Inter-organizational conflict within decentralized organizations
- Exploring the sources of conflict between collaborating subsidiaries –

Melvin D. Esser

Public Version
Inter-organizational conflict within decentralized organizations

- Exploring the sources of conflict between collaborating subsidiaries –

Written by:

Name: Melvin Desmond Esser
s0177083
Address: Asschatterweg 7a
3831JJ Leusden
The Netherlands
E-mail: m.d.esser@student.utwente.nl
Study: MSc. Business Administration, University of Twente, The Netherlands
Track: Innovation & Entrepreneurship

Sponsor:

Name: Imtech ICT Brocom B.V.
Address: Imtech ICT Brocom B.V.
Terminalweg 32
3821 AJ Amersfoort
The Netherlands
Coach: JF (Jelle Frank) van der Zwet

University:

Institute: University of Twente, The Netherlands
School of Management and Governance
Address: University of Twente
Drienerlolaan 5
7522 NB Enschede
The Netherlands
Supervisors: Dr. Ir. K. (Klaasjan) Visscher
Dr. D.L.M. (Dries) Faems
Prof. dr. ir. P.C. (Petra) de Weerd-Nederhof
“Trust is earned by many acts, and lost by only one”

(Socrates, ± 470 BC)
Preface

This paper is the ultimate part of the master thesis carried out at Imtech Holding N.V, within Amersfoort, the Netherlands. The thesis was executed as a final part of the Master Business Administration at the University of Twente, established within the Netherlands.

Imtech is with almost 25,000 employees one of the larger corporations established in the Netherlands. Since this corporation is divided into several autonomous subsidiaries it provides for flexibility and entrepreneurship despite the organizational size. This proved to be an effective strategy, but when client propositions demand capabilities from several subsidiaries these are “forced” to collaborate, which can lead towards conflict situations as these subsidiaries have competing interests. This thesis contribute to the existing literature exploring, at first, the sources which lead to conflicts between autonomous subsidiaries with competing interests that are “forced” to collaborate because of client propositions.

During the execution of this master thesis supervision from the corporation was provided by Jelle Frank van der Zwet. His feedback and support proved to be very valuable during this investigation. From the University of Twente this research was supervised by Klaasjan Visscher and Dries Faems. They supported me during the whole thesis trajectory and delivered a major contribution to the theoretical foundations.

Beside my supervisors I would like to thank my colleagues from Imtech ICT Brocom as well as Imtech ICT CS who were very helpful during my investigation and provided a great time at Imtech.

Leusden, July 2011
Management Summary

One of the major concerns of corporations is the issue of corporate growth. Corporations can grow through corporate renewal, innovation, expanding capabilities (through alliances and acquisitions), and expanding markets. Imtech Holding N.V. choose explicitly to grow through alliances and acquisitions and they keep these acquired firms operate in autonomous subsidiaries which became profit/ loss responsible towards the parent corporation. When these subsidiaries are “forced” to collaborate due to client demands, main disadvantages of this organizational structure came into existence. This paper explores the sources that cause conflict situations between subsidiaries that are “forced” to collaborate. This paper specifically explores the sources of conflict in collaborative projects between Imtech ICT Brocom and Imtech ICT CS. It also comes up with recommendations to reduce the occurrence of conflict situations between these subsidiaries. As the sources of conflict between two autonomous subsidiaries aren’t identified before, this paper definitely contributes to the existing literature related to organizational collaboration as well as conflict management.

Sources of conflict that were identified are based on a framework extracted from the work of Park & Ungson (2003) who identified ten forces that lead to collaborative failure. These ten forces could be distributed under two main categories; inter-firm rivalry and managerial complexity. Their work is based on research which is generally accepted as being reliable and valid. Conflicts during collaborative projects between the two subsidiaries Imtech ICT CS and Imtech ICT Brocom are caused by forces related to inter-firm rivalry as well as managerial complexity. As the forces of inter-firm rivalry are a minor concern in the current situation it is expected that this will raise serious difficulties in the near future due to technological developments. Nowadays, the forces related to managerial complexity are a major concern. Due to “forced collaboration” subsidiaries didn’t develop coordination routines that deal with organizational, cultural, and personal differences and are therefore confronted with recurring conflict situations.

To reduce conflict situations forced by inter-firm rivalry it is recommended to:

- Establish rules and procedures that secure proper information sharing between the collaborating subsidiaries and create a platform, available to all actors in the collaboration, were all project related data is stored. This leads to a reduction in the occurrence of withholding crucial information towards the collaboration partner.
- Merge both subsidiaries or to think of an organizational structure were products and services are complementary if operational overlap rises due technological developments.

In order to reduce the conflicts caused by managerial complexity subsidiaries have two options. First, they can choose to formalize the collaboration excessively. However, since various scholars proved that excessive formalization also caused conflict situations it isn’t recommended to choose this option. Second, they can invest in a relationship of trust were subsidiaries overcome their dissimilarities through mutual discussions. To establish a relationship of trust it is recommended to invest in:

- The creation of an organizational fit between the collaborating subsidiaries. This becomes the foundation of strong interpersonal dynamics between the actors in a collaborative project as they know exactly who is responsible for each part in the project. Since it becomes clear that these actors also need to collaborate on future projects they will be triggered to overcome conflict situations and to improve the collaboration.

- Frequent meetings between the subsidiaries on an operational level. During these meetings actors in collaborative projects discuss about their dissimilarities and will therefore overcome these before they fall into conflict situations.

- An objective person who is charged with the organization of these frequent meetings and who needs the secure the relationship of trust. This person should secure the relationship of trust and were necessary need to coordinate collaborative projects.
Management Samenvatting

Een van de belangrijkste strategische zaken voor een organisatie is groei. Organisaties kunnen groeien door te vernieuwen, door te innoveren, door het uitbreiden van kennis en kapitaal (via allianties en acquisities), of door het uitbreiden van markten. Imtech Holding N.V. kiest er expliciet voor om de groei door het aangaan van allianties of door de overname van kleine- en/of middelgrote organisaties die worden ondergebracht in werkmaatschappijen. Binnen een dergelijke structuur kunnen echter problemen ontstaan wanneer klanten producten/services willen afnemen waar kennis en kapitaal vanuit diverse werkmaatschappijen noodzakelijk is. Hierdoor worden werkmaatschappijen “gedwongen” om samen te werken en ontstaan er conflictsituaties. Twee van deze werkmaatschappijen zijn Imtech ICT Brocom en Imtech ICT CS. In dit rapport wordt een gedetailleerde analyse van samenwerkingsprojecten tussen deze werkmaatschappijen beschreven en worden de oorzaken van conflicten tijdens deze projecten geïdentificeerd. In dit rapport worden ook aanbevelingen gedaan die moeten leiden tot een reductie van het aantal conflicten tijdens deze samenwerkingsprojecten. Dit onderzoek levert hiermee een significante bijdrage aan de theorie, omdat de oorzaken van conflict tussen samenwerkende werkmaatschappijen nog nooit zijn onderzocht.

De oorzaken van conflicten die in dit rapport zijn onderzocht zijn in oorsprong verkregen vanuit een raamwerk dat is ontwikkeld door Park & Ungson (2003). In deze publicatie identificeren zij een aantal dimensies die kunnen leiden tot het mislukken van samenwerkingsprojecten. Deze dimensies verdelen zij onder in twee categorieën, te weten: rivaliteit tussen bedrijven en management complexiteit. Zij baseren hun bevindingen op onderzoeken die algemeen worden geaccepteerd als zijnde betrouwbaar en valide. De conflicten die tijdens samenwerkingsprojecten tussen Imtech ICT Brocom en Imtech ICT CS zijn ontstaan kunnen worden gerelateerd aan de rivaliteit tussen beide werkmaatschappijen als aan de complexiteit om dergelijke projecten te managen. De dimensies van rivaliteit veroorzaken de minste conflicten. Echter, de verwachting is dat deze dimensies steeds meer conflicten gaan veroorzaken, omdat het producten- en dienstenaanbod van deze werkmaatschappijen steeds verder naar elkaar toegroeit. Momenteel veroorzaakt de complexiteit om dergelijke projecten te managen voor de meeste conflicten tussen de beide werkmaatschappijen, omdat beide geen routines hebben ontwikkeld om dergelijke projecten te coördineren.

