

# CONNECTED SYNERGY

- a case study of mergers and acquisitions within business networks

Competitive paper

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Mergers and acquisitions are frequent phenomena in everyday business activities (Holtström, 2008). For a merger or an acquisition, expected synergy is of fundamental importance. The synergy-concept emerged in the business strategy literature in the 1960s and has since then gained immense influence as a strategic tool for CEOs and company boards. In both theory and practice, synergy describes value creation of some kind (Pernod Ricard, 2008; Arya, 2002; Rozemeijer, 2000; Tapper, 1999; Larsson & Finkelstein, 1999; SvD, 1998; Olsson, 1997; Chandler, 1992; Trautwein, 1990; Porter, 1987; Rydén, 1971; Ansoff, 1965). Having a business network structure perspective as point of departure, we assume that mergers and acquisitions will involve and integrate not only the acquirer or the acquired company but also connected companies such as customers and suppliers (Holtström, 2008; 2003; Öberg, 2008; 2004; Dahlin, 2007; Öberg & Holtström, 2006; Anderson, Havila & Salmi, 2000; Havila & Salmi, 2000; Bengtsson, 1994).

Synergy as concept (cf. Goold & Campbell, 1998; Itami, 1987; Lubatkin, 1983; Ansoff, 1965) is in this paper further developed and extended to comprise also synergy in the integrating companies' business network. The paper aims to develop a framework to describe synergy in business relationships with customers and suppliers. To achieve this we first need to analyse how synergy is realised within a company. The analysis is based on a case study of mergers and acquisitions among industrial companies having business in Sweden.

Our findings indicate that within a company synergy is the result of the interplay between creation of value, alignment between strategic prioritisations and functional performance. Thus the integrating companies are at the core. The application of synergy in the M&A-companies business network is to include also their business relationships with other actors. So in a second analysis, we show that synergy in business relationships can be seen as the result of how companies a) adapt to changes in the business network, b) how the changes affects interdependency among actors, c) to what extent there is a co-ordination of activities between actors, but most importantly d) how this is carried out over time.

The resulting framework on connected synergy, combines the perspectives on synergy described above with also the development over time. Within the M&A-companies, two forms of synergy appears; (i) planned in the early phases of integration and, (ii) emerging over time. In the M&A-companies' business relationship synergy can appear as (iii) something planned by the integrating companies to purposely influence other actors and, (iv) developing when different actors adapt to these changes over time.

**Keywords:** Synergy, merger, acquisition, integration, business relationship, business network, supplier, customer.

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## INTRODUCTION

Synergy is a frequently used concept to describe the strategic development of companies, both in theory and in practice. Synergy, as such, is the expected result of deliberate actions taken by one or more organisations to achieve something more. This is sometimes, in simple words, described as 'two-and-two-equals-five'. In mergers and acquisitions the discussion of synergy is of strategic importance (Pernod Ricard, 2008; Tapper, 1999; SvD, 1998; Olsson, 1997; Trautwein, 1990; Porter, 1987). Effects of mergers and acquisitions have been studied from a perspective that such changes appear in business networks (Anderson, Havila & Salmi, 2000; Havila & Salmi, 2000; Öberg, 2008: 2004; Dahlin, 2007). In this paper we focus not only on synergy as a concept related to the two merging companies but also on that synergy is created in business networks. The purpose with this paper is *to using a case study develop a framework for understanding how acquiring companies can realise synergy both within the company(ies) and in its business relationships to customers and suppliers*. In the first part of the paper we present a traditional perspective of synergy and thereafter interpret the case from that perspective. In the second part of the paper we add a business networks perspective which results in an extended framework introducing the concept connected synergy.

Synergy is according to Ansoff (1965) one building block in company strategies. Companies who have the capabilities to identify and exploit possibilities of related businesses can achieve competitive advantages (Porter, 1985) and during the 1960's and early 1970's synergy was a motive for companies' strategic development through diversification (Porter, 1985; Wells, 1984). The discussion on synergy by Ansoff (1965) is conceptualised around ROI – Return on investment. However a one clear definition on synergy does not exist (Sirower, 1997; Porter, 1987; Carter, 1977), it is broad as a concept (Campbell & Sommers Luchs, 1998). Further, imagined synergy is more common than real synergy and even the identified synergy are difficult to realise (Porter, 1987). A classic illustration of synergy is: "2 + 2 = 5" (Ansoff, 1965; Mee, 1965; Campbell & Sommers Luchs, 1998) which indicates that two units should achieve something more than as separate units (Arya, 2002; Rozemeijer, 2000; Campbell & Sommers Luchs, 1998; Chandler 1992; Buzzell och Gale, 1987).

Ansoff's (1965) explanation of synergy is a description of its financial benefits and the possibilities thereof, both material and immaterial assets. Ansoff (1965) has four main categories of synergy; sales, operational, investment and management. Larsson (1990) formulated a new typology by discussing Ansoff (1965), Lorsch and Allen (1973), Lubatkin (1983) and Chatterjee (1986). This typology consists of; market power synergy, operational synergy, management synergy and financial synergy. This typology is also used by Larsson and Finkelstein (1999). In addition to this Rydén (1971) discuss coordination benefits. Itami (1987) has divided synergy in two; a complement effect and a synergy effect. The complement effect is more of an adding effect, i.e. using the current resources in a more efficient way. Synergy by Itami (1987) is multiplying, i.e. using companies' unique resources (the invisible or the immaterial resources). Other authors discuss synergy from different perspectives; creating value (Buzzell & Gale, 1987), strength and increased profitability (Kanter, 1989), sharing competences and capabilities (Goold and Campbell, 1989) and purchasing (Rozemeijer, 2000). Altogether it seems as if synergy can be categorised in five main categories; sales synergy, operational synergy, investment synergy, management synergy and financial synergy, see Appendix 1 for an overview of the literature on synergy discussed in this paper.

In Ansoff (1965) there is a clear link to a financial result of the possibilities synergy can generate. In other words this is "how we earn more money through a better utilisation of the company's resources". If the realisation of synergy is lower by two working together rather than as two separate units, the outcome can be characterised as a negative synergy. Cooperation and

collaboration in general i.e. to create something more with available resources in comparison with the previous separate use of the resources is one example of synergy potential. Another is coordination of operations. It is the performance and how competence and knowledge is used within the integrating companies that is of significance for the outcome of the coordinating activities. Coordination affects the flow of activities within a company and to be able to gain further effect coordinating the flow of incoming and outgoing products and services is important. Coordination is also related with economies of scale. An efficient use of the integrated companies capacities a require coordination. A third potential is the possibility to combine and utilise material and immaterial resources over time. Also when companies more focus on core-activities and do not have access to the needed capabilities within the company placing the involved companies respective capabilities positioned to each other becomes significant. This will affect a company's possibilities to coordinate and cooperate. Diversification is an important starting point for the discussion on creating synergy. In companies constituted from related operations, this has given increased assets of the same kind and gives also increased possibilities both in technology and market.

Expected synergy may be more prevalent than realized synergy. There are several difficulties with synergy realisation. In preparing mergers and acquisitions the motive for the outcome of the change is significant for the expected outcome. Also integration problems may occur and affect the possibilities to create synergy. It may even turn out negative, if the synergy is not materialised it may destroy or erase value.

Goold and Campbell (1998) identify four reasons for the failure of synergy initiatives. The first reason is to overestimate positive effects and underestimate costs for the initiative. An idea to be able to create synergy can lead to decisions based on inferior grounds. The second reason is that company management assumes business unit managers to be against synergy initiatives. This may cause actions from the corporate level to convince or force initiatives to be taken. Goold and Campbell (2003) suppose that if business units choose not to cooperate there are probably good reasons for this. A third reason for synergy failure is a believe among company management to be capable enough to implement and realise synergy initiatives. The fourth reason for synergy failures is so called knock-on effects, e.g. costs and/or revenues as an indirect effect of the coordination between business units. Such effects can be either positive or negative, but there is a risk that company management preferably are interested in the potential positive effects and neglects the negative ones. It is not obvious that all cooperation leads to positive results (Goold & Campbell, 1998).

