IJOPM-08-2013-0362
- Gulati, R. (1998). Alliances and Networks. *Strategic Management Journal*, 19(4), 293–317. http://dx.doi.org/10.1002/(SICI)1097-0266(199804)19:4<293::AID-SMJ982>3.0.CO;2-M
- Hall, J. (1998). Private Opportunity, Public Benefit? *Fiscal Studies*, *19*(2), 121-140. http://dx.doi.org/10.1111/j.1475-5890.1998.tb00280.x
- Han, S.L., Wilson, D.T. and Dant, S.P. (1993). Buyer-Supplier Relationships Today. *Industrial Marketing Management*, 22(4), 331-338. http://dx.doi.org/10.1016/0019-8501(93)90029-7
- Handley, S.M. and Benton, W.C. (2009). Unlocking the Business Outsourcing Process Model. *Journal of Operations Management*, 27(5), 344–361. http://dx.doi.org/10.1016/j.jom.2008.11.002
- Hennink, M., Hutter, I. and Bailey, A. (2011). *Qualitative Research Methods*. Thousand Oaks, CA: Sage Publications Ltd.
- Herzlinger, R.E. (2006). Why Innovation in Health Care is so Hard. *Harvard Business Review*, 84(5), 58-66.
- Hoegl, M. and Wagner, S.M. (2005). Buyer–Supplier Collaboration in Product Development Projects. *Journal of Management*, *31*(4), 530–548. http://dx.doi.org/10.1177/0149206304272291
- Hoffman, W.H. and Schlosser, R. (2001). Success Factors of Strategic Alliances in Small and Medium-sized Enterprises An Empirical Survey. *Long Range Planning*, *34*(3), 357-381. http://dx.doi.org/10.1016/S0024-6301(01)00041-3
- Hoven, R. van den. (2015). *De Vijf Belangrijkste Pijlers van Succesvol Contractmanagement* [NEVI white paper]. Retrieved 6 June 2017, from: http://docplayer.nl/16727139-De-vijf-belangrijkste-pijlers-van-succesvol-contractmanagement.html
- Jensen, M.C. and Meckling, W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure. *Journal of Financial Economics*, *3*(4), 305-360. https://dx.doi.org/10.1016/0304-405X(76)90026-X
- Jong, B. de., Diepen, C. van., Kok, H., Jansen, P., Schaik, B. van. and Spil, T. van der. (2010). *De Facilitaire Regieorganisatie in Bedrijf*. Alphen aan den Rijn: Kluwer.
- Kandukuri, B.R., Paturi, V. and Rakshit, A. (2009). *Cloud Security Issues*. IEEE International Conference on Services Computing, Bangalore, India.
- Kaplan, R.S. and Norton, D.P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press.

- Kraljic, P. (1983). Purchasing Must Become Supply Management. *Harvard Business Review*, 61(5), 109-117.
- Kumar, D. and Rahman, Z. (2015). Sustainability Adoption through Buyer-Supplier relationship across Supply Chain: A Literature Review and Conceptual Framework. *International Strategic Management Review*, *3*(1-2), 110-127. http://dx.doi.org/10.1016/j.ism.2015.04.002
- Laing, A. and Cotton, S. (1997). Partnerships in Purchasing: Development of Consortium-Based Purchasing amongst GP Fundholders. *Health Services Management Research*, 10(4), 245-254. http://dx.doi.org/10.1177/095148489701000405
- Leondes, C.T. (2010). *Intelligent Knowledge-Based Systems: Business and Technology in the New Millennium*. Boston/Dordrecht/London: Kluwer Academic Publishers.
- Lian, P.C.S. and Laing, A.W. (2004). Public Sector Purchasing of Health Services: A Comparison with Private Sector Purchasing. Journal of Purchasing and Supply Management, 10(6), 247–256. https://doi.org/10.1016/j.pursup.2004.11.005
- Likert, R. (1932). A Technique for Measurement of Attitudes. *Archives of Psychology*, 22(140), 5-55.
- McIvor, R. (2005). *The Outsourcing Process: Strategies for Evaluation and Management*. Cambridge, UK: Cambridge University Press.
- McQuaid, R.W. (2010) Theory of Organisational Partnerships Partnership Advantages, Disadvantages and Success Factors. In S.P. Osborne (Ed.), *The New Public Governance: Critical Perspectives and Future Directions*, 127-148. London, UK: Routledge.
- Mettler T. and Rohner, P. (2009). Supplier Relationship Management: A Case Study in the Context of Health Care. *Journal of Theoretical and Applied Electronic Commerce Research*, *4*(3), 58-71. http://dx.doi.org/10.4067/S0718-18762009000300006
- Miah, S.J., Ahsan, K. and Msimangira, K.A.B. (2013). An Approach of Purchasing Decision Support in Healthcare Supply Chain Management. *Operations and Supply Chain Management*, 6(2), 43-53.
- Miller, G.J. and Whitford, A.B. (2006). The Principal's Moral Hazard: Constraints on the Use of Incentives in Hierarchy. *Journal of Public Administration Research and Theory*, *17*(2), 213-233. http://dx.doi.org/10.1093/jopart/mul004
- Mitchell, I. and McQuaid, R.W. (2001). Developing Models of Partnership in Economic Regeneration. In: L. Montanheiro and M. Spiering (Ed.), *Public and Private Sector Partnerships The Enterprise Governance*, 395-406. Sheffield, SY: Sheffield Hallam University Press.
- Mohamed, A., Mohammed, A.H. and Abdullah, M.N. (2015). Service Level Agreements: Governance in Outsourcing Facility Management. *Jurnal Teknologi*, 73(5), 11-15. http://dx.doi.org/10.11113/jt.v73.4313
- Mohr, J. and Spekman, R. (1994). Characteristics of Partnership Success: Partnership Attributes, Communication Behavior, and Conflict Resolution Techniques. *Strategic Management Journal*, *15*(2), 135-152. http://dx.doi.org/10.1002/smj.4250150205
- Morgan, R.M., & Hunt, S.D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, *58*(3), 20-38. http://dx.doi.org/10.2307/1252308