Om het aantal conflictsituaties die worden veroorzaakt door rivaliteit tussen de werkmaatschappijen te reduceren, wordt aanbevolen om:
Richtlijnen op te stellen waarin vastgelegd wordt hoe en wanneer informatie moet worden gedeeld. Ook dient er een platform voor alle actoren in een project te worden opgesteld waar alle projectgerelateerde data moet worden opgeslagen. Deze maatregelen moeten leiden tot een situatie waarin het niet mogelijk is om cruciale informatie voor elkaar achter te houden.

beide werkmaatschappijen te laten fuseren of om na te denken over een organisatiestructuur waarin de producten en diensten elkaar aanvullen i.p.v. beconcurren. Ondanks het feit dat deze aanbeveling buiten de scope van dit onderzoek valt is het iets waarmee men rekening dient te houden, omdat producten en diensten steeds verder naar elkaar toegroeien.

De werkmaatschappijen hebben twee opties om het aantal conflicten te reduceren dat wordt veroorzaakt door de management complexiteit. De eerste optie is het formaliseren van samenwerkingsprojecten in allerlei gestandaardiseerde regels, procedures en werkprocessen. Echter, omdat verschillende onderzoekers hebben ontdekt dat het formaliseren van samenwerking juist kan leiden tot conflicten is dit niet aan te raden. De tweede optie is het investeren in een vertrouwensrelatie waarin de werkmaatschappijen hun verschillen bespreken en kiezen voor de best mogelijke optie. Om een vertrouwensrelatie te creëren wordt aanbevolen om:

- de organisatiestructuren van beide werkmaatschappijen op elkaar aan te passen. Dit vormt het fundament voor sterke persoonlijke relaties tussen de actoren in samenwerkingsprojecten. Men weet namelijk precies wie, waarvoor verantwoordelijk is in een bepaald project en omdat men in de toekomst vaker moet gaan samenwerken zijn actoren sneller geneigd om conflictsituaties bij te leggen en de samenwerking te verbeteren.
- regelmatig bijeenkomsten op operationeel niveau te organiseren. Tijdens deze bijeenkomsten kunnen de actoren elkaar beter leren kennen, oplossingen bedenken voor hun verschillen en de samenwerking verbeteren voordat er conflictsituaties ontstaan.
- een objectieve persoon aan te stellen die verantwoordelijk wordt gesteld voor de organisatie van deze bijeenkomsten en voor het bewaken van de vertrouwensrelatie.
# Table of Content

Preface ................................................................................................................................. iii  
Management Summary ......................................................................................................... iv  
Management Samenvatting .................................................................................................. vii  

1.  Introduction .......................................................................................................................... 1  

2.  Research Design .............................................................................................................. 3  
   2.1  Research objective, central question and research questions ........................................ 3  
   2.2  Structure of the report .................................................................................................... 4  

3.  Theoretical Framework ................................................................................................... 5  
   3.1  Organizational collaboration ........................................................................................... 6  
   3.2  Organizational conflict .................................................................................................. 7  
   3.3  Sources of conflict ......................................................................................................... 8  
   3.4  Conclusion ..................................................................................................................... 15  

4.  Methodology .................................................................................................................... 16  
   4.1  Research strategy .......................................................................................................... 16  
   4.2  Methodology: Selection of Cases .................................................................................. 18  
   4.3  Methodology: How is the collaboration between the two subsidiaries organized? .... 20  
   4.4  Methodology: What are the sources that lead to conflicts between the collaborating  
       subsidiaries? ....................................................................................................................... 21  
   4.5  Reliability and Validity ................................................................................................... 23  

5.  Results ............................................................................................................................... Error! Bookmark not defined.  
   5.1  Case context ................................................................................................................. Error! Bookmark not defined.  
   5.2  Collaborative structure ................................................................................................. Error! Bookmark not defined.  
   5.3  Case A: Scheepvaart en Transport College ................................................................. Error! Bookmark not defined.  
   5.3  Case B: Zuwe Hofpoort Ziekenhuis .............................................................................. Error! Bookmark not defined.  
   5.4  Cases C, D, E, F ........................................................................................................... Error! Bookmark not defined.  

Inter-organizational conflict within decentralized organizations
5.5 Cross Case Analysis......................................................... Error! Bookmark not defined.
5.6 Conclusions.................................................................................. Error! Bookmark not defined.

6. Discussion & Conclusion.................................................................................. 25
   6.1 Research questions......................................................................................... 25
   6.2 Collaboration between Imtech subsidiaries.................................................... 25
   6.3 Sources leading to collaborative conflicts..................................................... 26
   6.4 Final conclusion.............................................................................................. 26

7. Recommendations, Limitations and Contribution .................................................. 28
   7.1 Recommendations......................................................................................... 28
   7.2 Limitations....................................................................................................... 29
   7.3 Contributions to the literature......................................................................... 30

Appendix I: ................................................................................................. Error! Bookmark not defined.
Appendix II: ................................................................................................. Error! Bookmark not defined.
Appendix III:................................................................................................... XII

References........................................................................................................ 1
1. Introduction

This chapter outlines the context of the research. First, it describes the main advantages and disadvantages of acquiring firms as an organizational growth strategy, which is the growth strategy of Imtech Holding N.V. Second, the theoretical relevance covered. The chapter finishes with the practical context and relevance.

One of the major concerns of corporations is the issue of corporate growth. Healthy growth is an indispensable dimension of corporate strategy and a challenge that senior managers have to tackle. It is critical in finding and developing talent, attracting capital, managing the risk of substitution, and breaking the mature industry mindset (Canals, 2001). There are several approaches for corporate growth. Canals (2001) identified four basic strategic options for corporate growth: corporate renewal, innovation, expanding capabilities (through alliances and acquisitions), and expanding markets. Some corporations choose to expand their capabilities through acquisitions, since they find it hard to develop or provide the opportunity to leverage existing capabilities (Schweizer, 2005). These corporations’s are facing difficulties integrating the acquired companies during the post-acquisition process due to differences in culture and organizational styles (Cartwright & Cooper, 1993). Other corporations are deliberately using and maintaining these differences to create an entrepreneurial environment. Distinctive for this strategy is that acquired firms are only integrated to a modest degree and preserves its way of doing business (Haspeslagh and Jamison, 1991). This “preservative acquisition strategy” (Haspeslagh and Jamison, 1991) is characterized by a low interdependence with the corporation and a high autonomy within the acquired firm. Preservation strategies are increasingly popular due to the advantage of flexibility and entrepreneurship that maintain in the acquired firms. In the post-acquisition process acquired firms become autonomous subsidiaries, which have, most of the time, just financial responsibility towards the corporation. The main disadvantages of this structure come into existence when capabilities from several autonomous subsidiaries are needed to come up with integrated product solutions due to client propositions. Subsidiaries that are used to work autonomously are now “forced” to collaborate within the organization. As these subsidiaries have competing interests and the interdependence between them increases the appearance of conflicts becomes inevitable (Cyert & March, 1963). This paper explores the sources of conflict that occur between autonomous subsidiaries, which have competing interests and that are “forced” to collaborate because of client propositions.
Scholars investigated conflicts during intra-organizational collaboration and inter-organizational organizational collaboration for decades. It became an interesting field of research since researchers recognized that half of these collaborations failed (Mintzberg e.a, 1996, Parkhe, 1993). Despite the extensive literature on both inter-organizational as intra-organizational collaborative conflicts there is little attention for conflicts that arises between collaborating subsidiaries, with competing interests, within a holding structure. As these subsidiaries are both part of the same parent firm intra-organizational dimensions could be a source of conflict. On the other hand inter-organizational dimensions could be a source of conflict since subsidiaries are completely autonomous. This explorative research should map the sources of conflict leading to a collaborative failure between subsidiaries, with competing interests, within an holding structure. The findings during this research are therefore valuable for comparable holding structures and could form a basis for future research in this field.