### **ACHIEVING SYNERGY**

Diversification is one way to create synergy (Verweire, 1999; Carter, 1977). Through diversification companies can develop, expand and create growth. In such cases, synergy is often a basic assumption in decisions on diversification (Campbell & Sommers Luchs, 1998). Andersen et al (1957) describe synergy as a better use of resources and also as a way to better adapt to a changing environment with increased competitive pressure. Diversification increase the amount of available assets with broader technological- and/or market scope. Combining companies' capabilities creates opportunities for synergy. Driving forces for diversification is particularly strong e.g. in markets with short product life cycles and/or with high rates of product development or where substitutes are developed. Also high market instability and/or difficulties to predict demand makes diversification interesting. If diversification seems interesting for business development, this is associated with cost and financial risk and should not be carried out without deep analyses. Diversification should not be considered as a replacement for development of current products and services but as a complement (Andersen et al, 1957).

According to Campbell and Sommers Luchs (1998) the studies of Rumelt (1974) on diversifications and the outcome thereof is an important empirical work for the existence of synergy. Rumelt (1974) show that diversified companies with related operations had better return than unrelated operations. However, later studies do neither find theoretical nor empirical support for related diversifications versus unrelated.

Hoskisson and Hitt (1990) discuss internal and external driving forces for diversification. An external force is competition rules and regulations and as an internal force risk reduction is mentioned. Also company management might have their own motives for diversification. These motives can be related to own benefits and compensations. Company size, benefits and other type of compensations correlate with each other. (Hoskisson & Hitt, 1990)

Resources available are valuable if a company can utilise these resources to gain market advantages. Competitive advantage is not only about resources, it is also about utilising and sharing activities to a larger extent. Creating sales synergy is important for the success of a merger or acquisition strategy although Weber and Dholakia (2000) maintain that the formal integration process rarely evaluate market prerequisites. Models used to evaluate synergy in mergers and acquisitions are most often related to the companies' financial development e.g. through stock market development, revenues and investments. They do not evaluate potential consolidation of market activities or sales synergy (Weber & Dholakia, 2000).

Sales synergy can emanate from enhanced service from integrated distribution, specialisation of services for different customer segments and needs (Weber & Dholakia, 2000). Campbell & Sommers Luchs (1998) also highlight distribution as a source for sale synergy but adds a vertical integration perspective, i.e. flow of material. Furthermore business units in the integrated company can utilise the companies brand value, image, reputation and product quality to enhance potential sales synergy (Campbell & Sommers Luchs, 1998). Carter (1977) argue that one of the two important sources for synergy is a stronger market position (the other being increased efficiency). Sales synergy can also emanate from cross sales, product packaging, combined market knowledge and market capabilities and better market communication (Kanter, 1989).

Operational synergy can be achieved through higher utilisation of production facilities (Campbell & Sommers Luchs, 1998) and coordination of production where sharing information and knowledge is important (Flaherty, 1986), increased spread of costs (Campbell & Sommers Luchs, 1998) or lowering total costs (Buzzell & Gale, 1987; Porter, 1987; 1985), learning between the two integrating companies, possibilities to affect price and quality of purchased products and components (Campbell & Sommers Luchs, 1998). Synergy through purchasing has gained more significance since a larger part of the finished product is purchased through suppliers (Rozemeijer, 2000). Not all sharing of activities do create competitive advantage (Porter, 1987; Buzzell & Gale, 1987), e.g. irrelevant activities with small or no potentials (Buzzell & Gale, 1987) or if there are defined possibilities but there are restraining forces against the change within the organisation (Porter, 1987).

Synergy can be achieved through transfer of knowledge and capabilities between different functions within an integrated company (Campbell & Sommers Luchs, 1998; Prahalad & Hamel, 1990). For company management it is of importance to be able to identify the integrated business critical activities. This can be sharing technologies, production resources or the coordination of marketing and distribution (Prahalad & Doz, 1986). Company management has the responsibility to make coordination between different units functioning and may need to get involved if there is e.g. business units' lack of knowledge of the pros and cons with different alternatives. Clash of opinions is also something that make it necessary for company management to take actions and

also in cases where there are complicated negotiations with continuous compromises. (Goold & Campbell, 2003).

Goold and Campbell (2000) suggest a few important aspects to be able to identify and realise synergy. Identify possibilities in overlapping value chains, i.e. there are high potentials to find synergy if similar activities are integrated and coordinated. It is also important to utilise the knowledge and information of managers on different levels of the organisation and furthermore to understand attitudes among business units to how synergy is dealt with. Furthermore, how well do expectations of synergy fit with real synergy potential.

Haspeslagh and Jemison (1991) discuss value creation in acquisition and maintain that management for the acquiring company has an important role and is responsible for the management in the acquired company. There is otherwise a risk that knowledge in the acquired company is jeopardized. This may affect the potential value of integrating two companies.

In mergers and acquisitions assets are transferred between companies and synergy may occur if the potential to generate revenues is higher for the integrated company than as two separate firms (Sirower, 1997; Ossadnik, 1996; Carter, 1977). Synergy derived from a cause and effect discussion is difficult to establish (Ossadnik, 1996). However, using models measuring synergy through stock owner's position before and after an integration is another way to show synergy or how well an integration has succeeded. If an acquirer pays a premium of the value of the acquired company there is a pressure on the acquirer to deliver a better yield than previously expected by the market. The premium value should be interpreted as an increased efficiency potential, i.e. synergy. This value in terms of synergy must be identified and delivered by the integrated company (Sirower, 1997). Financial synergy in general is related with the company's position to the financial markets (cf. Seth, 1990; Chatterjee, 1986).

## **METHOD**

The studied case consists of three acquisitions where BT Industries acquired Raymond Corporation, BT Industries acquired Cesab and finally Toyota acquired BT Industries. The case is written based on interviews with managers on corporate and business unit level. The total amount of interviews is 16 with duration of between 1.5 to 3 hours/interview. (Holtström, 2008) The case has been reviewed by the company in various occasions; presentations, seminars and peer reviewed journal articles. The case description has also been validated by one of the leading top managers within the organisation today.

Overall, the changes for BT Industries can be characterised as; first a horizontal acquisition of a manufacturer of the same size, i.e. the acquisition of Raymond. In addition to this there are two concentric acquisitions where BT Industries acquire a company with a complementing product range and the second where BT Industries is acquired by Toyota for the same reasons.

## **TO ACQUIRE AND TO BE ACQUIRED - BT INDUSTRIES**

This part describes three acquisitions; BT Industries (continuing BT) acquisition of The Raymond Corporation (continuing Raymond) in 1997, BT Industries acquisition of Cesab Carelli Elevatori (continuing Cesab) in 1999/2000 and the Toyota Industries Corporation (continuing Toyota) acquisition of BT in 2000. This case illustrates the changes in BT between 1997 and 2005. During this period BT also acquired MHC (Mechanical Handling Consultants) a sales and service organisation in Eastern Europe. This acquisition is not included in this discussion. The case illustration describes the course of events from BT's point of view.

BT was established in 1946 and started its business as an agency for machine equipment to the building and construction industry and for company internal transportation (counterbalanced fork

lifts from Clark is an example). Together with Swedish State Railways (SJ), BT developed standardised pallets e.g. the EUR-pallet. In 1947 BT developed its first own hand pallet truck. In 1954 BT developed operations within service and spare parts. Rental – which is a major part of company turnover today, was established in 1965. With rental, customers rent truck equipment and BT is responsible for service and maintenance. The internationalisation of BT started in 1961 when the distributor Rolatruc Ltd in United Kingdom is acquired. The internationalisation has been done both through acquisitions of distributors and producing companies and also through the establishment of own sales companies. In 1988 BT acquired Lift Rite Inc. in Canada and The Prime-Mover Co. in USA.