- Nystén-Haarala, S., Lee, N. and Lehto, J. (2010). Flexibility in Contract Terms and Contracting Processes. *International Journal of Managing Projects in Business*, *3*(3), 462-478. http://dx.doi.org/10.1108/17538371011056084
- Olsen, R.F. and Ellram, L.M. (1997). A Portfolio Approach to Supplier Relationships. *Industrial Marketing Management*, 26(2), 101-113. https://dx.doi.org/10.1016/S0019-8501(96)00089-2
- Opdenakker, R. (2006). Advantages and Disadvantages of Four Interview Techniques in Qualitative Research. *Forum: Qualitative Social Research*, 7(4), 1-13. http://dx.doi.org/10.17169/fqs-7.4.175
- Oudot, J.M. (2005). Risk-allocation: Theoretical and Empirical Evidences. Application to Public-Private Partnerships in the Defence Sector. mimeo. Retrieved 19 June 2017, from: http://carecon.org.uk/Conferences/Conf2005/Papers/Oudot.pdf
- Parmenter, D. (2007). Key Performance Indicators: Developing, Implementing and Using Winning KPIs. Hoboken, NJ: John Wiley & Sons Inc.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods (Third Edition)*. Thousand Oaks, CA: Sage Publications Inc.
- Paulraj, A., Lado, A.A. and Chen, I.J. (2008). Inter-Organizational Communication as a Relational Competency: Antecedents and Performance Outcomes in Collaborative Buyer-Supplier Relationships. *Journal of Operations Management*, 26(1), 45-64. http://dx.doi.org/10.1016/j.jom.2007.04.001
- Ploetner, O. and Ehret, M. (2006). From Relationships to Partnerships New Forms of Cooperation between Buyer and Seller. *Industrial Marketing Management*, *35*(1), 4-9. http://dx.doi.org/10.1016/j.indmarman.2005.08.006
- Poppo, L. and Zenger, T. (2002). Do Formal Contracts and Relational Governance Function as Substitutes or Complements? *Strategic Management Journal*, *23*(9), 707-725. http://dx.doi.org/10.1002/smj.249
- Porter, M.E. and Olmsted Teisberg, E.O. (2004). Redefining Competition in Health Care. *Harvard Business Review*, 82(6), 64-76.
- Qureshi, M.N., Kumar D. and Kumar P. (2007). Modeling the Logistics Outsourcing Relationship Variables to Enhance Shippers' Productivity and Competitiveness in Logistical Supply Chain. *International Journal of Productivity and Performance Management*, *56*(8), 689-714. https://doi.org/10.1108/17410400710833001
- Rivard-Royer, H., Landry, S. and Beaulieu, M. (2002). Hybrid Stockless: A Case Study: Lessons for Health-Care Supply Chain Integration. *International Journal of Operations and Production Management*, 22(4), 412-424. http://dx.doi.org/10.1108/01443570210420412
- Romero, D. and Molina, A. (2011). Collaborative Networked Organisations and Customer Communities: Value Co-Creation and Co-Innovation in the Networking Era. *Production Planning and Control: The Management of Operations*, 22(5/6), 447-472. http://dx.doi.org/10.1080/09537287.2010.536619
- Romzek, B.S. and Johnston, J.M. (2005). State Social Services Contracting: Exploring the Determinants of Effective Contract Accountability. *Public Administration Review*, 65(4), 436-449. http://dx.doi.org/10.1111/j.1540-6210.2005.00470.x

- Roy, S., Sivakumar, K. and Wilkinson, I.F. (2004). Innovation Generation in Supply Chain Relationships: A Conceptual Model and Research Propositions. *Journal of the Academy of Marketing Science*, 32(1), 61–79. https://doi.org/10.1177/0092070303255470
- Sandelowski, M. (1995). Focus on Qualitative Methods: Sample Sizes in Qualitative Research. *Research in Nursing and Health*, *18*(2), 179-183. http://dx.doi.org/10.1002/nur.4770180211
- Sappington, D.E.M. (1991). Incentives in Principal-Agent Relationships. *The Journal of Economic Perspectives*, 5(2), 45-66. http://dx.doi.org/10.1257/jep.5.2.45
- Selviaridis, K. and Spring, M. (2007). Third Party Logistics: A Literature Review and Research Agenda. *The International Journal of Logistics Management*, *18*(1), 125-150. https://doi.org/10.1108/09574090710748207
- Sharma, A. (1997). Professional as Agent: Knowledge Asymmetry in Agency Exchange. *The Academy of Management Review*, 22(3), 758-798. http://dx.doi.org/10.2307/259412
- Tate, W.L., Ellram, L.M., Bals, L., Hartmann, E. and Valk, W. van der. (2010). An Agency Theory Perspective on the Purchase of Marketing Services. *Industrial Marketing Management*, 39(5), 806-819. http://dx.doi.org/10.1016/j.indmarman.2009.08.005
- Ulaga, W. (2003). Capturing Value Creation in Business Relationships: A Customer Perspective. *Industrial Marketing Management*, *32*(8), 677–693. http://dx.doi.org/10.1016/j.indmarman.2003.06.008
- Verhoest, K. (2000). Control by Inputs, Results or Markets? The Control of Public Organisations and Their Performance in the New Public Management: Testing the Assumptions. The Fourth International Research Symposium on Public Management. mimeo. Retrieved 21 August 2017, from: http://soc.kuleuven.be/io/pubpdf/IO02060003 koenspmiv1.pdf
- Vries, J. de. and Huijsman, R. (2011). Supply Chain Management in Health Services: An Overview. *Supply Chain Management: An International Journal*, *16*(3), 159-165. http://dx.doi.org/10.1108/13598541111127146
- Yan, Y. (2005). Foreign Investment and Corporate Governance in China. New York: Palgrave Macmillan.
- Weber, F. (2014). The Law and Economics of Enforcing European Consumer Law: A Comparative Analysis of Package Travel and Misleading Advertising. New York: Ashgate Publishing.
- Wiengarten, F., Humphreys, P., McKittrick, A. and Fynes, B. (2013). Investigating the Impact of E-business Applications on Supply Chain Collaboration in the German Automotive Industry. *International Journal of Operations and Production Management*, *33*(1), 25–48. https://doi.org/10.1108/01443571311288039
- Wilhelmy, J. (2012). *Tracing Marketing Knowledge Transfers in Multinational Corporations*. Marburg, GE: Tectum Verlag Marburg.
- Williamson, O. E. (1998). Transaction Cost Economics: How it Works, Where It is Headed. *De Economist*, 146(1), 23-58. http://dx.doi.org/10.1023/A:1003263908567
- Wuyts, S., Geyskens, I. (2005). The Formation of Buyer-Supplier Relationships: Detailed Contract Drafting and Close Partner Selection. *Journal of Marketing*, 69(4), 103-117. http://dx.doi.org/10.1509/jmkg.2005.69.4.103

Zikmund, W.G., Babin, B.J., Carr, J.C. and Griffin, M. (2013). *Business Research Methods* (*Ninth Edition*). Mason, OH: South-Western Cengage Learning.

Appendices

Appendix A: Interview guide (Dutch)

Appendix A1: Interview guide intern Appendix A2: Interview guide extern

Appendix B: Interview guide (English)

Appendix B1: Interview guide internal Appendix B2: Interview guide external

Appendix C: Additional information about the results

Appendix C1: Additional information about the opportunities, risks and additional points

Appendix C2: Additional information about the type of contract management

Appendix C3: Additional information about the ideal distribution at strategic, tactical and operational level

Appendix C4: Additional information about sufficient knowledge to manage the content of the contract

Appendix D: Additional information about the discussion

Appendix E: Service Level Agreement

Appendix A: Interview guide (Dutch)

In this Appendix the interview guide in Dutch that is used during the interviews is presented. In Appendix A1, the interview guide for the interviews with the internal respondents of Gelre Ziekenhuizen is exhibited. In Appendix A2 the interview guide for the interviews with the respondents of the external hospitals is showed.

Appendix A1: Interview guide internal

The interview guide in Dutch for the interviews with the internal respondents of Gelre Ziekenhuizen is presented below.