Imtech Holding N.V. choose to expand their capabilities in the fields of electrical engineering, mechanical engineering, traffic, marine and ICT through the acquisition of firms that contribute directly to their knowledge and financial objectives. “One of Imtech’s main strategic pillars is its growth strategy through acquisitions” (Annual report, 2008). In order to maintain the entrepreneurial spirit within the acquired firms Imtech Holding N.V. choose a post acquisition preservation strategy. Acquired firms became autonomous subsidiaries of Imtech Holding N.V and are just controlled by financial goals. The consequence of this strategy is that the organization became extremely decentralized with numerous autonomous subsidiaries. This proved to be a very effective strategy in order to keep this large organization flexible, entrepreneurial, and innovative. As described in the previous section firms that choose this decentralized structure are confronted with conflicts between collaborating subsidiaries which also have competing interests. Imtech recognizes this as a major weakness of the decentralized business model. According to the annual report (2008): “Internal collaboration is hindered as autonomous subsidiaries are accounted on their own performances. Imtech sees it as one of their main objectives to turn this weakness into strength”. They will exploit all sorts of initiatives to intensify collaboration between subsidiaries. This paper identifies the sources of conflict between collaborating subsidiaries and could be helpful improving it in order to achieve their goal.
2. Research Design

This chapter outlines the design of the research. It starts with a description of the research objective, the central question, and the research questions. It then continues with the structure of the paper.

2.1 Research objective, central question and research questions

As described in the introduction subsidiaries that need to collaborate due to client propositions could face conflict situations as interests are competing. Because of the organizational structure Imtech is confronted with conflicts between collaborating subsidiaries on a daily basis and is therefore interested in the cause(s) of these conflicts. This paper explores the sources of conflict related to collaborating subsidiaries. Therefore, the objective of this paper is stated as:

- An exploration of the sources of conflict that occur during the collaboration of two autonomous subsidiaries, with competing interests, within the Imtech Corporation. The findings of this explorative study combined with theories from the existing literature become the basis to come up with recommendations that should lead to improvements during collaboration between these subsidiaries.

Based on the research objective the central question could be formulated:

- Why do conflicts occur during the collaboration of two autonomous subsidiaries, with competing interests, within Imtech Holding N.V.?

The central question described in the previous section could be answered by answering the following research questions:

- How is the collaboration between the two subsidiaries organized?

This research question will be answered to explore the organizational procedures in contemporary collaborative projects (cases). A selection of cases is necessary, since there are various cases were collaborative conflicts occur. The selection of cases will be executed using methods of purposive sampling and are based on structured interviews with project leaders (appendix I). After the selection of cases these interviews will also be used to answer the second research question.
• *What are the sources that lead to conflicts between the collaborating subsidiaries?*

This question will be answered using the method of in-depth case study research. The selected cases will be analyzed in-depth in order to identify the sources that lead to collaborative conflicts. Data will be gathered through semi-structured interviews with project employees who were involved in these collaborative projects. Cases that were ceased during the case selection will be used either. Questionnaires with participants in these cases should strengthen the claims that were made by answering this research question.

The answers to the first and second research question become the basis for a discussion with the existing literature to come up with recommendations that lead to a reduction of conflicts during collaborative projects.

2.2 **Structure of the report**

This is section outlines the structure of the report that is constructed for this research. The structure is schematically framed in the model below (figure 2.2a). As framed in this figure the report starts with a short introduction, were the theoretical as well as the practical relevance is outlined. It then continues with a chapter were the research design is described. This chapter consists of the research objective, main question, sub-questions and main constructs. The paper than arrives at the theoretical foundations of the research, and gets toward a theoretical framework that is used throughout the rest of this paper. Subsequently, in the fourth chapter, the paper continues with a description of the preferred research methodology. During the construction of this research methodology the importance of the theoretical foundations become immediately clear. Based on the theoretical findings the methodological contents will be determined. The paper then continues with an extensive description of the results, which becomes the basis for a discussion about the research questions and a final conclusion of the main question. Finally, the paper comes up with a number of recommendations that lead towards a reduction of the problem investigated.
3. **Theoretical Framework**

This chapter frames the theoretical foundations for this research. The theoretical framework starts with an explanation of the constructs of organizational collaboration and organizational conflict. It than continues with a more extensive study on the sources leading to conflicts during collaboration. This paragraph also draws the theoretical model that will be used within the following chapters.

3.1 **Organizational collaboration**

The first construct that needs clarification is “organizational collaboration”. Scholars investigate this construct for decades (Austin, 2000; Bailey & Koney, 2000; Alter & Hage, 1993; Gray, 1985; Trist, 1983). From a theoretical perspective it is distinguished in collaboration within organizations; “intra-organizational collaboration” as well as between organizations; “inter-organizational collaboration”. Both theoretical fields of research could be applicable to this research. Since subsidiaries are part of the same organization characteristics of intra-organizational collaboration could be applicable. On the other hand, as subsidiaries operate extremely autonomous it becomes more likely to have more characteristics of inter-organizational collaboration. As described in the introduction to this paper Imtech Holding N.V. choose to let each acquired firm operate completely autonomous. Characteristics of inter-organizational collaboration are therefore more suitable to analyze. Case study research should exile if characteristics of intra-organizational collaboration are also applicable to this situation.

A lot has been written about inter-organizational collaboration as a ‘collective’ strategy where businesses co-operate rather than compete (Astley, 1984; Bresser, 1988; Bresser and Harl, 1986; Carney, 1987). Such collaboration takes a variety of forms: joint ventures (Harrigan, 1985), strategic partners (Lorenzoni and Baden-Fuller, 1995), alliances (Kanter, 1990), networks (Alter and Hage, 1993; Powell, 1990; Thorelli, 1986), network alliances (Gomes-Casseres, 1994), modular corporations (Tully, 1993), and virtual corporations (Byrne, 1993). This work examines how these forms of inter-organizational collaboration can improve strategic performance by, helping to spread risk, share resources, enhance flexibility, increase access to technological know-how and information, enter new markets, and secure assets (e.g. Amara, 1990; Barley et al., 1993; Nohria and Eccles, 1993; Powell and Brantley, 1993). These fields of research are all related to the occurrence that collaboration needs to add something to the collaboration partners’ businesses. This should
be the basis for collaboration. As Stuart (1998) mentioned: “A precondition for collaboration is that the output is higher than that of the individual parts.”

There are various degrees and types of linkages that develop between agencies that seek to collaborate in some capacity (Gajda, 2004). The levels of interaction between these agencies are classified in a four point continuum by Bailey & Koney (2000). Based on the work of Peterson (1991) and Hogue (1993), they suggest that this continuum begins with (1) cooperation, whereby fully independent groups share information that supports each other’s organizational outcomes, to (2) coordination, whereby independent parties align activities or co-sponsor events or services that support mutually beneficial goals, to (3) collaboration, where individual entities give up some degree of independence in an effort to realize a shared goal, to (4) coadunation which implies the complete relinquishment of autonomy of at least one partnering entity in an effort to strengthen a surviving organization. Based on this theory, the second precondition for collaboration is that individual entities give up some degree of independence in effort to realize a shared goal.