BT had a leading position in Scandinavia and a strong position in Europe on electric warehouse trucks. BT had a strategic goal to be one of the three leading suppliers in the world of material handling equipment in 1995 (Moberg, 1990). To be able to reach this position there was a need to grow on the North American market. Another possibility would be to broaden the product range to include counterbalanced trucks and thereby also open up for other customer segments than BT's traditional customers.

BT had started its geographical expansion on the North American market with the acquisitions in 1988. This was further strengthened by the acquisition of Raymond in 1997. This acquisition made BT the largest producer of warehouse trucks in the world. The acquisition has two main characteristics; first it is an expansion within the same product niche – warehouse trucks, second it is a geographical expansion – not only more countries but also customer segments with specific product preferences. BT and Raymond became the complete producer of all types of electric warehouse trucks worldwide. Mainly there is one product standard for the North American market and another standard for the European market. A worldwide presence is important if customers on e.g. the North American market expand outside their home market. It is then possible to access material handling equipment in other parts of the world through previous contacts with Raymond.

There are similarities between the two later acquisitions described in the case. They are more acquisitions complementing the product range of the acquirer. The acquisition of Cesab provides BT with a range of counterbalanced<sup>1</sup> trucks to be produced in the BT brand. Toyota's acquisition of BT is similar. Toyota produced counterbalanced trucks and acquiring BT would give world wide coverage of warehouse trucks. One reason for this strategy is that customer may have a need for both types of trucks and a complete product range of both assortments would enhance customer relationships with no need to contact other suppliers of material handling equipment.

An important driving force within production is to lower production costs, which means a need for increased production volumes. One way to achieve this is to produce trucks to other companies through OEM-agreements. Before Toyota's acquisition of BT the companies had cooperated for six, seven years in the USA and between four and five years in Europe. BT had produced warehouse trucks for Toyota, branded Toyota.

Effects of globalisation is a need for companies to limit the number of suppliers, a large number of contacts drives cost to keep up to date and to manage. For suppliers it is important to follow these trends to be attractive in the eyes of the customers. For BT the globalisation trend also mean that customer with world wide operations want agreements for all markets. Within BT there has been a

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<sup>1</sup> There are in general two different types of lift trucks; counterbalanced trucks and warehouse trucks. The former has either combustion engines (diesel or LPG) or electrical engines. Warehouse trucks mainly have electrical engines, but there are other different standards between warehouse trucks depending on which market the product is produced.

need to develop such a function – a central sales department to cover these types of agreement. For local markets it is handled by BT in Europe and Raymond in North America.

In the relationship with the customers a well developed service organisation has earned increased significance in comparison with the sales organisation. Not that the sales organisation is unimportant but time for upholding and develop a good customer relationship has decreased through the sales organisation and increased through the service organisation. Two other trends in customer relationships are identified. First, there are increased requirements that price levels should be the same regardless on which market the products are distributed. Differences in price may occur due to e.g. transportation costs for distribution from the factory to the market. Second, there are more complex agreements, including more details on prices, services and conditions concerning rental, payment and guarantees, i.e. there is an increased interest to include more and more in the contracts.

### The acquisition of Raymond

The company was founded in 1922, as a foundry. However, since the 1930's the company has developed material handling equipment. The company was prior to the acquisition the market leader for warehouse trucks on the North American market. (Raymondhandling, 2006)

During the first part of the 1990's BT had restructured its business to increase productivity and profitability. In mid-1990 these efforts also gave result in increased profitability. These positive changes in BT lead to strategic discussion about the future development. The earlier acquisitions gave a market share of about 5 -6 percent on the North American market and further growth through these companies seemed difficult. Growth on the European market was also limited. BT has two major competitors on warehouse trucks in Europe, Jungheinrich and Linde. Both companies with large market shares and in addition to this already had complete product ranges of both types of lift trucks. For BT the alternative with most potential was to grow within their product segment – warehouse trucks – on the North American market. The analysis made in 1996 identified Raymond as the best alternative and had the potential to be an ideal partner for exchange of technologies and standardisation. Though, the company was not for sale! However, this was about to change and in early 1997 stock owners of Raymond intended to realise what was considered as hidden values and the company was for sale. BT with a restructured profitable business had the strength to carry through the acquisition and made BT the world leading company for production and distribution of warehouse trucks.

One motive for the acquisition of Raymond was to achieve a dominating position on a “new” geographical market, and access to both the established standards on the warehouse truck market. Gains from rationalisations were not included in the initial plan and were considered as something extra to try to realise. Thus, the integration between BT and Raymond was cautious. Two different companies with different corporate cultures with the main sales and distribution on different geographical markets did not force any major changes. And as a result of this, the company was organised in geographical business units, including both production and marketing. An exemption was the production of hand pallet trucks, considered as a volume product on both markets, which was integrated in the same business unit.

Reasons for not making any major changes were that the operations in the acquired company were considered as being well-managed, profitable and also with high growth. The management for Raymond therefore could continue as prior to the acquisition. Instead, the corporate management of BT controlled its business units through various ratios e.g. growth, profitability, cash flow rather than through direct involvement in business operations. Besides the business ratios used, BT has from 2003 started to implement other types of ratios to develop the operations e.g. speed in product development and quality improvement.

Although the integration was cautious there were cooperative arrangements. Purchasing from both BT and Raymond evaluated similarities in components to see if there were potential for common purchase agreements. Purchasing was the most important area to identify synergy e.g. through negotiations with suppliers to reach better prices with increased volumes. Besides purchasing, other synergy was identified e.g. costs for insurances. Transfer of knowledge was also done in an early phase. BT had a model for financing customer fork lift purchases and this was transferred to Raymond and implemented. These synergy initiatives were mainly administrative and did not involve many employees in neither BT nor Raymond. The synergy initiatives were concentrated on the easy and quick potentials since there was no ambition to fully integrate the companies.

BT and Raymond had prior to the acquisition co-operated. During 1992 BT had one person located at Raymond to assist in the development of a fork lift adapted for BT. Raymond produced a combi truck branded BT. This was a fork lift originally developed for the American market but modified for the European market. The product was a complement to BT's product range. BT paid for the product development and purchased the fork lift and spare parts under a license agreement. However, some year before BT acquired Raymond; the truck was distributed through Jungheinrich, but was returned to BT product range after the acquisition.

The new organisation after the acquisition with geographical business units did not enhance integrating projects. Expected in an acquisition with similar products would be to generate synergy in production, exchange of products and product development. However, not much of this was done and one explanation is different product standards on the different markets. Another explanation is long distance between production facilities and lead times which would affect distribution costs negatively if coordinated production was done to a large extent. Other explanations are costs to change and adapt existing products. Though what has been done is exchange of technologies, e.g. AC-technology (alternating current) developed by BT has been transferred to Raymond. This has also lead to a new supplier to Raymond. There are also examples of transfer from the acquired company. Raymond had a supplier of electrical engines which BT could use to replace some of their suppliers. For future products it is possible to work more together with product development and e.g. use more common components. However, there has not been any pressure to deliver more synergy than the early identified ones since both the companies were profitable.

Negative effects may also occur in integrations. BT had started product development of a new combi truck and were almost ready for a prototype when the acquisition was made. In the integration all product development projects were reviewed. It was then identified that Raymond had a similar product almost ready for production which would fulfil BT requirements for the new combi truck and the project were closed down. Though the product developed from Raymond was never delivered, it did not meet the requirements and the project had not reached as far as promised in the review process of current projects. The need for the product remained and BT had to carry it through themselves with a three years delay in comparison with the original plan. The competitors had launched their new products for this particular segment one year after BT closed its project. A combi truck is a long term investment for about 8 – 10 yeas in cooperation through rental, i.e. there will be long term effects in the customer relations if projects and products are delayed.