- Welke functie heb je binnen het ziekenhuis?
- Welke ervaring heb je met contractmanagement? Vind je dat het contractmanagement nu goed geregeld is?
- Wat zijn de meest belangrijke doelen/doelstellingen voor Gelre Ziekenhuizen omtrent de verzelfstandiging van het laboratorium?
- Wat is voor jou vanuit je eigen functie het meest belangrijke doel omtrent het verzelfstandigde laboratorium?
- Welke kansen zijn er te noemen met betrekking tot het verzelfstandigde laboratorium?
- Welke risico's zijn er te noemen met betrekking tot het verzelfstandigde laboratorium?
- Welke aspecten van contractmanagement passen goed bij het verzelfstandigde laboratorium?
- Zou je onderstaande aspecten van meest belangrijk naar minst belangrijk kunnen leggen, dus welke past het best bij Gelre Ziekenhuizen en welke het minst?
- Welke aspecten van een leverancier-klant relatie passen goed bij het verzelfstandigde laboratorium?
- Zou je onderstaande aspecten van meest belangrijk naar minst belangrijk kunnen leggen, dus welke past het beste bij Gelre Ziekenhuizen en welke het minst?
- Hoe ziet de ideale samenwerking tussen Gelre Ziekenhuizen en de regiepartner (ook wel: verzelfstandigd laboratorium) er uit volgens jou?
- Wat voor type relatie past het beste bij Gelre Ziekenhuizen?
- Hoe ziet de ideale verdeling tussen opdrachtgever en regiepartner er uit op operationeel, tactisch en strategisch niveau?
- Hoe dient de rol van taken en bevoegdheden tussen Gelre Ziekenhuizen en regiepartner eruit te zien?
- Welke rol kan de regiepartner spelen bij het optimaliseren van de dienstverlening?
- Welke rol dient Gelre Ziekenhuizen aan te nemen?
- Hoe dient het risicomanagement ingericht te worden?

- Waar dienen Kritische Prestatie Indicatoren voor opgesteld te worden zodat de doelstellingen behaald kunnen worden?
- In welke mate dient deze beoordeling/audit plaats te vinden?
- Hoe kan de kwaliteit van dienstverlening met de leveranciers worden gewaarborgd?
- Welke sturingsmiddelen dienen ingezet te worden om gemaakte afspraken te kunnen monitoren?
- Wat is voor jou het belangrijkste aandachtspunt voor het contractmanagement?
- Welke verbeteringspunten zou het verzelfstandigde laboratorium kunnen realiseren?
- Welke consequenties dienen er te volgen in geval van nakoming of niet-nakoming?
- Welke afdelingen/disciplines moeten intern betrokken worden?
- Verwacht je dat in de toekomst bepaalde eisen zullen veranderen met betrekking tot laboratorium dienstverlening?
- Welke onderdelen/diensten die verzelfstandigd worden zijn het meest kritisch?
- Wat kan Gelre Ziekenhuizen doen om voldoende kennis te hebben om het contract te managen op inhoud?
- Welke aspecten van het contract dienen extra aandacht te krijgen vanwege bijvoorbeeld onvoldoende kennis?
- Speelt duurzaamheid in jouw ogen een rol bij het management van dit contract? Zo ja, welke rol?
- Welke ontwikkelingen/innovatie met betrekking tot de dienstverlening van het laboratorium dienen aandacht te krijgen de komende jaren?
- Is er behoefte aan een netwerk van uitbestede en/of verzelfstandigde laboratoria met andere ziekenhuizen (om kennis te delen)?
- Op welke wijze kan Gelre Ziekenhuizen zicht houden op de ontwikkeling in de leveranciersmarkt?

Zijn er verder nog aandachtspunten te benoemen?

Appendix A2: Interview guide external

The interview guide in Dutch for the interviews with the contract managers of the external hospitals is exhibited below.

- Welke functie heeft u binnen het ziekenhuis?
- Wat is uw rol met betrekking tot het uitbestede laboratorium?
- Zou u allereerst wat kunnen vertellen over de uitbesteding van het laboratorium?
 - Waarom is gekozen voor uitbesteding?
 - Waarom gekozen voor 'uitbestede partij X'?
 - Welke diensten zijn allemaal uitbesteed en welke nog in huis?
 - Is het personeel overgenomen, waarom wel/niet? Hoe is dit aangepakt?
 - Wat waren organisatorische/financiële consequenties?
- Wat waren de meest belangrijke doelen/doelstellingen omtrent uitbesteding van het laboratorium?
- Welke kansen zijn er te noemen met betrekking tot uitbesteding van het laboratorium?
- Welke risico's zijn er te noemen met betrekking tot uitbesteding van het laboratorium?
- Hoe heeft de uitbesteding uitgepakt?
- Zijn er specifieke leerpunten? / Wat zou u anders doen als u opnieuw het contractmanagement inricht?
- Zou u in de toekomst nog verder willen uitbesteden of op een andere manier (samen met andere ziekenhuizen bijvoorbeeld)?
- Welke aspecten van contractmanagement waren belangrijk omtrent het uitbestede laboratorium?
- Zou u onderstaande aspecten van meest belangrijk naar minst belangrijk kunnen leggen?
- Met welke aspecten van een leverancier-klant relatie dient rekening te worden gehouden?
- Zou u onderstaande aspecten van meest belangrijk naar minst belangrijk kunnen leggen?
- Wat voor type relatie heeft 'ziekenhuis X' met 'uitbestede partij X'?
- Wat vinden de medewerkers van de uitbesteding van het laboratorium?
 - Voordelen/nadelen
- Wat vinden de klanten/cliënten van de uitbesteding van het laboratorium?
 - Voordelen/nadelen
- Hoe is de relatie met 'uitbestede partij X'?

Wie doet wat? > rolverdeling ['ziekenhuis X' – 'uitbestede partij X']

- Hoe ziet de verdeling eruit tussen 'ziekenhuis X' en 'uitbestede partij X' op operationeel, tactisch en strategisch niveau?
- Wie is er verantwoordelijk voor het laboratorium vanuit het ziekenhuis?
- Welke afdelingen zijn intern betrokken?
- Hoe is het risicomanagement ingericht?
- Hoe waarborgt 'ziekenhuis X' de kwaliteit van dienstverlening met de leverancier?
- Welke kwaliteitsaspecten zijn gewaarborgd / waar zijn Kritische Prestatie Indicatoren voor opgesteld en hoe vindt de beoordeling plaats?
- Welke sturingsmiddelen worden ingezet om gemaakte afspraken te kunnen monitoren?
- Welke maatregelen/consequenties worden genomen in geval van nakoming of niet-nakoming?
- Hoe vindt evaluatie plaats met betrekking tot de samenwerking met 'uitbestede partij X'?
- Zijn er nog tegenslagen geweest tijdens of na het traject die jullie vooraf niet verwacht hadden?
- Welke onderdelen/diensten die uitbesteed zijn hebben jullie als kritisch ervaren?
- Hoe zorgt u er als ziekenhuis voor dat er voldoende kennis is om het contract te managen op inhoud?
- Waren er bepaalde aspecten van het contract waar extra aandacht aan besteed moest worden vanwege bijvoorbeeld onvoldoende kennis?
- Speelt duurzaamheid nog een rol bij het managen van het contract? Zo ja, welke rol?
- Zijn jullie ook lid van een netwerk van uitbestede/verzelfstandigde laboratoria met andere ziekenhuizen, om kennis te delen?

Zijn er verder nog aandachtspunten te benoemen?