Although inter-organizational collaborative research focuses on organizations, the implementation of inter-organizational efforts has as much to do with individual relationships. For this reason, it is important to emphasize the human elements of the process (Bailey and Koney, 2000). As humans have diverge opinions, interpersonal conflict becomes inevitable and needs to be recognized as normal and even expected as the level of integration and personal involvement increases (Gajda, 2000). Healthy interpersonal connections and a strong basis of trust were important to overcome these conflict situations. The third precondition for inter-organizational collaboration is that key individuals need to connect personally and emotionally with the combined social purpose and with one another (Austin, 2000).

Thus, according to the literature, there are three preconditions for successful inter-organizational collaboration. First, the output should be higher than that of the individual parts. Second, individual entities need to give up some degree of independence in effort to realize a shared goal. And third, key individuals need to connect personally and emotionally with the combined social purpose and with one another.

3.2 Organizational conflict
The second construct that needs clarification is organizational conflict. Conflict and conflict management are subjects that are extensively investigated by various scholars. Conflict is defined as; “an expressed struggle between at least two inter–dependent parties who
perceive incompatible goals, scarce rewards, and interference from the other party in achieving their goals” (Smith, 1966; Hocker & Wilmot, 1985; Jameson, 1999; Panteli & Sockalingam, 2004). According to Panteli & Sockalingam (2004) organizational conflict literature has identified three common forms of organizational conflict. First, relationship conflict which tends to be emotional and focused on inter-personal incompatibilities or disputes and typically provokes hostility, distrust, cynicism, apathy and other negative emotions. Accordingly, relationship conflict can promote divide, diminish trust and weaken relationships, which in turn curtails open communication, value-adding knowledge sharing, learning and ultimately knowledge creation. Second, task conflict which is generally task oriented and is focused on judgmental differences on the best solution to achieve organizational objectives. It is a condition in which individuals disagree about task issues including goals, key decision areas, and the appropriate choice for action. Third, process conflict concerns an awareness of controversies about aspects of how task accomplishment will proceed. This form of conflict arises from differences of opinion regarding roles, responsibilities, time schedules and resource requirements.

Organizations that collaborate need to overcome these conflict situations in order to achieve their common goals and to preserve good interpersonal relationships. The alliance will eventually fail as these organizations lack to overcome these conflict situations.

3.3 Sources of conflict
This section outlines the sources that could result in conflicts during the collaboration between two organizations. As defined in the previous section conflict is a broad defined construct with numerous dimensions. Park and Ungson (2001) conducted an extensive study on these dimensions and concluded that conflicts between collaborating organizations in essence occur because of inter-organizational rivalry between the partners and/or the managerial difficulties of coordinating two independent firms (figure 3.3a). Based on these main categories they identified a number of sources that could result in conflict situations between the collaborating organizations. If the partners doesn’t overcome these conflicts, the partnership fails. Within the next subsection, the sources of conflict that could lead towards inter-organizational rivalry, are outlined. This overview is based on the findings of Park and Ungson (2001), and are replenished with findings of recent literature. The second subsection outlines the sources of conflict related to the management of two autonomous firms.
Figure 3.3a: Causes leading to Inter-organizational conflict within decentralized organizations

- **CAUSE**
  - Inter-organizational rivalry
    - Distribution of profits/losses, and incentives
    - Nature of competitive rivalry
    - Goal divergence
    - Operational overlap
    - Asymmetric dependence and learning
  - Managerial Complexity
    - Uncertainty about the values of the collaboration partner
    - Cultural dissimilarities
    - Organizational misfit
    - Excessive formalization
    - Interpersonal dynamics

- **EFFECT**
  - CONFLICT
3.3.1 Sources of inter-organizational rivalry

The sources related to inter-organizational rivalry identified by Park and Ungson (2001) are framed in figure 3.3b. These sources of conflict are explained in this section. The relationship of each source will be attached to the setting, of a decentralized organization, applied in this investigation.

**Distribution of profits/losses, and incentives.**

The distribution of profits/losses, and incentives are a major sources of conflict through collaborations. Park & Ungson (2001) stated a strategic partnership as a temporal structure of exchange relationship that generates cooperative or competitive behaviors between partners, depending on their private incentives. If these are not clear defined, partners may have conflicts about the most profitable parts of the collective product set. According to Kogut (1989), because competitive incentives among the partners and a lack of reciprocity are at odds with inter-organizational cooperation, alliances tend to be highly unstable.

This could be a difficult issue to assess, especially within a decentralized organization were autonomous subsidiaries are controlled by financial goals. Both subsidiaries like to deliver the most profitable parts of the collective product set resulting in organizational rivalry between them. On the long term this may lead to distrust between the partners. Former research illustrated that if the collaboration has strong economic incentives for both firms, they are more willing to cooperate, and it is also much easier to develop mutual trust (Das & Teng, 2000). The opposite could be achieved when one of the partners receive more incentives than the other.

**Nature of competitive rivalry**

The nature of competitive rivalry could come into existence when organizations collaborate on the basis of short-term self interest instead of long-term collective goals. Short-term orientation views strategic partnerships as transitional in nature, with a demand for quick and tangible results, whereas long-term orientation regards partnerships as at least semi permanent entities, so that more patience and commitment is exercised (Das & Teng, 2000).
Within a decentralized structure, partnerships that are based on short-term self-interest can create tensions and distrust. If there is no definition of collective goals project stakeholders will prefer short-term goals based on self-interest, since their objectives and targets are related to the subsidiary they represent. This nature of competitive rivalry affect future collaborations due to distrust. The nature of competitive rivalry becomes even stronger if the product set from subsidiaries in the collaboration has operational overlap. Short-term self-interest than leads to the distribution of the most profitable parts towards their own firm.

**Goal divergence**
If the goals of both organizations are divergent and not in line with collective goals, competitive rivalry could occur between the organizations in the collaboration (Park & Ungson, 2001). As these collective goals are not determined or not complied within the partnership competition will motivate partners to pursue individual interests at the expense of the other partner (Parkhe 1993).

Within a decentralized organization collaboration between subsidiaries should be based upon the long-term the observation of collective goals is important since this will lead to distrust beforehand.

**Operational overlap**
Strategic partnerships could originate as both firms need complementary capabilities. But, besides these complementary capabilities, partners may also have competing capabilities. Sometimes managers choose competitive partners in order to pursuit short-term synergy through consolidation of overlapping product and market positions (Park & Ungson, 2001).

Within a decentralized structure partnerships originate as customers demand solutions were complementary capabilities from multiple subsidiaries are needed. Conflict situations can occur if these subsidiaries also have competing capabilities. Especially when the delivery of these capabilities towards the client are not defined beforehand. Research indicated that the success rate of alliances between two competing firms is only about one in three (Bleeke & Ernst, 1993).
Asymmetric dependence & learning

Asymmetric dependence creates tensions between the alliance partners due to coordination difficulties that will overwhelm cooperative activities (Hamel et al., 1989). This asymmetric dependence is usually generated by one of the partners, who withholds information from and/or gave incomplete information to the other partner. This asymmetry is often cited as a primary reason for partnership failure between U.S. and Japanese firms (Hamel et al. 1989).

Collaboration between subsidiaries often occurs when an existing client from one of the subsidiaries demands an extension of the products and services delivered by the parent firm. Asymmetric dependence & learning could therefore always be a source of conflict, since one of the subsidiaries is directly dependent on the information gained and passed through from the client towards the other subsidiary.

3.3.2 Sources of managerial complexity

The sources of conflict related to managerial complexity defined by Park and Ungson (2001) are outlined in this subsection (figure 3.3.2a). These sources of conflict are explained in this section. The relationship of each source will be attached to the setting, of a decentralized organization, applied in this investigation.