On the market side there are minor effects of the acquisition, the exchange of products has been limited, e.g. three, four machines a year of VNA-trucks (Very Narrow Aisle) for the Swedish market. Though, an advantage for the customers from BT point of view is that customers through the acquisition could access both the dominating truck standards in the world through one distribution channel.

During fall 1997 the first phase, purchase coordination gave effect already after a few months. The process to co-ordinate the purchasing function took two years. This co-ordination started as a co-operation project making a review of all product areas with potential to reduce costs. All major fork lift components were systematically studied e.g. breaking systems, hydraulic systems and electronics. In some areas it soon became obvious that there were no potentials. One such area is steel; neither as raw material (steel beam) nor refined as steel components. Here the distance between the supplier and the production unit is more important. Logistics, transportation costs and supplier contacts were considered as more important than the possible synergy. Also for components with high degree of change in the construction, being close to the supplier is considered as a major advantage in comparison with the potential benefits a synergy initiative could give. The synergy initiative was instead concentrated on more of system oriented components. The total value of the reviewed components corresponded to between 20 and 30 percent of the total purchased value. Some suppliers were changed but the overall result was more favourable price levels. One example is Curtis, a supplier of controllers (electronic equipment). Curtis has a dominant position within the fork lift industry of this type of equipment. At the time for the acquisition the companies purchased for values of around 50 MSEK/company. The integration between BT and Raymond made them Curtis' largest customer which lead to lower purchase prices instead of yearly increases. The coordination of purchasing activities initiated in 1997 resulted in some joint contracts for BT and Raymond but for the next 3-year period some contracts were still jointly negotiated, and others not. There are however not any new areas open for joint negotiation efforts than the ones initially identified in 1997.

#### The acquisition of Cesab

Cesab was a separate company included in a family owned Italian industry consortium. The fork lift industry is under consolidation and with a shrinking number of producing companies it becomes more important with high production volumes to be able to be competitive. Cesab had in 1999 a production volume of about 2000 fork lift trucks mainly aimed for the Italian market. This production volume was long term not viable. The needed volumes are at least 5000 fork lift trucks to reach a profitable level. The owners of Cesab had an interest to sell the company to a long term owner. There were probably more potential buyers than just BT.

BT and Cesab's relationship had developed with BT's expansion through sales companies in Europe. BT established a sales company in Italy in 1988. This was done with major losses during the first years. In the beginning of 1990's there were increased demand to turn this development. BT had weak results and the BT's owner had also financial problems. It became necessary for a structural change to turn the development in Italy. At this time it had also become more important to develop the after sales market and not just concentrate on the initial sales through local sales organisations. A potential partner for the Italian market was found in Cesab. Cesab's produced mainly counterbalanced trucks for the Italian market and had about 60 sales representatives in Italy. Discussions with Cesab led to the establishment in 1994 of a jointly 50/50-owned company, BT-Cesab. The jointly owned company was to represent BT's and Cesab's products on the Italian market. From a market share in Italy on between 3 – 6 percent it grew in a few years to between 15 – 20 percent. The co-operation had been running for about five years before the acquisition. A result of BT-Cesab was that Italy became as an important market as United Kingdom, Germany and France.

Sales companies within BT had for long wished for a broader product range also including counterbalanced trucks. BT had also been searching for alternatives to be produced in their own brand. BT had a previous agreement with Clark for the British and Scandinavian markets. Also with Steinbock, a German company was a supplier of counterbalanced trucks until it was acquired by Jungheinrich. But, BT had no interest to invest in own production capacity and product

development but would rather like to purchase BT branded products. One important reason for this is that counterbalanced trucks are more standardised, i.e. lower margins. In comparison, warehouse trucks is an investment with more of problem orientated solutions with integrated service agreements, which is much more profitable.

The co-operation with Cesab had its origin in a need to be more established on the Italian market. However, the acquisition can be seen as one way to get access to a complete range of fork lift trucks including also counter balanced trucks. BT acquired 45 percent of Cesab in 1999 and the remaining 55 percent in 2000. This agreement was already made when Toyota acquired BT. In Sweden, Norway, Denmark and United Kingdom Cesab trucks replaced the previous brand Clark.

Due to the history between BT and Cesab there has been no attempt to fully integrate the two companies. Though, this does not mean that no integrating activities were done. With the acquisition in 1999 there were thoughts on how co-operation could be made within purchasing. Cesab had a weak purchasing organisation with low status in the company, and had almost no international experience. BT suggested that a purchaser from BT should be placed in Italy. The purpose was to exchange information and transfer some knowledge within purchasing. This did not turn out satisfactorily, language became one barrier, and the purchasing function had a very weak status within the organisation. The co-operation was terminated before two years duration. However, other changes on management level were made during 2001. A new CEO was hired with another view on purchasing as a function and the purchasing manager became a member of the executive team.

There are economies of scale in Cesab's factory as a consequence of the acquisition. Through this developed relationship the production levels had increased from 2000 fork lift trucks to a level of more than 5500 fork lift trucks. From an overall company perspective it might not be the best solution with two producers of counterbalanced trucks in the same corporation. But as we shall see later, it has been necessary for BT since access to Toyota trucks has not been easy. For Raymond the acquisition has meant that Cesab produces a new truck for Raymond with American standard.

The acquisition of Cesab solved the problem with counterbalanced trucks in own brand. It may also open possibilities for new customer segments not available before. The trend on the market is also that customers want to purchase their full need of fork lift trucks from one supplier. This makes it necessary for BT to have a complete product range. Even if this is the case, the customers may not rely on only one supplier of fork lift trucks, but the ones chosen must have a broad product range covering the possible needs of the customer.

For BT the change to Cesab also meant that the previous relationship with Clark was terminated. During five years prior to the acquisition of Cesab, Clark had a deteriorating rumour, i.e. could not keep up with market development. The customers were positive for the change however at the beginning there was some scepticism for Italian made fork lift trucks.

Real synergy potential between BT and Cesab in purchasing is limited. There are a few areas to work together within, e.g. electric systems with engines and controllers. To some extent it is also possible for gearboxes and other components. There are joint negotiation agreements if the suppliers are the same. Since the products between BT and Cesab are different from each other co-operation is more about exchange of experiences and to try to develop the professional purchasing. It is a trend to purchase more of sub-systems produced by suppliers. In such cases the total number of suppliers may decrease.

Between Toyota and Cesab there are also some cooperative initiatives. Cesab choose to change its supplier of combustion engines to be replaced by Toyota. This is however a low volume change since Cesab mainly produces counterbalanced trucks with electrical engines.

## The acquisition of BT

Toyota Industries Corporation is the parent company and owns a part of the automotive producer, Toyota Motor Corporation, which is listed on the stock market. Between the companies there is a crosswise ownership. The parent company started in 1926 under the name Toyota Automatic Loom Works (TAL). Since the relevance of textile has decreased in the company production, the company changed its name in 2001 to Toyota Industries Corporation (TICO). Within Toyota Industries Corporation there is a variety of business areas; engines, textile machines, compressors etc. One of the company's core businesses is production of fork lift trucks.