Appendix B: Interview guide (English)

In this Appendix the interview guide that is used during the interviews is translated into English. In Appendix B1, the interview guide for the interviews with the internal respondents of Gelre Ziekenhuizen is exhibited. In Appendix B2 the interview guide for the interviews with the respondents of the external hospitals is showed.

Appendix B1: Interview guide internal

The translated interview guide in English for the interviews with the internal respondents of Gelre Ziekenhuizen is presented below.

- What position do you have within Gelre Ziekenhuizen?
- What is your experience with contract management?

 Do you think that contract management is arranged well now?
- What are the most important goals for Gelre Ziekenhuizen for the privatisation of the laboratory?
- What is for your position the most important goal for the privatisation of the laboratory?
- What are the opportunities for the privatised laboratory?
- What are the risks for the privatised laboratory?
- What aspects of contract management do you think are important for the privatised laboratory?
- Could you rank the following aspects of contract management from most important to least important?
- What aspects of a buyer-supplier relationship do you think are important for the privatised laboratory?
- Could you rank the following aspects of a buyer-supplier relationship from most important to least important?
- How does the ideal collaboration between Gelre Ziekenhuizen and the privatised laboratory look like?
- What kind of relationship suits best with Gelre Ziekenhuizen?
- How can contract management be distributed towards the partner on strategic, tactical and operational level?
- How should the role of tasks and responsibilities between Gelre Ziekenhuizen and the partner look like?
- What role can the partner play in the optimisation of the services?
- What role can Gelre Ziekenhuizen play?
- How should risk management be organised?
- Where should Key Performance Indicators be prepared for to achieve the goals?

- What quality aspects should minimally be arranged and to which extent should the assessment or audit take place?
- How could the quality of services with the suppliers be guaranteed?
- What tools should be used to monitor agreed appointments?
- What is the most important focus for contract management?
- What improvements could the privatised laboratory achieve?
- What consequences should follow in case of compliance or non-compliance?
- What departments or disciplines should be internally involved?
- Do you expect that future requirements concerning the laboratory services will change?
- Which parts or services that will be privatised are most critical?
- How can Gelre Ziekenhuizen ensure to have sufficient knowledge to manage the content of the contract?
- Which aspects of the contract should require more attention because of insufficient knowledge for example?
- Does sustainability play a role in managing the contract? What role?
- Which developments or innovations regarding laboratory services should be addressed in the coming years?
- Is there need for a network of outsourced or privatised laboratories with other hospitals (to share knowledge for example)?
- How can Gelre Ziekenhuizen monitor the developments in the supplier market?

Are there any further issues which you want to discuss?

Appendix B2: Interview guide external

The interview guide for the interviews with the contract managers of the external hospitals is translated into English below.

- What position do you have in the hospital?
- What is your role concerning the outsourced laboratory?
- Could you first tell something about the outsourcing of the laboratory?
 - What was the reason to outsource the laboratory?
 - Why is 'outsourced party X' selected?
 - What laboratory services are outsourced and which ones are still in the hospital?
 - Are the employees also outsourced to the outsourced party or are they still an employee of the hospital? Why? And how was this addressed?
 - What were organisational / financial consequences of the outsourcing?
- What were the most important goals regarding outsourcing the laboratory?
- What are the opportunities for outsourcing the laboratory?
- What are the risks for outsourcing the laboratory?
- What was the result of outsourcing the laboratory?
- What would you do differently if you re-arrange contract management? (Are there specific learning points?)
- Would you like to expand the outsourcing in the future or in another way (working together with other hospitals, for example)?
- What aspects of contract management are important for the outsourced laboratory?
- Could you rank the following aspects of contract management from most important to least important?
- What aspects of a buyer-supplier relationship are important for the outsourced laboratory?
- Could you rank the following aspects of a buyer-supplier relationship from most important to least important?
- What kind of relationship do you have with 'outsourced party X'?
- How do the employees experience the outsourcing of the laboratory?
 - Advantages and disadvantages
- How do customers/clients experience the outsourcing of the laboratory?
 - Advantages and disadvantages
- How can contract management be distributed between 'Hospital X' and 'outsourced party X' at operational, tactical and strategic level?
- Which departments or disciplines are internally involved? (Who is responsible of the hospital for the laboratory?)

- How is risk management organised?
- How does 'Hospital X' guarantee the quality of service with the supplier?
- What quality aspects should minimally be arranged and to which extent should the assessment or audit take place?
- What tools are being used to monitor agreed appointments?
- What consequences will follow in case of compliance or non-compliance?
- How does the evaluation take place concerning the collaboration with 'outsourced party X'?
- Have there been any setbacks during or after the project of outsourcing the laboratory which you did not expect before?
- Which parts/services that have been outsourced have you experienced as critical?
- How can a hospital ensure that there is sufficient knowledge to manage the content of the contract?
- Which aspects of the contract required extra attention because of insufficient knowledge for example?
- Does sustainability play a role in managing the contract? What role?
- Are you also a member of a network of outsourced/privatised laboratories with other hospitals (to share knowledge for example)?

Are there any further issues which you want to discuss?

Appendix C: Additional information about the results

In this Appendix, additional information as a result of the interviews with the respondents of Gelre Ziekenhuizen and the external hospitals is presented.

First, some general information about the interviews is presented below.

Experience with contract management

- Eight respondents of Gelre Ziekenhuizen only have experience with a Service Level Agreement or with a contract. These are especially the respondents who are related with the laboratory.
- The other respondents of Gelre Ziekenhuizen have experience with contract management because they have it in their portfolio, or had it in the past.

Quality of contract management

Overall can be concluded that there is room for improvement in the field of contract management. The 'Contract manager' mentioned that the visibility and involvement of employees in the content of contract management should be increased. At this moment, there is no contract manager appointed to the contracts. Furthermore, 'Manager of the laboratory services 2' explained that contracts should be centrally located in the organisation. Time can be saved because then it is not needed to search the contract within the organisation. All the involved employees can immediately find and review the agreements made when these are centrally located. Furthermore, 'Internal customer 1' argued that operational contract management could be improved. The Key Performance Indicators for example should be controlled and monitored better.

Choice for outsourcing and the outsourced party

According to the respondents of the external hospitals, reasons mentioned for outsourcing or privatising the laboratory services are:

- The 'Contract manager of Hospital B', 'Contract manager of Hospital C' and 'Contract manager of Hospital D' mentioned scale enlargement as reason for outsourcing.
- The 'Contract manager of Hospital C' and 'Contract manager of Hospital D' mentioned cost reduction as reason for outsourcing.
- The 'Contract manager of Hospital A' and 'Contract manager of Hospital B' mentioned efficiency by making better use of capacity of the machines as reason for outsourcing.

The 'Contract manager of Hospital B' mentioned that it was necessary to outsource because only some large laboratories will remain in the future and otherwise you become too small and will be taken over without having participation.

The 'Contract manager of Hospital B' called that the choice for this outsourced party was based on that they were the most enterprising and best fit. The 'Contract manager of Hospital C' did not searched any further because the privatised party was the best option. The other hospitals did not knew the reason behind, because it was before their time.

Financial and organisational consequences

The respondents of the external hospitals experienced the following financial and organisational consequences after the laboratory services were outsourced or privatised:

Financial consequences

- The 'Contract manager of Hospital C' mentioned that negotiations are difficult and complicated because of three financial flows with different interests. For two of the three flows, there is almost no information available, what makes it difficult to negotiate for these flows as well.
- The 'Contract manager of Hospital B' explained that it saves a lot of money in the operation, and that it can result in cost reduction and a growth opportunity.