Uncertainty about the values of the collaboration partner

The first source that makes it complex to manage collaboration between firms is the uncertainty and/or complexity about the people and their capabilities of the collaboration partner (Park & Ungson, 2001). The management of two independent firms could be complex as the capabilities of each firm are not clear. Firms in an alliance may choose to formalize the collaboration securing the share of each alliance in order to minimize uncertainties. Formalization in order to minimize uncertainties could minimize managerial complexity either, but can also result in bureaucracy and increases coordination costs. Another approach is the creation of an environment of trust were firms in the collaboration knew each other’s capabilities and values and responsibilities due to mutual discussions and mediation.
A main advantage of the decentralized organization is that it remains flexible and entrepreneurial despite excessive organizational growth. Formalization in order to secure the partners values within the collaboration could result in bureaucratization and could harm the main advantages of the decentralization. On the other hand formalization in order to secure transparency and information sharing doesn’t harm the subsidiaries autonomy and could reduce uncertainties within between the collaboration partners. The creation of an environment of trust is preferred in this structure because it doesn’t harm the advantages of the decentralized organization.

Cultural dissimilarity
Strategic alliances often involve managers from different parent companies with different cultural, social, political, and economic backgrounds. These cultural dissimilarities could lead to poor communication and mutual distrust (Park & Ungson, 2001) leading to conflicts during the collaboration. Lane and Beamish (1990) argued that cultural compatibility between partners is the most important factor in the survival of an alliance, because the defects in alliances often stem from the unobtrusive influence of culture on behavior and management systems, which may create unresolved conflicts. It has been proposed that the similarity of cultural values may reduce misunderstanding between the partners, and that culturally distant partners experience greater difficulty in their interactions (Park & Ungson, 1997).

At first stance it sounds unlikely that cultural dissimilarities could become a source of conflict within decentralized organizations as subsidiaries collaborate. Because organizational culture normally originate from the parent firm and subsidiaries are both part of the same parent firm cultural dissimilarities shouldn’t become a source of conflict. But if the subsidiaries are completely autonomous they may develop their own culture. These cultural differences between subsidiaries could become a source of conflict during collaboration.

Organizational misfit
The failure of a strategic alliance is also caused by how compatible the partners are with regard to specific organizational characteristics (Doz 1988, Yan and Gray 1994, Park and Ungson 1997). Because an alliance is a hybrid of more than two independent firms, dissimilarities in organizational structures and processes can create problems in coordination. Higher dissimilarities result in higher costs to coordinate collaboration since partners need to expend more time and energy to establish standard managerial routines.
to facilitate communication and to overcome disagreements over operating strategies, policies and methods (Brown et al., 1998).

Within a decentralized organization this could become a source of conflict because each subsidiary has the autonomy to develop their own organizational structure and routines. The time, energy and money to establish standard processes and routines that should result in proper collaboration are disengaged as collaboration occurs on an ad-hoc basis and differs because of the diversity of client expectations. The establishment of these standard processes and routines could also affect the advantages of the decentralized organization with regard to its flexibility and entrepreneurial spirit.

**Excessive formalization**
Some alliance partners demand excessive formalization to protect themselves towards uncertainty and behavior of moral hazards. This excessive formalization approach is popular within the United States. Another approach is based on trust and is often used within Japanese firms. The emphasis in these firms is situated on the basis of mutual trust. They prefer soft control mechanisms coordinating the alliance instead of hard control mechanisms. Japanese managers prefer mutual discussion and mediation to formal contracts. They view formality and the use of third-party management to control an alliance as signs of mutual distrust. Mutual trust in an alliance reduces interaction and minimizes bureaucratic complexity (Park & Ungson, 2001).

Within a decentralized structure it is difficult to coordinate with a high level of formalization and standardization because the bureaucratic complexity reduces the strength of the flexibility preferred by this type of organizational structure. Collaboration on mutual trust is necessary in order to maintain the organizational flexibility, mutual discussion and mediation are therefore essential.

**Interpersonal dynamics**
The final source that could lead towards collaborative conflict identified by Park & Ungson (2001) are the interpersonal dynamics. They stated that Investments in interfirm cooperation include not only economic and technological resources, but also social commitments and entanglements of individual agents. These interpersonal dynamics become extremely important as the parties face adverse situations (Ring & Van de Ven, 1994). If positive interpersonal dynamics aren’t secured the risk of cheating rises. If one of the agents expects the venture to fail because of cheating by others. The risk of prejudicing the venture through its own cheating is correspondingly low, and there may be
considerable advantages in being the first to cheat because the richest pickings are available at this stage (Buckley & Casson, 1988).

Cheating by one of collaborating subsidiaries could be extremely harmful within decentralized organizations, as they are forced to collaborate in future projects. In normal inter-organizational relationships partners are capable to step out of collaboration. But as collaborating subsidiaries are part of the same organization this becomes no option. Therefore cheating could be extremely harmful.

3.4 Conclusion
Thus, according to the literature, there are three preconditions for successful inter-organizational collaboration. First, the output should be higher than that of the individual parts. Second, individual entities need to give up some degree of independence in effort to realize a shared goal. And third, key individuals need to connect personally and emotionally with the combined social purpose and with one another.

Organizations that collaborate need to overcome these conflict situations in order to achieve their common goals and to preserve good interpersonal relationships. The alliance will eventually fail as these organizations lack to overcome these conflict situations.
4. Methodology

The applied research method will be described in this chapter. The first section frames the research strategy. This section outlines the choice for case study research based on proven literature in this field. The second section continues with a description of the data collection method. After the description of the data-collection method, the data-analysis methodology is illustrated. This chapter finishes with the validity and reliability concerns regarding this research methodology. This section also goes into the subject on maximizing reliability and validity.

4.1 Research strategy

This section explains the preferred strategy for this research. There are several ways of doing research. These include experiments, surveys, histories, and the analysis of archival data. The preferred research in this study is case study research due to the exploratory character of the central question and limited control over behavioral events. Exploratory research is especially useful in finding answers to “why” questions.

As described by Yin (2003) the choice for case study research depends on three conditions; a) the type of research question posed, b) the extent of control an investigator has over actual behavioral events, and c) the degree of focus on contemporary as opposed to historical events. With regard to their first condition Yin (2003) stated that “how” and “why” questions are more exploratory and likely to lead to the use of case studies, histories, and experiments as the preferred research strategies. This is because such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidents (Yin, 2003). Since this research is focused on exploring the occurrence of conflicts within a decentralized setting the identification of operational links will add more value to the research than just the description of frequencies or incidents. The second and third condition makes a further distinction between the preference for choosing case study research, histories, and experiments as most appropriate. According to Yin (2003):

- Histories are the preferred strategy when there is virtually no access or control
- Case study research is preferred in examining contemporary events, but when the relevant behaviors cannot be manipulated.
- Experiments are done when an investigator can manipulate behavior directly, precisely, and systematically.
Methodology

Case Selection
Structured Interviews with Project Leaders

1st Research Question
Archival data + additional data from Project Leaders

2nd Research Question
Semi-structured interviews with key players

3rd Research Question
Discussion on the outcomes of the 2nd research question with literature

Case I
Case I
Case I

Case II
Case II
Case II

Discussion

Figure 4.1a: Methodology overview
Manipulation of behavioral events is not possible as this study is conducted within an organization and the unit of analysis is related to the day to day business. Therefore, the application of experiments is not possible in this study. The examination of contemporary and historical events that cannot be manipulated or controlled is applicable to this study. Since case studies could also make use of historical data, the preferred research strategy in this study is case study research.