Both BT and Toyota had earlier identified each other as suitable for co-operations. Both companies had a need to broaden their product range. In 1997 Toyota contacted BT with an inquiry if BT could produce electric powered warehouse trucks branded Toyota. One of the important questions raised in this process was if BT were about to develop a competitor to their own businesses. But the idea was interesting since BT had identified a need for Toyota's products. BT identified what products would be available for Toyota. These products would fulfil the needs of Toyota customers, and at the same time not give as much competitive advantage to compete with BT prime customers. Though there were difficulties in this co-operation. BT did not get access to Toyota's product range. Reasons for this was mainly due to internal circumstances, i.e. the sales organisation for fork lifts were organised in one business unit (Toyota Motor Corporation) and production and development in another unit (TAL). Despite this BT made an agreement with Toyota in 1998 to deliver a limited product range branded Toyota. In 2001, i.e. after the acquisition of BT, TAL changed name to TICO and a reorganisation was made so that all businesses with material handling equipment were transferred to the same organisation, TICO. Still, after the acquisition and reorganisation, there have been problems for BT to get access to Toyota product range for distribution in BT sales channels. This is also a motive to keep Cesab as a part of BT, since there is a need in the sales organisation for counterbalanced trucks. The reasons for these difficulties can be traced to the thoughts BT had when starting distribution to Toyota, i.e. does this develop a competitor to themselves.

The owners of BT had for long time had financial problems and needed funding. A restructuring of the ownership in the 1990's led to a situation where BT was for sale. There were both financial as well as industrial actors interested to acquire BT. The management of BT were not fully informed of this but had their preferences on whom they wanted to see as the future owner. Toyota was informally informed of the situation, that a new owner could lead to a situation where Toyota could lose their access to BT warehouse trucks. In less than four months, in the beginning of 2000 the deal was closed with Toyota as new owners of BT. This was a rather quick decision process for Toyota who never had acquired a company outside Japan before.

Few changes were made with BT after the acquisition; the CEO remained and was after his retirement replaced with his deputy. BT had high degree of freedom in their operations. A liaison officer was appointed from Toyota and stationed at BT headquarters.

In Europe there is a big difference between Toyota and BT in their market and distribution organisation. BT has a fully owned sales organisation, with direct contact with end customers. Furthermore, BT has a service organisation with 2400 service technicians. Toyota on the other hand has distributors in each country (owned by Toyota or by private entrepreneurs). Toyota distributes their products through the distributors to privately owned retailers, who also run service and after sales. As said above service and after sales has gained in significance for company revenues and profit. With the Toyota distribution, a major part of this business is in the hands of the retailers, whilst BT has control of this part with their direct customer contacts.

The acquisition of BT has led to increased volumes in BT plants due to increased production of Toyota branded trucks. Difficulties have been how to differentiate the products enough to meet requirements and demands. Sales companies want a high degree of product differentiation whilst production wants a low degree of differentiation for a more streamlined product development and product assembly. Toyota has a good reputation with quality and production processes. This is something useful for BT and there has after the acquisition been an exchange primarily from Toyota to BT concerning production systems. An increased understanding of Toyota production system (TPS) has helped BT to develop their production system, not as a copy of TPS but to something that can handle all product varieties customer can choose among.

In the co-operation between BT and Toyota prior the acquisition BT invested much in product quality. Toyota quality requirements also had an affect on quality on BT's own products. There has not been an ambition after the acquisition for a common product development, but rather a technology development, i.e. exchange of knowledge and technologies.

Product differentiation must be done as late as possible in the production process, in order not to make the products more expensive. However, the differentiation can not be as superficial as the initial differentiation was, i.e. different colours, panels and other exterior differences. Differentiation must be done earlier, i.e. integrated in the product development process.

After the acquisition of BT the coordination of purchasing activities has changed. This is more done on the different geographical areas, e.g. co-ordinated purchase in Europe for Toyota, BT and Cesab. For the European purchasing co-ordination was in the early phases concentrated on forks, engines and some electronics. A lead buyer system was introduced in the European organisation. A purchaser in one of the companies is appointed lead buyer and co-ordinates the internal need of a particular system or component and then leads the negotiations with the suppliers for all involved companies. Besides the lead buyer activity there has been technical analyses of similar systems between the companies, e.g. hydraulic systems. Though, it is difficult to change the existing systems but the ideas can be used for future product development.

This illustrates the acquisitions made between 1997 and 2000 and to some extent what has happened thereafter. The case does not describe the changes made after 2005. An integration process between BT's and Toyota's sales organisations has started. July 1, 2005 Toyota and BT forms a global organisation within material handling, Toyota Material Handling Group (TMHG). This development and what has happened in this change is an interesting study in itself.

### Synergy and BT Industries

Table 2 illustrates synergy identified in the case described above. Analysing synergy in BT Industries shows that it; (i) synergy is about creating something more than possible with the single operations, (ii) synergy appear in different functions and is operational trough a variety of changes, (iii) synergy occur in different hierarchical levels from a strategic management to a operational activities. Synergy is also of strategic importance (iv) from a overall improvement of material resources to a combination of physical and immaterial resources and (v) synergy and potential synergy appear or is possible at different times and over time depending on the changes an integrating company makes and initiates.

The case illustrates more dimensions than synergy within a company. Sales synergy relates to the market and purchasing is related to suppliers. This indicates that there are more dimensions with synergy than just within a company. Bracker (1980) discuss strategy from Socrates to present time, where one description of business strategy is to analyse factors in the companies internal and external environment to be able to maximise the utilisation of the companies resources related to the company goals and visions. Since a company operates in an environment with other actors it

may be that what is initiated also has consequences for other actors. These consequences may also cause reactions from these other actors. It will therefore be useful to see the case through a theoretical frame of business networks.

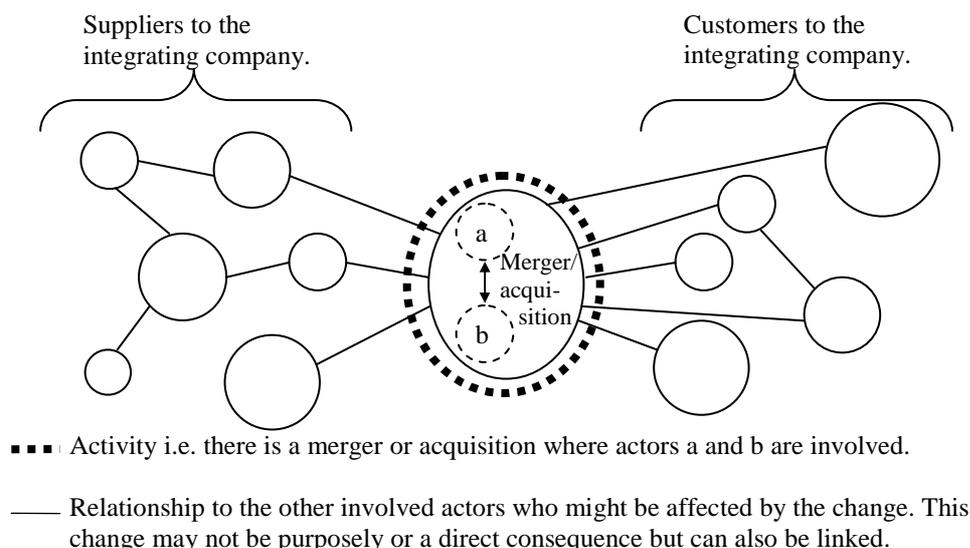
**Table 2: Identified synergy within an integrating company**

Sales synergy	Operational synergy	Investment synergy	Management synergy
Market relationships	Product technology	Plant structure	Ability to generate operations/businesses
Distribution	Efficiency	Development resources	Management function
Product range	Quality	Technical competence	Measuring
Product strategy	Production	Investments	Profitability
Market competence	Purchasing		
	Organisation structure		
	Operational competence		
	Suppliers		

### A BUSINESS NETWORK PERSPECTIVE

Synergy is closely linked to the management's ability to drive change through mergers and acquisitions. Cooperation between companies and the exchange, in interaction, between the different actors affect the development of the relationship, dependencies and the outcome of the actors' actions, i.e. the value. Thus business relationships are likely to influence the outcome of mergers and acquisitions.