Organisational consequences

- The 'Contract manager of Hospital A' mentioned that more attention should be paid to contract management because there are a lot of unspoken issues.
- The 'Contract manager of Hospital D' mentioned that the preparation time is very long before you can actually outsource.
- The 'Contract manager of Hospital C' and 'Contract manager of Hospital D' called that ICT and connections between systems are difficult to arrange because of two separate organisations (sharing data becomes difficult because of safety issues).
- The 'Contract manager of Hospital C' and 'Contract manager of Hospital D' explained that employees find it hard that they are no longer an employee of the hospital.

Experience of the employees

Most respondents notified that they were not involved since the beginning of this process and therefore it is difficult to estimate how employees have experienced the new situation. One of the respondents mentioned that employees are more satisfied since the communication lines are better arranged and it becomes even better when there are more lines to resolve incidents and annoyances. Two respondents stated that it is depending on the employee and the background situation (some employees were taken over). Some employees are happy with the changes, and see benefits and opportunities, like specialisations that are not lost and keep maintained. Other employees have more trouble with it. They think that they have more safety, future for a job and security in the hospital. These are their biggest fears. Other disadvantages could be that you are less independent, have more travel time, have to use other materials and have another schedule and name on the payroll. One respondent named that transparency is important. Employees find it hard that the new situation is not voluntarily and that others decide for you. Therefore it is important to clearly explain why you do it and explain the benefits to employees.

Experience of the customer/client

All respondents mentioned that the client did not noticed that another party is responsible for the laboratory services. The respondents called that it is not physically visible that the outsourced party has taken over the service. In terms of quality, the patient also does not notice anything. The 'Contract manager of Hospital A' performed a patient satisfaction survey and monitored how satisfied the patient is and which lessons can be learned. The 'Contract manager of Hospital C' mentioned that the internal customer also did not recognised the new situation. The patient and internal customer only want that everything is well-arranged and they do not matter how it is arranged. They do not want to be bothered with it.

Appendix C1: Additional information about the opportunities, risks and additional points

Additional opportunities and risks mentioned by the respondents of Gelre Ziekenhuizen and the external hospitals are:

Opportunities

• The 'Contract manager of Hospital B' called that the privatised laboratory will have the laboratory services as their core business. Before, it was one of the many tasks of the hospital. This is an opportunity for the hospital, as the focus for the privatised laboratory services is more on service, efficiency and quality (improvement).

Risks

- The 'Contract manager of Hospital C' mentioned that another risk of divided interests between the hospital and the laboratory might result in that not all the information of the hospital can be shared with the privatised or outsourced laboratory, because of privacy sensitive information. This could result in that the communication is weaker and that the laboratory misses essential information.
- 'Internal customer 2' explained that Gelre Ziekenhuizen will have less control if the laboratory makes certain choices, because the laboratory is independent of Gelre Ziekenhuizen.
- The 'Contract manager of Hospital B' explained that the supplier market is still very small. This could be a risk because it becomes more difficult to switch to another party when not being satisfied.

Additional points

Some additional and improvement points that the contract managers of the external hospitals have noticed in their outsourcing or privatising process are:

• The 'Contract manager of Hospital C' explained that the management of the hospital should not be the shareholder of the outsourced company, as this could lead to conflicts because of different interests.

- The 'Contract manager of Hospital C' also argued that the distribution of the roles and responsibilities with the Board of directors should be clearly discussed and shared with each other.
- The 'Contract manager of Hospital A' mentioned that it is important to take into account that knowledge in the department will disappear and that it is not easy to switch to another party. Both points make you vulnerable and are therefore important to take into account.
- The 'Contract manager of Hospital C' clarified that lead times for uncoupling were longer than initially thought because issues are more complicated and because of dependency on other services like ICT and HRM.
- The 'Contract manager of Hospital D' mentioned that it should be ensured that internal employees and employees of the outsourced laboratory get the same education.

Appendix C2: Additional information about the type of contract management Aspects of contract management

Contract management	Strategic: Respons- ibilities and tasks	Strategic: Innovation	Strategic: Processes, procedures and policy	Strategic: Sustainable purchasing	Strategic: Strategic goals and desired results	Tactical: Performance management	Tactical: Supplier management	Tactical: Risk management	Tactical: Relationship management	Operational: Process and quality control	Operational: Monitoring and reporting the quality of the services	Operational: Software used to manage/ store contracts
Manager of the	1	9	2	10	8	5	11	7	6	4	3	12
laboratory services 1												
Manager of the	1	3	8	12	10	2	11	9	4	7	6	5
laboratory services 2												
Manager of the	1	9	3	11	2	4	10	7	8	5	6	12
laboratory services 3												
Manager of the	3	9	2	8	1	7	11	10	5	4	6	12
laboratory services 4		_	_				_		_			
Internal customer 1	1	7	5	11	2	3	9	4	8	6	10	12
Internal customer 2	3	5	1	10	8	9	11	4	7	2	6	12
Internal customer 3	3	10	1	8	9	2	11	7	6	4	5	12
Director of the	10	5	9	12	4	2	11	3	1	6	7	8
laboratory	_		_			_						
Manager hotel	5	6	7	8	2	3	1	9	12	10	4	11
Contract manager	2	6	3	8	7	10	12	1	5	4	9	11
Purchasing manager	1	8	4	9	2	3	11	10	12	7	5	6
Financial manager	7	5	9	12	1	2	6	4	3	8	10	11
Business controller	8	9	1	11	7	10	12	2	6	3	4	5
Board of directors	X	X	X	X	X	X	X	X	X	X	X	X
External customer	2	8	1	10	3	6	11	9	5	7	4	12
Contract manager of Hospital A	9	7	6	11	1	8	10	4	3	2	5	12
Contract manager of	9	8	6	7	2	1	10	3	12	4	5	11
Hospital B	_		0	1.1	0	2	10	2		1	_	10
Contract manager of Hospital C	7	6	9	11	8	2	10	3	4	I	5	12
Contract manager of	4	9	3	10	1	2	11	5	8	7	6	12
Hospital D												
AVERAGE Gelre	3,4	7,1	4	10	4,7	4,9	9,9	6,1	6,3	5,5	6,1	10,1
CUMMULATIVE	1	9	2	11	3	4	10	6/7	8	5	6/7	12
AVERAGE Extern	7,3	7,5	6	9,8	3	3,3	10,3	3,8	6,8	3,5	5,3	11,8
CUMMULATIVE	8	9	6	10	1	2	11	4	7	3	5	12

Aspects of contract management

Internal interviews

Responsibilities and tasks; Processes, procedures and policy and Strategic goals and desired results are mentioned most often as most important. The reason for this according to the respondents of the internal interviews, is that this will lay the foundation. When describing responsibilities and tasks, both parties know who will do what so that the mutual expectations are fitting. When these are not arranged right from the start, you don't know where to start if something is wrong. Processes, procedures and policies should also be clear arranged. There should be described how everything should be set-up. Besides, it is important to communicate these processes, procedures and policies well.