For case studies, four major types of designs are relevant, following a 2x2 matrix (figure 4.1a). The matrix assumes that single- and multiple-case studies reflect different design situations and that, within these two types, there also can be a unitary or multiple units of analysis (Yin, 2003). As described in figure 4.1b this research is related to multiple cases. The cases represent the extreme/ unique occurrences during the collaboration between two Imtech subsidiaries. However this case involves just one unit of analysis (figure 4.1b). The units of analysis are the conflicts that occur in collaborative projects. Two deviant cases will be selected in order to find the sources of conflict related to the collaboration. Yin (2003) called this a type 3 case study research that consist of a multiple cases with a single unit of analysis. The next section elaborates on this section describing the methodology for selecting the cases.

4.2 Methodology: Selection of Cases
The methodology preferred in this research is in-depth case study research. Since there are various collaborative projects that could be analyzed (Table 4.2a) and the time period for conducting the study is limited a selection of the most suitable projects for analysis should be made (Table 4.2a). The selection of cases is important since these should give a good representation of the investigated projects. Cases are selected based on several criteria (Table 4.2b) that were directly extracted from the theoretical framework described in the previous chapter. The selection of cases will be executed using structured interviews with project managers from both organizations (Appendix I). They are most suitable to answer these questions, as they have multiple experiences collaborating with each other. The results from the semi-structured interviews are framed in table 4.2a.
### Collaboration Projects

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Project A</th>
<th>Project B</th>
<th>Project C</th>
<th>Project D</th>
<th>Project E</th>
<th>Project F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentives</td>
<td>Subsidiary A: 90%</td>
<td>Subsidiary A: 90%</td>
<td>Subsidiary A: 30%</td>
<td>Subsidiary A: 90%</td>
<td>Subsidiary A: 10%</td>
<td>Subsidiary A: 90%</td>
</tr>
<tr>
<td>Contribution period</td>
<td>Subsidiary B: 20%</td>
<td>Subsidiary B: 30%</td>
<td>Subsidiary B: 70%</td>
<td>Subsidiary B: 13%</td>
<td>Subsidiary B: 90%</td>
<td>Subsidiary B: 10%</td>
</tr>
<tr>
<td>Contribution overlap</td>
<td>Subsidiary A: 80%</td>
<td>Subsidiary A: 90%</td>
<td>Subsidiary A: 40%</td>
<td>Subsidiary A: 90%</td>
<td>Subsidiary A: 5%</td>
<td>Subsidiary A: 90%</td>
</tr>
<tr>
<td>Knowledge about the partners' organization</td>
<td>Subsidiary A: High</td>
<td>Subsidiary A: Low</td>
<td>Subsidiary A: Low</td>
<td>Subsidiary A: Low</td>
<td>Subsidiary A: Low</td>
<td>Subsidiary A: Low</td>
</tr>
<tr>
<td>Rules, Procedures, Feedback moments</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Personal attitude towards the collaboration partner</td>
<td>Subsidiary A: Good</td>
<td>Subsidiary A: Bad</td>
<td>Subsidiary A: Average</td>
<td>Subsidiary A: Average</td>
<td>Subsidiary A: Average</td>
<td>Subsidiary A: Bad</td>
</tr>
<tr>
<td></td>
<td>Subsidiary B: Good</td>
<td>Subsidiary B: Bad</td>
<td>Subsidiary B: Average</td>
<td>Subsidiary B: Average</td>
<td>Subsidiary B: Average</td>
<td>Subsidiary B: Bad</td>
</tr>
</tbody>
</table>

**Case I**

**Case II**
There are various methods for case selection. The preferred method in this study is the selection of deviant cases. Deviant (or extreme) cases are of interest here because they represent the purest or most clear cut instance of a phenomenon we are interested in (Gerring, 2007). The most deviant cases are selected based on the outcomes of the interviews with the project leaders. These cases are investigated in-depth using semi-structured interviews with members of the project teams. The other cases are used to support/reject the findings of the deviant cases. Account managers from these collaborative projects will be asked to fill in questionnaires (appendix II).

### Methodology: How is the collaboration between the two subsidiaries organized?

This section continues with a description of the methodology that is used to answer the first research question. It outlines the method(s) for data-collection and data-analysis. Data is gathered from archives and semi-structured interviews with project leaders which are related to each project. Archival data like project plans contains a lot of information with respect to the organization, responsibilities, communication, expenses & revenues, and planning of each project. Additional information is gathered through structured interviews (appendix I) with project leaders. The design of these semi-structured interviews is based on the dimensions that could lead to conflict situations, as described in the previous chapter. Based on the data founded in archives and structured interviews the current organization of collaborative projects could be described.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Distribution of profits/losses, and incentives</td>
<td>% incentives subsidiary A - % incentives subsidiary B</td>
</tr>
<tr>
<td>1b. Nature of competitive rivalry</td>
<td>% contribution subsidiary A - % contribution subsidiary B</td>
</tr>
<tr>
<td>1c. Goal divergence</td>
<td>% contribution subsidiary A - % contribution subsidiary B</td>
</tr>
<tr>
<td>1d. Operational overlap</td>
<td>% could as well be delivered by Subsidiary A - % could as well be delivered by Subsidiary B</td>
</tr>
<tr>
<td>1e. Asymmetric dependence and learning</td>
<td>Subsidiary A - direct/indirect, Subsidiary B - direct/indirect</td>
</tr>
<tr>
<td>2a. Uncertainty about complexity of values of the collaboration partner</td>
<td>Knowledge of the partner’s product set - low/average/high</td>
</tr>
<tr>
<td>2b. Cultural dissimilarities</td>
<td>Knowledge about the partner’s organization - low/average/high</td>
</tr>
<tr>
<td>2c. Organizational mismatch</td>
<td>Rules, Procedures, Feedback mechanisms - low/average/high</td>
</tr>
<tr>
<td>2d. Interpersonal Dynamics</td>
<td>Personal attitude towards the collaboration partner - low/average/good</td>
</tr>
</tbody>
</table>

Table 4.2b: Criteria for project selection
4.4 Methodology: What are the sources that lead to conflicts between the collaborating subsidiaries?

This section describes the methodology that is used to answer the second research question. It outlines the method(s) for data-collection and data-analysis. The second research question is important since it answers the central question.

As mentioned in the theoretical framework the general/abstract concept in this research question are sources of conflict. This general concept needs to be conceptualized, which is the refinement and specification of abstract concepts. This already occurred within the theoretical framework of this paper. The identified concepts consist of dimensions, which are characteristics of concepts. These characteristics are listed in figure 3.3a and become the basis for framing the semi-structured interviews with “experts” (appendix…) that witnessed conflicts during collaboration on a tactical/operational level. Since the expected sources of conflict could be identified on an operational/tactical level these experts could provide the most suitable data. Semi-structured interviews provide in the opportunity to list a number of critical questions that clarify the dimensions in each concept. Another advantage of semi-structured interviews is the opportunity to deviate from the list of questions in order to identify interrelationships between the dimensions or be able to find other concepts that aren’t mentioned within the theoretical framework. A third advantage of this data-collection method is the opportunity to adjust the interviews to the project data gathered during the first research question.

A difficulty using semi-structured interviews is the data-analysis method. According to Auerbach & Silverstein (2003) there are two main issues concerning the analysis of data gained from (semi-structured) interviews. The first issue is that the researcher is likely to think that everything is important. The second issue mentioned by Auerbach & Silverstein (2003) is that it is hard to see how anything in the interviews bears on their research concerns. In order to overcome these issues Auerbach & Silverstein developed a coding mechanism to move from raw text to research concepts in small steps (table…). This coding mechanism is used to come up with relevant outcomes concerning these concepts.
The application of this method in this research is described in the coming parts of this section.