Influences between actors with consequences for other actors in the network can generate reactions which can level out the intended synergy but also generate not expected synergy. A change in a network is not always immediately visible but emerges over time (Håkansson & Ford, 2002). Take for example network position. Figure 1. illustrates the different actor's position in relation to each other, i.e. the integrating companies' relationships to customers and suppliers. Irrespective of whether the merging companies' actions affect other actors with an intention or not, the change in the network position will initiate some kind of reaction among suppliers and customers. Actors try to adapt to prevailing conditions in an industrial network but will at the same time try to affect its own position, and thereby also the relationship with other. There is connectedness in a business network.



**Figure 1: Schematic picture of the relation between an integrating company and its connected actors.**

Dependencies among actors are also affected by how, in what way and to what extent a company's relationships develop. The relative position between the companies will also affect the dependencies between the companies. A company's position in the network is significant for what the existing possibilities are to be able to affect its surrounding business network.

A third important aspect with company relationships in relation to synergy is the creation of value. In value creation the direct relation is most significant. It is important for a company to understand what value is for their customer. It is also important as a supplier to understand how their customer creates value for the company. This is of increasing significance since product life cycles become shorter and shorter at the same time as the purchased part (products and components) of value added is increasing. If the products have shorter life cycles the need for upgrading may be of strategic importance. Changes in value creating relationships can affect other structures/networks through overlapping value creating chains of involved companies. An important capability in a value creating network is to know what activities create value and also to be competent enough to coordinate these activities between different actors.

For the understanding of synergy in business networks we highlight four important issues: Industrial networks are based on business transactions. Creating value (or destroying) is made in interaction between actors in an industrial network. This value does not need to be the same value for the involved actors. The totality of the accumulated values is not the same as individual relationships added together but can be of more or less value. This connects synergy, coordination and value.

An industrial network constitutes a system of interaction in the relationship between actors. The importance of the relationships has increased over time. Companies purchase their value added from suppliers rather than produce itself. This leads to an increased importance of cooperation between actors, voluntarily or involuntary. The relationship as a strategic resource appears in mergers and acquisitions where the purchasing power increases through the integration of the companies. This is of importance for e.g. suppliers in negotiations in their new relationship with an integrated company.

Relationships develop over time where reaction, action and adaptation to changes constitute the dynamics in the industrial network. Relationships between actors are often long lasting, at least over the product life cycle, or more. Maintained by many individuals in different roles, relationships are to some extent complex. Relationships is constituted of a number of bonds between actors; technology, time, knowledge, social, economic and legal. Time is interesting since it deals with coordination of activities.

Coordination of activities is central, but it is not done without a purpose. Actors in a network act with the purpose to affect their current situation. This is an important driving force to affect a dynamic network. Companies are affected by other actors with whom there are direct as well as indirect relationships. In this study it is primarily the direct relationships that are of interest. By attempting to affect others this indicates a wish to control the industrial network of which the company is a part. Whether this is possible or not also depends on the company's relative position. In combination with other companies' resources new resources may appear. New resources in combination develop a company but can in some relationships be interlocking.

Stability in relationships exists but varies over time through incremental changes. Small changes indicate that companies chose to see relationships as an investment. Costs to establish a new relationship must be compared with the costs to maintain an existing relationship. If there is stability in relationships this implies that dependencies will arise in the industrial network. The type of relationship affects the strength of the dependence between the actors.

## CONNECTED SYNERGY

Table 2 relates synergy as a strategic concept with business networks. The interaction between different actors can be seen as it is through co-operation that activities are generated. The importance of this has increased over time since companies to a larger extent purchase a higher degree of value added from other actors (Rozemeijer, 2000). Synergy can be seen as one way to describe the creation of the increased value through integration of resources.

Synergy also deals with co-ordination of activities, i.e. how is the work performed and how is the competencies of the integrating actors used? Co-ordination affects the flow of activities, within a company, of incoming and outgoing products and of services. Companies in industrial networks are affected by other actors in direct as well as in indirect relationships. Relationships in industrial networks are linked through different types of connections between the various actors. The time dimension deals with integrating activities through a production line; this is linked to co-ordination of operations. Efficient use of corporate capacities requires co-ordination. In the ties, which are the link between the different actors of the industrial network, co-ordination is made with a purpose. Actors in industrial networks act with a purpose to influence the company's own situation in relation to other companies. Co-ordination of activities is closely linked to economies of scale, where scale is an expression for efficiency as a way to create value. The included parts are used in such a way that they generate a higher value added together than as separate parts. Advantages with economies of scale are then generated through a change in the existing production facilities due to a higher utilisation of the capacities. Synergy, co-ordination and creating value links strategy concepts with industrial networks through integrating activities between different actors.

**Table 2: Synergy in an industrial network**

	Synergy as a strategic concept	Industrial network
Co-operation	Achieve more with existing resources than independently.	Interaction between actors generates activities.
Co-ordination	Work performance and the use of competencies. Affect the flow of activities and the efficiency of the organisation through economies of scale.	A company is affected by other actors' actions through the links that ties a relationship between the different actors.
Diversification	Integration of operations makes it possible to use a larger amount of resources within a company.	New resources are created through combination of different actors resources.
Adaptation	Creating synergy as a strategy is about adapting operations to the surrounding environment. A prerequisite is the potential to affect the surrounding environment. It is also about adapting the integrating operations to each other, e.g. through transfer of knowledge or shared activities.	Adaptation is made in relation to other the actions of other actors. This develops in a process of and between the different actors. In interaction between the actors of the system, relationships are developed and this contributes, through adaptation, to increased competitiveness. There are different opinions on the possibility to affect other actors in the network.
Dependence	Dependence on other companies can increase if a restructure leads to increased purchase from other companies.	Buyer and seller in an exchange relationship are dependent on each other, also over time. In many cases these relationships are also long-term.
Resources	Ability to combine material and immaterial resources contributes to the possibility to create synergy.	New resources are created through interaction and co-ordination in the network by different actors in co-operation.
Results	The combination of different resources aims at creating value, but it can also lead to negative effects, where the joint result is less than as separate operations.	The ambition is to create a positive outcome but the joint effect can be a destruction of resources.

Diversification of operations is another point of departure when creating synergy. Diversified operations are formed by integration of more or less related operations. This gives opportunities to the use of a larger amount of assets through integration of companies. In industrial networks it is assumed that a company's resources in combination with resources from another company, creates new resources through e.g. mergers or acquisitions. This may seem simple with a diversifying strategy with a purpose to create new resources. Since industrial networks are complex, creating new resources may be complicated. A relationship between two companies is maintained on various levels, by persons in different roles. This may effect whether a merger or acquisition will be able to achieve synergy or if the change is counteracted. A counteraction may be illustrated by internal competition between different units within the integrating company, making a more efficient use of resources complicated. The synergy intended may not fail to come but may take longer time to achieve.

Reaction and adaptation between actors constitutes a dynamic in an industrial network. There is a link between strategy, relationships and synergy as a way to create competitive advantages through mutual relationships between different industries (cf. Porter, 1987). Synergy results from knowledge transfer and activity sharing. Synergy related to adaptation is when integrating operations, similar or non-similar, adapts to each other (cf. Larsson, 1990). Industrial networks constitutes of a system where there are interaction in the relationship between the different actors in the network. Since companies, to a larger extent, purchase products and components as part of their value added from suppliers, there is an increased need of cooperation between the actors in the network. This will result in an increased interaction between the actors in the industrial network. Thus, strategically the relationship between the actors in the network is of significant importance. Creating competitive advantages and developing companies' relationships evolves over time and is related to companies' resources which together and in interaction with other actors' resources are seen as new resources.