Two respondents ranked relationship management lower (with a 12), because they think it is something which should happen naturally or that a partnership or buyer-supplier relationship is not needed for this type of service.

Software is most often mentioned as least important. Respondents indicate that the software should be sufficient to manage and store the contracts, but for most respondents it does not have a priority, the same as for sustainable purchasing. Performance and control in the form of processes and policy, strategic goals and responsibilities is considered as more important than sustainable purchasing.

External interviews

For the external interviews, Strategic goals and desired results; Performance management and Process and quality control are most often mentioned as most important. According to the 'Contract manager of Hospital A' the job of the contract manager is accomplished when defining and achieving the goals and desired results. Relationship management was also mentioned as important according to the 'Contract manager of Hospital A', because this is needed to accomplish the goals. The 'Contract manager of Hospital B' indicated that performance management is most important, as this is one of the reasons to privatise or outsource. Relationship management is seen as something that will happen naturally, and therefore received a low rank.

Overall, Sustainable purchasing; Supplier management and Software used to manage/store contracts are seen as most important by all the external respondents.

Aspects of a buyer-supplier relationship

	Agreed goals and perform- ance measures	Collective learning	Complement- ary expertise, skills and resources		Efficient and effective communi -cation	Incentive alignment	Market knowledge	Member commitment	Monitoring	Risk allocation	Top management commitment and support	Trust between members	Standardised procedures and processes
Manager of the	6	7	5	11	1	13	8	3	9	10	4	2	12
laboratory services 1													
Manager of the	2	4	8	9	3	11	13	6	12	10	5	1	7
laboratory services 2													4
Manager of the	3	9	10	11	2	13	12	4	8	7	5	1	6
laboratory services 3													/
Manager of the	4	10	13	6	2	12	8	9	7	11	5	1	3
laboratory services 4													4
Internal customer 1	3	6	4	9	5	11	13	2	12	10	7	1	8
Internal customer 2	8	4	9	3	2	13	12	7	11	10	5	6	1
Internal customer 3	6	13	7	5	3	11	12	4	10	9	8	1	2
Director of the	10	6	7	11	5	4	13	2	12	3	9	1	8
laboratory	A				•								/
Manager hotel	2	12	5	8	10	6	1	11	13	3	7	9	4
Contract manager	9	7	4	11	3	12	13	6	10	2	5	1	8
Purchasing manager	8	13	11	6	10	4	12	3	7	5	2	1	9
Financial manager	5	13	4	7	2	12	8	10	11	9	1	3	6
Business controller	2	9	13	1	11	6	7	3	8	5	12	4	10
Board of directors	X	X	X	X	X	X	X	X	X	X	X	X	X
External customer	1	8	4	2	3	12	10	6	13	11	9	5	7
Contract manager of	4	8	12	5	3	10	6	7	11	9	1	2	13
Hospital A													
Contract manager of	2	12	1	13	10	5	7	11	6	4	9	3	8
Hospital B													
Contract manager of	7	8	4	9	2	11	13	3	12	10	6	1	5
Hospital C													
Contract manager of	1	11	6	9	7	8	10	12	13	4	2	3	5
Hospital D		4											
AVERAGE Gelre	4,9	8,6	7,4	7,1	4,4	9,9	10,1	5,4	10,2	7,5	6	2,6	6,5
CUMMULATIVE	3	10	8	7	2	11	12	4	13	9	5	1	6
AVERAGE Extern	3,5	9,8	5,8	9	5,5	8,5	9	8,3	10,5	6,8	4,5	2,3	7,8
CUMMULATIVE	2	12	5	10/11	4	9	10/11	8	13	6	3	1	7

Aspects of a buyer-supplier relationship

Internal interviews

Trust is by far most often mentioned as the most important aspect in a buyer-supplier relationship. Also efficient and effective communication is considered as important, even as agreed goals and performance measures. 'Manager of the laboratory services 1' mentioned that trust between parties derives from communication and complying with agreements. Closing contracts was often seen as a standard thing, and therefore ranked lower by some respondents. With a partnership, it is more desirable to have a partner which provides input. Therefore, a standard contract is less desirable. Another respondent mentioned that in a contract the most important agreements and procedures could be presented, like for example flexibility.

The internal respondents called incentive alignment, market knowledge and monitoring as least important aspects. 'Manager of the laboratory services 2' stated that these are more contract technical aspects, even as risk allocation and closing a contract, which are important, but have less priority than trust and communication for example.

External interviews

Trust is considered as the most important aspect in a buyer-supplier relationship according to the respondents of the external hospitals. All respondents ranked this aspect in their top three. Also Agreed goals and performance measures and Top management commitment and support are seen as important aspects. The least important aspects according to the respondents are Monitoring, Collective learning, Contracts and Market knowledge.

Type of relationship

Additionally to the theory, almost all the respondents of Gelre Ziekenhuizen mentioned during the interviews that the relationship should be a partnership with a long-lasting relationship and contract. The other party should be reliable, innovative, collaborative, supportive and proactive. Both Gelre Ziekenhuizen and the privatised laboratory should invest in each other and in the relationship. Developments, research and innovation should be executed together. The 'Financial manager' and the 'Business controller' mentioned both that the relationship should be formal with strict agreements in a formal contract. Lastly, the 'Manager hotel' mentioned that a partnership or buyer-supplier relationship is not needed for this type of services.

All the contract managers of the external hospitals who were interviewed have a partnership as type of relationship or desire a partnership. The 'Contract manager of Hospital C' mentioned that the relationship should be professional and transparent to succeed. The 'Contract manager of Hospital D' wants to grow to a partnership with shared decisions and shared savings.

Appendix C3: Additional information about the ideal distribution at strategic, tactical and operational level

Additional information about the ideal distribution at strategic, tactical and operational level is presented below.

Strategic level

Processes, procedures and policy

In the results part, some Service Level Agreements were mentioned. Below, a description per Service Level Agreement aspect is presented.

- <u>Duration of the contract</u>: the duration of the contract is about the length of the contract between both parties.
- <u>Financial agreements:</u> the financial agreements are about prices (what do we pay, who pays what) and more or less need of products.
- <u>Description of the products and services:</u> the products and services are clearly described, and are clear for both parties. For example, CITO diagnostics and the Infection Prevention Policy can be described here, because these are related to the laboratory and very important to have clear for both parties.
- <u>Service times</u>, <u>delivery times</u>, <u>and respond times</u>: the service times, delivery times and respond times are for example about when and at what times being available, when doctors/specialists or laboratory specialists are being available and at what location (service times), how fast the test results should be delivered/received (delivery times), and how fast a response should be given (respond times).
- Quality agreements: there should be agreements about Key Performance Indicators in the Service Level Agreement, that measure the quality. For example (customer) satisfaction, lead times, risk management, number of complaints and number of margin of error.
- <u>Risk and control measures:</u> the risk and control measures are about risk management (accessibility in case of a major malfunction) and agreements in case of non-compliance.

Strategic goals and desired results

The 'Contract manager of Hospital C' prefers to have a formal contract. This contract will have a general part with juridical issues. The Service Level Agreement is one of the aspects of this contract. With this type of contract, it is easier to make adjustments in the Service Level Agreement without also discussing the general part with juridical issues.

Tactical level

Performance management

In the results part, some Key Performance Indicators were mentioned. Below, a description per Key Performance Indicator is presented.