<table>
<thead>
<tr>
<th>Making the text manageable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Explicitly state your research concerns and theoretical framework</td>
</tr>
<tr>
<td>2 Select the relevant text for further analysis. Do this by reading through your raw text with Step 1 in mind, and highlighting relevant text</td>
</tr>
<tr>
<td>Hearing what was said</td>
</tr>
<tr>
<td>3 Record repeating ideas by grouping together related passage of relevant text</td>
</tr>
<tr>
<td>4 Organize themes by grouping repeating ideas into coherent categories</td>
</tr>
<tr>
<td>Developing theory</td>
</tr>
<tr>
<td>5 Develop theoretical constructs by grouping themes into more abstract concepts consistent with your theoretical framework</td>
</tr>
<tr>
<td>6 Create a theoretical narrative by retelling the participant's story in terms of the theoretical constructs</td>
</tr>
</tbody>
</table>

The first step mentioned by Auerbach & Silverstein is already stated in this paper. The research concerns were framed in chapter 2 and the theoretical framework is framed in chapter 3. The second step is the selection of “relevant text” for further analysis. Relevant text refers to passages of the transcript that express a distinct idea related to the research concerns (Auerbach & Silverstein, 2003). There are three criteria during the selection of relevant text that a researcher should keep in mind:

- Does it relate to your research concern?
- Does it help you understand your participants better? Does it clarify your thinking?
- Does it simply seem important, even if you can’t say way?

The next step is the discovery of repeating ideas by grouping together related passages of relevant text (Auerbach & Silverstein, 2003). They stated that a repeating idea is an idea expressed in relevant text by two or more research participants. The repeating ideas in relevant text could then be grouped into coherent categories that express a common theme. A theme is an implicit idea or topic that a group of repeating ideas have in common (Auerbach & Silverstein, 2003). These themes lay the foundations for a discussion in relation to the theories already mentioned in the third chapter. This discussion will take place within the next chapter of this paper.
4.5 Reliability and Validity

One of the main issues concerned with the conduction of proper research are reliability and validity. This section outlines the reliability and validity concerns that are related to the research methodology used in this research.

Reliability is that quality of the measurement method that suggests that the same data would have been collected each time in repeated observations of the same phenomenon (Babbie, 2007). Reliability can be improved by measuring the same measurements more than once. Within this study this is possible due to multiple cases that are studied. Another technique to improve the reliability of findings is the use of multiple sources. The findings in this study will not only based on data obtained from unstructured interviews but also from archival sources. Another method to improve reliability is to review the interview questions by several persons that have experience in conducting proper interview questions. After the data is gathered the answers to the research questions will be write down and checked by the interviewee. The reliability of this research will be improved using a semi-structured approach. This will improve reliability since questions could be repeated from another perspective and the relationship between questions and answers could be mapped.

Validity is a term for describing a measure that accurately reflects the concept it is intended to measure (Babbie, 2007). Cook and Campbell (1979) elaborated the different kinds of validity into four related components: statistical conclusion validity, internal validity, construct validity, and external validity. The statistical conclusion validity component is not relevant within qualitative field studies, thus this component will not be discussed here. Internal validity refers to the possibility that the conclusions drawn from results may accurately reflect what went on during the measurement (Shadish, Cook & Campbell; Babbie, 2002; 2007). Internal validity issues will be reduced to a minimum in this research. Data will be collected in an short time period which declines the internal validity threats of history, maturation, and diffusion and imitation. People are also interviewed once which solves internal validity problems like testing and instrumentation. All interviews are taped using a voice-recorder and are worked out in detail. This leaves no room for own interpretations of the researcher. Construct validity is the degree to which a measure relates to other variables as expected within a system of theoretical relationships (Babbie, 2007). Construct validity will be assured by using constructs deducted from existing theory. This will decrease the threat of inadequate explications of constructs and the probability of confounding constructs with levels of constructs. Another way to improve construct validity is by using multiple repetitions (e.g. multiple theories, multiple interviews, and multiple case studies). The threat of Mono-Operations bias and Mono-method bias are solved. External
validity concerns inferences about the extent to which a causal relationship holds over variations in persons, settings, treatments, and outcomes (Shadish, Cook and Campbell, 2002). In order to improve the external validity within this study multiple cases concerned with the research problem are studied. However, case studies studied only vary in persons and outcomes involved in the different cases, thus the findings within this study are not generalizable to other treatments and settings. In order to improve the external validity findings of the practical case-studies are compared and discussed with findings in other studies.
6. Discussion & Conclusion

This chapter continues with a discussion on the research questions that will lead towards an answer to the main question. Based on this discussion a final conclusion of the main question could be described. This becomes the foundation for practical recommendations that should lead to an improvement of collaborative projects. These are outlined in the next chapter.

6.1 Research questions

Before starting a discussion on the research questions and come up with a conclusion on the main question just recall these again. As mentioned in the second chapter the main question is formulated as:

- Why do conflicts occur during the collaboration of two autonomous subsidiaries, with competing interests, within Imtech Holding N.V.?

In order to answer the main question the following research questions should be answered:

- How is the collaboration between two autonomous organized?
- What are the sources that lead to conflicts between the collaborating subsidiaries?

The next section continues with an discussion based on the findings obtained during case study research.

6.2 Collaboration between Imtech subsidiaries

The collaboration between autonomous subsidiaries at Imtech originate as clients demand products/ services were capabilities from both were needed. As this occurs subsidiaries are “forced” to deal with the coordination of these collaborative projects. This coordination will be executed by one of the subsidiaries on an ad-hoc basis, as subsidiaries doesn't developed skills to coordinate these projects properly. This coordination is, most of the time, executed by the subsidiary who introduces the other subsidiary to one of their clients.
6.3 Sources leading to collaborative conflicts
As mentioned in the previous chapter, partnerships/alliances between autonomous subsidiaries have most characteristics of an inter-firm relationship. Although the subsidiaries were part of the same organization, intra-firm relationships were less applicable as they have the opportunity to develop their own capabilities. Differences in organizational culture and structure, as well as the development of competing products and services could lead to conflict situations, which makes it difficult to establish collaborative projects.

For some decades, scholars investigated conflicts during inter-firm collaboration. From the perspective of alliance failure, Park & Ungson (2003) identified that dimensions of managerial complexity and inter-firm rivalry lead towards conflicts between the collaboration partners.

Since the cases investigated were executed between two subsidiaries which partly have similar product sets, it was expected that conflicts mainly arise due to inter-firm rivalry. Unexpectedly, the cases showed that the dimensions of inter-firm rivalry were less related to conflict situations than the dimensions of managerial complexity. The dimensions of inter-firm rivalry that did cause conflicts were directly related to unclear client expectations which lead to goal divergence and asymmetric dependence. Despite the minor relationship between inter-firm rivalry and collaborative conflict in the current situation, it is expected that this will raise more concerns in the future. Due to technological improvements, operational overlap will rise, which should lead towards higher inter-firm rivalry.

The dimensions of managerial complexity became greater sources of conflict than those of inter-firm rivalry. These conflicts arise as subsidiaries find it hard to coordinate differences in organizational structure, culture, and interpersonal dynamics. As collaborative projects were supervised by someone from one of the subsidiaries, the personal, cultural, and structural attitude towards projects are applied based on their habits. If these habits don’t fit the habits of the other subsidiary and if both subsidiaries don’t overcome these misfits it could lead to conflicts situations.