If a company's own activities is replaced with purchases of products and components from other organisations this means that cooperation with other organisations increase (cf. Kanter, 1989). In a case where a company is restructured through a merger or an acquisition the dependence to other organisations may increase. Companies increased interest on core activities implies that a single company to a larger extent needs access to capabilities outside the direct control of the company. The capabilities of a single company affect its possibilities but also create a need to cooperate and coordinate. An increased need of access to resources of other actors promotes the origin of more or less strong dependencies between actors. This can generate new possibilities but also be restraining or interlocking.

An important capability in efforts to reach synergy is to be able to use both material and immaterial resources over time. In industrial networks the interaction and combination between actors and their resources a possibility to generate new resources. Material and immaterial resources is combined in industrial networks to new resources through the activities performed. The co-ordination of activities is done over time between the different actors in the industrial network. When combining operations of similar character the coordination of activities may more deal with exploit joint resources than to develop new resources. In industrial networks, a company's resources can in interaction and combination with other actors' resources constitute new resources. For the involved actors this can be developing and depends on the type of change initiated through a merger or an acquisition. The focal interest on synergy realisation can be directed toward existing resources or developing new resources or capabilities.

In Ansoff (1965) a point of departure for synergy is increased return on assets. The connection with financial results is clear and obvious, i.e. to use resources in a better and more efficient way. The relationship with other companies and actors has received increased significance since an

increased share of value added is purchased from other actors. This makes the interaction between companies more important. Thus, a well functioning cooperation or relationship between these actors becomes more important. The importance of financial results does not decrease because the importance of the relationship increases, on the contrary, the importance of financial results may increase. The interest on the financial results may increase due to a need to control, manage and divide the outcome. In an industrial network value creation or value destruction is made in the interaction between involved actors and can in comparison with the reasoning around synergy be more or less of the sum of the value of the relationships.

Factors as time and type of change are also of importance for the consequences mergers or acquisition may have. It is not only the integrating companies that may be affected but also actors with relationships to the integrating companies. Time can influence such that it will settle when a change may occur e.g. it may depend on the length of contracts. The type of merger or acquisition may be of importance for how and when a change can affect the relationship with other actors.

### THE RESULTING FRAMEWORK ON CONNECTED SYNERGY

The two complementing perspectives presented in this paper points at two important dimensions when realising synergy, (i) network horizon and (ii) time. Network horizon means how large part of the companies' business network which comprises the overview a single actor has over the network (cf. Anderson et al, 1994). The two complementing perspectives on synergy presented in the paper illustrate two network horizons. The first network horizon comprises the integrating companies. The other network horizon also includes the integrating companies' relationship with other actors.

Time is important when discussing synergy. Mintzberg and Waters (1985) and Mintzberg (1978) discuss the development of strategy within an organisation. In their discussion, time is one of the dimensions. The authors use deliberate (planned – intended strategy) and emergent (evolves and develops over time – without intention) to describe the development of strategy. These two notions will be used in the following to discuss synergy over time. In our attempt to broaden the view of synergy – time can represent two from each other relative notions of time, present ( $t_0$ ) and future ( $t_1$ ). The present is represented by the early phases of integration, where the company is merged and initial activities is taken to realise synergy. The future represents the time after the present. There is not a sharp boundary between the present and the future, more than that future occurs after the present. The two dimensions - network horizon and time - form a two-by-two matrix, linking these dimensions with synergy as a concept. This is illustrated in Figure 2.

		Time	
		Present - $t_0$	Future - $t_1$
Network-horizon	Within the company – the merging, or acquirer/acquired	<b>Planned</b>	<b>Emergent</b>
	In relationship with other actors	<b>Influence</b>	<b>Interaction</b>

Figure 2: Synergy expressed in the two dimensions network horizon and time.

The two-by-two matrix is outlined as follows: Planned synergy (upper left), combines activities within the company which has been identified and/or planned to be implemented in the early

phases of the integration,  $t_0$ . Emergent synergy (upper right), consists of activities which emerges over time,  $t_1$ . Influence (lower left), combines early phases of integration with the relationship with other actors,  $t_0$ . Interaction (lower right), is the combination of an integrating company's relationship with other actors over time,  $t_1$ .

Planned synergy combines the integrating companies with a short time perspective, the present –  $t_0$ . This is a natural starting point since this deal with what the company intends to achieve with the merger or the acquisition. This is the company's planned synergy and the wanted realisation of such synergy. Within this category there is some kind of rationality, the integrating company in the centre, executing planned activities. This is closely related with what is originally meant with the concept of synergy.

An example of planned synergy is from our case study with a combined and coordinated purchase. The purpose is to increase the purchased volumes by some of the supplier and at the same time lower the purchase prices. In the BT Industry case a lead buyer activity was started to coordinate purchases in Europe for Toyota, BT and Cesab e.g. the purchase of forks in a joint project lead to lower purchase prices of these components.

Characterising a planned synergy is the intended change of the integrating companies. These planned and intended activities; with a purpose to create synergy has its starting point at the time before the merger or acquisition, already in the phase of planning and in the early phases of integration. The initial merger or acquisition strategy can change in the integration process as other opportunities arise. Itami (1987) discuss synergy as a complement effect, i.e. material resources, and a synergy effect, i.e. more of immaterial resources. In comparison with Itami (1987) we argue that a planned synergy with the time horizon  $t_0$  is more of a complement effect and the intended outcome has a focus on the use of material resources. However indications of what Itami (1987) means with synergy could be found e.g. Lilliecreutz (1996) mention a need for product development capacity as a motive for an acquisition.

Synergy origins as an economic motive (Ansoff, 1965), this applies to the planned synergy as described here where synergy is all about saving money through organisational changes, combined technical development. Also, increased market shares are a motive and might give improved income possibilities and/or secure the companies' market position (cf. Sirower, 1987).

Emergent synergy combines evolving activities over time,  $t_1$ , within the company and follows the initial activities started as a result of the integration of the two merging companies or the acquirer and the acquired. This is a consequence of the actions initiated by the integrators. Emergent synergy within a company is not necessarily intended by the integrating parties. It is provoked by the change carried out by the company and can in terms of time be characterised as a motion from  $t_0$  to  $t_1$  where activities is started in the present,  $t_0$ , that results in activities that we label emergent synergy. This category of synergy can be both wished for and not wished for, but the consequence of the change initiated arises at a later stage. As a result of this the effect can be both favourable and unfavourable i.e. the outcome of the initiated activity can be both positive and negative. One important characteristics of this category is that the integrating company is affected by its own actions.

An example of emergent synergy from our case study is coordinated product development, cf. Buzzell & Gale (1987) writing about sharing R&D costs. In the BT acquisition of Raymond there were early attempts to coordinate fork lift product development. Both companies produce warehouse trucks and the similarities between the two companies products ought to have much in common to be able to create synergy. However, internal impediments, or a lack of interest among the involved parties, restrain such activities. Though, an emergent synergy in this case can be illustrated by the exchange of technologies that came about instead. Even if the attempts to create a

common product development did not lead to any new developed products, exchange of knowledge and technological solutions may benefit the relationship between the different units in the integrating company. An example of such exchange is the AC-technology for forklift operations. The AC-technology was transferred from BT to Raymond who further developed the technology to be applied in products for the North American market.

An emergent synergy is characterised by the initiation of activities in connection with a merger or acquisition, which is affected over time for various reasons, e.g. an internal reaction against the change intended by the company management. Such effects can develop over time, after the early stage of the integration, before a new company structure is formed and by this a legible management. Even if the identified or planned synergy does not turn out to be what was originally intended, the outcome of an emergent synergy can be positive. Itami (1987) discuss not only different types of synergy, but also dynamics. A company's present and future strategies are combined, through the development of immaterial assets in the present which makes it possible to develop future strategies.