- <u>Financial indicators:</u> financial indicators could be about profit, net income or return on investment for example.
- <u>Absence of employees:</u> indicator about the percentage of days that the employees are absent from work in a given period.
- <u>Lead times:</u> lead times are about the amount of time that elapses between when a process starts and when it is completed. In the hospital, lead times are about the time between the application process and the moment that the test results are received.
- Quality indicators: quality indicators could be about number of complaints, hygiene and safety or sustainability and ISO standards.
- (Customer) satisfaction: satisfaction is about the customer satisfaction or number of people waiting in the waiting room.
- <u>Number of tests and urgency:</u> the number of tests and urgency of the tests, like for example how often the number of tests is at an acceptable level and how often a test was really urgent.

Risk management

The most critical services or parts for the privatised laboratory are:

- Six respondents mentioned that all the laboratory services are critical. Some of them mentioned especially the Clinical Chemical Haematological Laboratory because they need quick results (Board of directors, contract manager, one of the managers of the laboratory services, director of the laboratory, one of the internal customers, Purchasing manager). The 'Director of the laboratory' called that because of integral diagnostics all the laboratory services are equally critical.
- According to the 'Business controller' and 'Internal customer 2', employees are a critical part because it is a challenge to get them involved, because they will lose some safety and security.
- According to the 'Manager of the laboratory services 1', ICT process and systems are critical as this is an irreplaceable basis. When there now is a malfunction, you cannot continue the process. Therefore, good agreements should be made about ICT processes and systems in the Service Level Agreement.

Appendix C4: Additional information about sufficient knowledge to manage the content of the contract

Additional information about how to maintain knowledge to manage the content of the contract is presented below.

Sufficient knowledge to manage the content of the contract

• The 'Purchasing manager' stated that experiences could be exchanged with other hospitals or abroad to maintain knowledge about the content of the contract.

Network of outsourced or privatised laboratories

All respondents are positive about gaining experience and knowledge with other hospitals. It is mentioned that it could be informative to share pitfalls and tips and tricks. Four respondents added that it would probably be difficult to have a network with other hospitals because of competition.

The contract managers of the external hospitals mentioned that they are all interested in discussing issues with other hospitals and if possible in the form of a network of outsourced or privatised laboratories.

Aspects contract that require extra attention

The following aspects need extra attention when privatising the laboratory, because of not having enough knowledge for example:

- According to the 'Financial manager', it should not be underestimated how far details in the contract should be arranged to have a suitable contract.
- The 'Director of the laboratory' mentioned that the professional quality of the services and the relationship with the customer should be more important than ever and therefore require extra attention.
- The 'Manager hotel' mentioned that the new situation should be monitored well, because the privatisation will not happen automatically and perfect directly.
- 'Two managers of the laboratory services' mentioned that ICT, especially privacy issues, and Logistics could be more efficient. The developments in the ICT field at Gelre Ziekenhuizen are very much behind. There is not enough knowledge about these aspects now, what should be improved. This should be mentioned properly in the contract. For example, gaining experience at other companies is a way how to collect information.

Appendix D: Additional information about the discussion

In this appendix, some additional information about the discussion is presented below.

Partnership

The most important aspects for contract management and a buyer-supplier relationship internal and external are combined in Table 19 and 20 below. Per aspect is indicated if the aspect is more related to the agency theory or to the relational view theory. The agency theory is more focused on control, while the relational view theory is about trust and relationships. Strategic goals and desired results is the only aspect that was mentioned by both the internal and external respondents. This aspect is more related to the relational view theory. Furthermore, Responsibilities and tasks and Processes, procedures and policy are most often mentioned during the internal interviews. These aspects are more related to agency theory. During the external interviews, Performance management and Process and quality control are next to Strategic goals and desired results the most important aspects. Performance management is considered as a relational view theory aspect, while Process and quality control is more related to the agency theory.

There is a remarkable difference between the ranks of the internal and external respondents for contract management. The respondents of Gelre Ziekenhuizen ranked on average responsibilities and tasks as most important (1st place), while the contract managers of the external hospitals ranked this aspect on average relatively low (8th place). A possible explanation is that for Gelre Ziekenhuizen, it is important to have first clear Responsibilities and tasks and Processes, procedures and policy. The respondents mentioned during the interview that this will provide a basis for good contract management.

The respondents of the external hospitals have probably recorded the Processes, procedures and policy and Responsibilities and tasks well because the outsourcing or privatisation of the laboratory services was a few years ago. However, during the interviews the contract managers of the external hospitals mentioned that Strategic goals and desired results and Processes, procedures and policy are important to record, but most of these aspects got a lower rank than aspects related to Performance management. One of the contract managers of the external hospitals mentioned during the interview that their focus is currently to meet the customer's wishes and satisfaction and to improve the relationship with the supplier. These focus points are both more related to the relational view theory. Thus, based on above analysis, it might be a logical reason that Gelre Ziekenhuizen therefore focusses more on aspects from the agency theory and that the contract managers of the external hospitals focus more on the relationship with the supplier (relational view theory).

Table 19 – Contract management aspects related to a theory

Contract management aspects	Theory
Strategic goals and desired results	Agency theory
Responsibilities and tasks	Agency theory
Processes, procedures and policy	Agency theory
Performance management	Relational view theory
Process and quality control	Agency theory

The buyer-supplier relationship aspects that were mentioned as most important in both the internal and external interviews can all be related to the relational view theory. Two aspects were mentioned in the top three of both the internal and external respondents, which are Trust between members and Agreed goals and performance measures. For both the internal and external respondents, Trust between members was most often mentioned as most important aspect. The aspect Agreed goals and performance measures is also related to agency theory, because it is about control when goals and performance measures are defined.

During the interviews, a few respondents mentioned that aspects of the agency theory, such as Incentive alignment, Monitoring and Market knowledge, are important but more contractual aspects. Therefore, these aspects were given a lower rank because Trust between members and Efficient and effective communication for example have more priority.

The type of relationship described by the internal and external respondents during the interviews corresponds to the most important buyer-supplier relationship aspects that were mentioned in Table 20. Therefore, the relationship between Gelre Ziekenhuizen and the privatised laboratory should be long-term relationship based on trust, with proper communication and agreed goals.

Table 20 – Buyer-supplier relationship aspects related to a theory

Buyer-supplier relationship aspects	Theory
Trust between members	Relational view theory
Agreed goals and performance measures	Relational view theory/Agency theory
Efficient and effective communication	Relational view theory
Top management commitment and support	Relational view theory

Appendix E: Service Level Agreement

In this Appendix, a Service Level Agreement in Dutch is composed that could be used for the agreement between the privatised laboratory and Gelre Ziekenhuizen.

Service Level Agreement (dienstverlening van Labs aan Gelre Ziekenhuizen)

Overeenkomst

1. Identificatie partijen

Gegevens van de betrokken partijen worden vermeld.

2. Aard en omvang van de overeenkomst

Beschrijving van de onderdelen waar de dienst betrekking op heeft, zoals de organisaties (en/of bepaalde afdelingen) die de dienst afnemen, de juridische status van de overeenkomst en een verwijzing naar algemeen geldende voorwaarden.