6.4 Final conclusion
Based on the discussion above the main question; Why do conflicts occur during the collaboration of two autonomous subsidiaries within the Imtech Corporation and how could these subsidiaries improve this collaboration?, could be answered as followed:
Conflicts within the Imtech corporation between collaborating subsidiaries occur because of characteristics of inter-firm rivalry as well as managerial complexity. If a client demand a single point of contact, goal divergence as well as asymmetric dependence could lead towards conflicts related to inter-firm rivalry as the main contractor withholds critical client information for the sub contractor. Other sources that lead towards conflicts during collaboration are related to managerial complexity. As subsidiaries are forced to collaborate due to client expectations they didn’t develop skills to coordinate the interdependencies between them. Therefore, bad interpersonal dynamics as well as cultural and organizational dissimilarities easily became a source of conflict. Since excessive collaborative formalization will harm the advantages of the decentralized organization the only alternative becomes a relationship based on mutual commitment and trust.

The next chapter comes up with recommendations which will lead to a relationship of trust between the collaborating subsidiaries as well as rules and procedures to secure communication.
7. Recommendations, Limitations and Contribution

This final chapter comes up with recommendations to improve the collaboration between autonomous subsidiaries within an holding structure. The importance of building a relationship of trust or to merge both subsidiaries is outlined. The chapter continues with a description of the limitations and proposed further research. It than finishes with a section were the contribution to the literature is described.

7.1 Recommendations

The conflicts that occurred due to inter-firm rivalry were caused by unclearness in client demands and/ or because subsidiaries provided incomplete information about the expectations from the other subsidiary. This collaboration issue is directly related to a lack of communication between the collaborating subsidiaries. Since there is no coordination of collaborative projects by a neutral party and because there is a lack of standardized rules and procedures concerning communication subsidiaries have the opportunity to withhold crucial information which leads towards asymmetric dependence and goal divergence. As excessive formalization will harm the advantages of the decentralized setting a relationship of trust become more important. On the other hand, to less formalization lead to free riding and the opportunity to withhold crucial information towards the collaboration partner, which subsequently will harm the relationship of trust. Standardized rules and procedures that secure proper information sharing will increase the relationship of trust, since actors didn’t have the opportunity to withhold crucial information. It is therefore highly recommended to draft rules and procedures that secure proper information sharing.

As mentioned in the previous chapter it is expected that inter-firm rivalry will increase due to technological developments, which creates more and more operational overlap. These future events could only been overcome if both subsidiaries merge / or create a structure were subsidiaries become complementary towards each other. Since this is not related to the scope of research recommendations related to this were not made.

Collaborative projects between two organizations are complex due to differences in structure, culture, and personalities. As these organizations lack to coordinate these differences properly conflicts will occur. In the situation investigated here coordination is executed by one of the subsidiaries which leads to certain expectations in cultural, organizational, and personal approach in collaborative projects. Both subsidiaries could overcome these issues in two ways. First, subsidiaries may choose to formalize the
collaboration with standardized rules and procedures. If this becomes the preferred strategy flexibility and entrepreneurship, which is one of the main advantages of the decentralized structure, will be threatened. Therefore, the second approach to overcome these issues is preferred. This approach is based on commitment and trust and will not harm the advantages of the decentralized structure.

The best way to stimulate collaboration will be through the incentives gained by account managers. Since account managers have direct contact towards clients they are able to recognize business opportunities for other subsidiaries. As the current incentive system is based on the business they create for their own subsidiary account managers are not triggered to create business for other subsidiaries. A change in the incentive system that will trigger account managers to create business towards each other is therefore desirable. These adjustments towards the current incentive system shouldn’t necessarily be financial in nature. Adjustments could also be related to promotion rewards, and/ or investments in development & learning. These kinds of incentives are preferred because these didn’t harm the financial structure of the individual subsidiaries directly and could therefore be easily adjusted to changing situations.

7.2 Limitations
As mentioned in the introduction to this paper there are inter- as well as intra-organizational dimensions that could become a source of conflict when subsidiaries collaborate. This research only focuses on the inter-organizational dimensions, because it investigates two completely autonomous subsidiaries. Future research could search for intra-organizational sources of conflict, like inter-group/ inter-departmental dimensions.

This research was also limited to a particular collaborative form, where one of the partners becomes the main-contractor and the other becomes the sub-contractor. There are also other collaborative structures thinkable, which have other sources of conflict. For instance, future research could investigate collaborative structures where both partners are symmetric dependent among each other or they need to collaborate in a highly formalized setting.

The findings in this paper are just generalizable to the specific organizational setting of Imtech Holding N.V., because it is just focuses on the cases within this organization. Future research could explore the sources of conflict in other organizational settings in order to make the claims more generalizable.
Finally, this research lacks strong quantitative data to support the findings. Since it explores the sources of conflict in this particular setting it is qualitative in nature. Future research, based on quantitative data, could support/reject the findings.

7.3 Contributions to the literature
This paper contributes to the literature to explore, at first, the sources that lead to collaborative conflicts between two autonomous subsidiaries. A lot of scholars investigate the collaboration between or within firms. The findings of this research indicate that it is difficult to collaborate when firms are “forced” due to client expectations. This becomes inevitable within a holding structure were clients just have one point of mutual interest – the Holing – and subsidiaries need to collaborate to combine capabilities in order to meet client demands. This paper also proves that a relationship of trust is very important to make collaboration between subsidiaries work.
References


Byrne, J.A. Byrne, J.A., Brandt, R. & Port; The virtual corporation. Business week, 1993
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carney, M.G.</td>
<td>Carney, M.G.; <em>The strategy and structure of collective action.</em> Organization Studies, 1987, oss.sagepub.com</td>
<td></td>
</tr>
<tr>
<td>Cartwright, S.</td>
<td>Cartwright, S. &amp; Cooper C.L.; <em>The role of culture compatibility in successful organizational marriage.</em> The Academy of Management Executive, 1993, jstor.org</td>
<td></td>
</tr>
<tr>
<td>Doz, Y.L.</td>
<td>Doz, Y.L.; <em>Technology Partnerships between larger and smaller firms: Some critical issues.</em> Cooperative strategies in international business: Joint ventures and technology partnerships between firms, 1988, books.google.com</td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td>Title and Details</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Huberman, A.M.</td>
<td>Huberman, A.M. &amp; Miles, M.B.; <em>Qualitative data analysis: An expanded sourcebook.</em> SAGE Publications, 1994, books.google.com</td>
<td></td>
</tr>
<tr>
<td>Kanter, R.M.</td>
<td>Kanter, R.M.; <em>When giants learn to dance; Mastering the challenges of strategy, management, and careers.</em> Unwin Paperbacks, 1990</td>
<td></td>
</tr>
<tr>
<td>Kogut, B.</td>
<td>Kogut, B.; <em>The stability of joint ventures: Reciprocity and competitive rivalry.</em> The Journal of Industrial Economics, 1989, jstor.org</td>
<td></td>
</tr>
<tr>
<td>Lane, H.W.</td>
<td>Lane, H.W. &amp; Beamish P.W.; <em>Cross-cultural co-operative behaviour in LDCs.</em> Management International Review, 1990</td>
<td></td>
</tr>
<tr>
<td>Lorenzoni, G.</td>
<td>Lorenzoni, G. &amp; Baden-Fuller, C.; <em>Creating a strategic center to manage a web of partners.</em> California Management Review, 1995, University of California</td>
<td></td>
</tr>
</tbody>
</table>
Pantelia, N. Pantelia, N. & Sockalingamba S.; *Trust and conflict within virtual inter-organizational alliances: a framework for facilitating knowledge sharing.* School of Management, University of Bath, Bath, UK


Rahim, M.A. Rahim, M.A.; *A strategy for managing conflict in complex organizations.* Human Relations, 1985, hum.sgaepub.com


Schweizer, L. Schweizer, L.; *Organizational integration of acquired biotechnology companies in pharmaceutical companies: The need for a hybrid approach.* Academy of Management Journal, 2005, whu.edu

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Publisher/Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tully, J.</td>
<td>An approach to political philosophy. books.google.com, 1993</td>
<td></td>
</tr>
</tbody>
</table>