Synergy through influence combines the integrating companies planned synergy in relation to other actors with which the integrators has a relationship. The meaning of synergy through influence is that an integrating company initiates a change with the intention to create synergy. This intention leads to wished for activities or reactions by the actors with which the integrating company has a relationship. This is a planned for activity by the integrating companies, an intended action, which leads to wished activities from the integrating companies' perspective in their relation to other actors, an influence. Synergy through influence is a prolongation of planned synergy. Related to time, synergy through influence is initiated by the integrating companies in connection to the integrations early phases,  $t_0$ . On the other hand, the effect of synergy through influence can either arise in the early phase,  $t_0$ , or over time  $t_1$ . Interesting with synergy through influence is that it is a planned act which arises from the activities of the integrating companies intended to create change.

An example of synergy through influence is BT's acquisition of Cesab. The acquisition motive originates from a need to reach a more stable market position in Italy. Another, yet as important for BT, was to complement the product range with their own brand of counterbalanced forklift trucks. In BT's relationship to their customers this can be seen as a synergy for the integrating companies' possibilities to purchase their need of forklift trucks by one supplier. A broader product range is an adaptation to the current prerequisites within the business network. The integrating companies interpret the competitive situation between other competitors and the customers. This generates a need to adapt to the business network development which in the BT case has lead to acquisitions both in terms of product range and in geographical expansion, i.e. BT's acquisition of Cesab and Raymond.

Synergy through influence is characterised of that integration through a merger or an acquisition initiates a number of activities. A purpose with these activities is to achieve an effect in the integration companies' relationship with their customers and suppliers. This is something intended with a consequence for actors with a relationship to the integrating companies. Above we discussed that a wished for effect is that customers should see the integrated company in a more positive way. In the integrating companies relationship with their suppliers a synergy through influence could be more concerned with price levels (from the integrators point of view) which affect the suppliers' possibilities to create effectiveness and profitable businesses. The interaction between actors generates activities with a purpose to create a positive result. This is the basic intention with a synergy through influence.

Synergy through interaction combines the relation to other actors with the time after the initial initiated activities, planned by the integrating companies. Synergy through interaction means that the integrating companies' initiates a change and this change leads to activities not directly planned from the integrating companies' perspective. These activities come up in the relationship between other actors in the integrating companies' business network, a type of interaction over time, from  $t_0$  to  $t_1$ . The interaction does not imply that the actors involved approve to the change, that it is a wished for affect that is necessarily good or to an advantage. This can rather be seen as a mutual adaptation to what occur in the relationship between the actors in the network. It can be either desirable or undesirable effects for the integrating companies. For other actors with which the integrating companies have a relationship, the initiated activities by the integrators can have either positive or negative consequences. Synergy through interaction mean that the initiated change, by the integrators, generate activities who the various actors, including the integrating company, adjust to over time, from  $t_0$  to  $t_1$ . An adjustment over time is not an expression for a passiveness but can also involve other actors' activities to affect the situation. This can be about e.g. enhance or counteract the effects of the change. There is a temporal move in this reasoning. The process of activities is initiated by the integrating companies to reach synergy will also have consequences for actors with which the integrating company has relationships.

An example of synergy through interaction is Toyotas acquisition of BT. The strategy when integrating BT in Toyota was to keep two different distribution channels. This leads to a situation where there is a risk that different parts of the integrated company starts to compete with each other. Customers can use such a situation to their benefit and the possibility for the integrating company is to manage some customer segments on an aggregated level within the integrated company. Managing customers on an aggregated level in the integrated company is an interaction with the company's business network to handle a potential internal competitive situation and an adjustment to customer expectation on the relationship with an integrated Toyota – BT. Weber and Dholakia (2000) state that a company can benefit from being larger due to fact that some customers prefer agreements with a few, major suppliers. Consolidated marketing efforts could generate additional effect (Weber & Dholakia, 2000). Though this is something Toyota – BT not has changed during the studied period. However, a change in direction towards more of consolidated marketing efforts has started after the studied period. This change can be seen as an adjustment of the integrated actors business in their relationship with their customers.

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## Appendix 1 – Categories of synergy

Author	Sales synergy	Operational synergy	Investment synergy	Management synergy	Financial synergy
Ansoff 1965	Sales synergy	Operational synergy	Investment synergy	Management synergy	
Lorsch & Allen 1973	Operational synergy - marketing	Operational synergy - technological knowledge		Management synergy - capability and knowledge	Financial synergy - attract capital investments
Lubatkin 1983	Diversification synergy Pecuniary economies - customers accept higher prices Technological economies - market	Technological economies - production  Pecuniary economies - suppliers accept lower prices	Technological economies - planning	Technological economies - experineces	Technological economies - financing - compensation
Chatterjee 1986	Collusive synergy – ”contract”	Operational synergy			Financial synergy
Larsson 1990	Market power -higher prices from customers Operational synergy -lower marketing costs	Market power -lower prices by suppliers Operational synergy -lower production costs	Financial synergy -cost for investments	Operational synergy - experience Management synergy	Financial synergy -risk reduction -stock owner diversification
Rydén 1971	Enhanced market position	Increased efficiency - economies of scale in production	Increased efficiency - Efficient utilisation of production resources.		Financial advantages Taxes and other institutional advantages Stability
Itami 1987	Information-based assets - brands - control over distribution	Information-based assets - knowledge on production facilities		Information-based assets - management capability - corporate culture	

Buzzell & Gale 1987	<p>Share resources to reach economies of scale</p> <ul style="list-style-type: none"> <li>- sales organisation</li> <li>- distribution</li> <li>- marketing</li> </ul> <p>Knowledge and capabilities:</p> <ul style="list-style-type: none"> <li>- market</li> </ul> <p>Shared image</p> <p>Indirect advantages of activities:</p> <ul style="list-style-type: none"> <li>- marketing</li> </ul>		<p>Indirect advantages of activities:</p> <ul style="list-style-type: none"> <li>- R&amp;D</li> </ul> <p>Knowledge and capabilities:</p> <ul style="list-style-type: none"> <li>- technology</li> </ul>	<p>Knowledge and capabilities:</p> <ul style="list-style-type: none"> <li>- management</li> </ul>	
Kanter 1989	<p>Exchange of information</p> <ul style="list-style-type: none"> <li>- market</li> </ul> <p>Economies of scale through shared functions</p>	<p>Economies of scale through shared functions</p> <p>Supporting functions</p> <p>Exchange of information</p> <ul style="list-style-type: none"> <li>- technology</li> </ul>	<p>Economies of scale through shared functions</p>	<p>Management capabilities</p> <p>Far-sightedness</p> <p>Career/ competence</p> <p>Values and standards</p>	
Goold & Campbell 1998	<p>Create new business opportunities through combination of different units.</p>	<p>Vertical integration</p> <ul style="list-style-type: none"> <li>- co-ordination of flow could decrease storage levels in warehouses.</li> </ul> <p>Increased negotiation power</p>	<p>Share physical assets or resources</p>	<p>Co-ordination of strategies</p> <p>Share knowledge and capabilities</p>	
Larsson & Finkelstein 1999	<p>Collusive synergy</p> <ul style="list-style-type: none"> <li>- market power</li> </ul>	<p>Operational synergy</p> <ul style="list-style-type: none"> <li>- economies of scale</li> <li>- vertical structures</li> </ul> <p>Collusive synergy</p> <ul style="list-style-type: none"> <li>- purchasing power</li> </ul>		<p>Management synergy</p> <ul style="list-style-type: none"> <li>- capabilities and competence</li> </ul>	<p>Financial synergy</p> <ul style="list-style-type: none"> <li>- risk sharing</li> </ul>
Rozemeijer 2000	<p>Business development in combination</p>	<p>Increased purchasing power</p> <p>Share direct resources</p> <p>Vertical integration</p>	<p>Co-ordinating strategies</p>	<p>Share abstract resources</p> <ul style="list-style-type: none"> <li>- knowledge and capabilities</li> </ul>	