- Omvang
- Juridische status en versie van de SLA
- Algemene voorwaarden
- Overige opmerkingen met betrekking tot de aard en omvang van de overeenkomst
- Gedwongen winkelnering over en weer

3. Duur, verlenging en beëindiging van de overeenkomst

Bepaling waarin wordt aangegeven voor welke periode de SLA geldt en hoe de standaardprocedure voor verlenging of beëindiging van de SLA luidt.

- Begin- en einddatum van de overeenkomst
- Procedure voor verlenging of beëindiging (opzegtermijn)

4. Aanpassingen overeenkomst (wijziging en herziening)

<u>Wijziging:</u> schetsen van mogelijkheden voor het wijzigen van de dienst (zowel door de leverancier als door de afnemer) indien dit noodzakelijk of wenselijk wordt geacht. Tevens wordt beschreven hoe en wanneer wijzigingsverzoeken ingediend kunnen worden en in welke mate het wijzigen van de dienst een herziening van de SLA noodzakelijk maakt.

- Wijzigingsprocedure
- Wijze van overleg over wijzigingsverzoeken
- Impact van de wijziging op de SLA
- Op wiens verzoek er aanpassingen gemaakt zijn in de SLA

<u>Herziening:</u> beschrijving van de procedure voor het wijzigen van de SLA en de regeling met betrekking tot de looptijd van de SLA. Bij een omvangrijke SLA loont het tevens de moeite om te beschrijven, wanneer vorige wijzigingen aan de SLA uitgevoerd zijn en wat er destijds gewijzigd is aan de SLA, zodat op eenvoudige wijze terug te zoeken is welke versies de SLA heeft gekend.

Opsomming van zaken die leiden tot een wijziging van de SLA

- Wijzigingsprocedure
- Verlenging van de looptijd van de SLA
- Vorige wijzigingen/versies SLA

5. Evaluatie van de overeenkomst

- SLA 1 keer per jaar controleren (ISO proof)

6. Financiële vergoeding en betaling (kan mogelijk hier een verwijzing worden gegeven naar de raamovereenkomst)

De hoogte van de vergoeding die betaald moet worden dient te worden vastgelegd, inclusief grenzen aan stijgingen. Welk prijsmechanisme wordt gehanteerd? Is er een volumeverplichting?

Tevens afspraken aangaande betaling van overeengekomen vergoedingen dienen te worden vastgelegd om onduidelijkheden en/of problemen hier omtrent te voorkomen.

- Betalingstermijn
- Regels bij te late betaling
- Facturatie
- Wat te doen indien opdrachtgever niet akkoord gaat met factuur
- Meerwerk/minderwerk (afspraken over maken)

Dienstverlening

7. Beschrijving van de dienst

Verwijzing per geleverde dienst naar de betreffende service level specificaties, die opgenomen zijn in de verschillende detailovereenkomsten of bijlagen.

- Concrete beschrijving van de diensten
- Service tijden
- Service beschikbaarheid
- Serviceprestaties (systeemprestaties, -koppelingen)
- Responstijden
- Informatievoorziening (terugkoppeling uitslagen)
- Bij- en/of nascholing
- ISO richtlijn

8. Overlegstructuren, contactpersonen en correspondentie

Vastleggen wanneer gestructureerd overleg plaatsvindt, wie er aan dit overleg zullen deelnemen en wie bij beide partijen verantwoordelijk is voor de onderlinge relatie. Tevens zal een overzicht opgenomen worden van alle contactpersonen en verantwoordelijken bij escalatie of calamiteiten.

- Betrokken en verantwoordelijke personen
- Aanleidingen voor overleg
- Overzicht contactpersonen en verantwoordelijkheden

- Communicatie/escalatie
- Jaarlijkse evaluatieafspraken

9. Verantwoordelijkheid, aansprakelijkheid en sancties

Bij wie liggen verantwoordelijkheden en aansprakelijkheden voor de te leveren product(en) en/of dienst(en) en de daarvoor benodigde middelen. Tevens wordt vermeld wat de strafbepalingen zijn in geval van wanprestatie en in welke gevallen die in werking worden gezet.

10. Privacyreglement

Afspraken met betrekking tot privacy van patiëntgegevens.

11. Kwaliteit-/prestatieniveaus (KPI's)

Opstellen van Kritieke Prestatie Indicatoren, waardoor prestaties meetbaar gemaakt kunnen worden. Hierin staat wat de klant verwacht van de leverancier. Kwaliteitsnormen, certificeringen et cetera waaraan de leverancier dient te voldoen worden hier beschreven. Ook eisen wat betreft afspraken over reactietijden, bereikbaarheid, beveiliging, calamiteitenregeling, klanttevredenheid et cetera.

12. Periodieke controle: monitoring, meting, audit

Een systematisch, onafhankelijk en gedocumenteerd proces voor het verkrijgen van informatie (bewijsmateriaal) over een dienst en een objectieve evaluatie hiervan om te bepalen in welke mate aan de criteria wordt voldaan. Audit is een middel waarmee de dienstleverancier kan aantonen dat een dienst voldoet aan bepaalde criteria die van belang zijn. Evaluatiemomenten worden genoemd.

13. Evaluatie van de dienstverlening

- Meten prestatie-indicatoren
- Beoordeling van uitvoering dienst door afnemer van dienst
- Afwijking van de afspraken
- Voorstellen voor verbetering van de dienstverlening
- Gemelde klachten

14. Rapportage

Omtrent de rapportage moeten afspraken gemaakt worden (aan wie, frequentie, waarover).

- Inhoud rapportage (dit is niet de individuele terugkoppeling van de uitslagen)
- Verschijningsfrequentie

15. Rampen- en calamiteitenplan en procedures

Algemene calamiteitenprocedure, inclusief een verwijzing naar de verschillende calamiteitenplannen.

- Uitwijkmogelijkheden

16. Huisregels/kleding

Kwaliteitsstandaarden van Gelre, onder andere betreffende bedrijfskleding.

Overig

17. Verzekering

Bijvoorbeeld beroeps- en bedrijfsaansprakelijkheidsverzekering.

18. Garantie

Beschrijving van de gewenste resultaten in termen van garanties. Hier worden de kwalitatieve en kwantitatieve afspraken voor het te realiseren dienstenniveau beschreven.

19. Ontbinding en garanties

Beschrijving van de ontbindende voorwaarden. Maar ook de garanties met betrekking tot de overdracht en vernietiging van gegevens. Bijvoorbeeld het langdurig niet halen van de afgesproken dienstniveaus.

20. Geschillen

Beschrijving van het feit wanneer onderling overleg plaatsvindt en wat de procedure is bij het optreden van onderlinge conflicten of geschillen qua afhandeling en het betrekken van derde partijen.

21. Nietigheid

Afspraken over indien een of meer bepalingen van de overeenkomst nietig of rechtsgeldig worden. De rest van de overeenkomst kan dan nog wel van kracht blijven. Partijen zullen over de bepalingen welke nietig zijn of niet rechtsgeldig worden geacht overleg plegen en een vervangende regeling treffen.

22. Geheimhouding

Afspraken over geheimhouding van informatie en concurrentiebeding worden vermeld.

23. Slotbepaling en handtekeningen

Formele afsluiting van de SLA, waarin gesteld wordt dat de betrokken partijen "het bovenstaande" overeengekomen zijn ondertekend door verantwoordelijke personen uit beide organisaties.