Strategic Alliances in the Digital Printing Industry

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Abstract

The fast technological development and the convergence of the media industry have made competition in the printing industry harder and not only in-industry any longer. This puts great pressure on individual companies, and in a climate of rapid change, companies need to respond quickly to external forces in order to remain competitive. To accomplish this many different competitive resources and competences need to be managed. This can be achieved either directly by ownership or indirectly by cooperation. This qualitative case study sets out to investigate how alliances are used in the dynamic business environment of the printing industry, with a focus on cooperation in connection with digital printing.

The primary reason, for the companies' cooperation was gaining access to resources to enhance customer satisfaction and retain customer contact. This paper illustrates that alliances and cooperations can be used in different ways and being part of an alliance can be regarded as successful and something worth nurturing. Even though alliances can provide competitive advantages, this study also indicates that hypercompetitive behavior, like being to opportunistic, clearly can have drastic negative effects on an alliance.

Introduction

There are often many reasons why two or more companies decide to cooperate. The reasons may be based on both external factors, e.g. turbulence in the market, fast technological changes and the impact of globalization, and internal factors, e.g. acquiring access to other firms assets and knowledge, reducing risk and helping shape the market (Child et al., 2005). Alliances and different kinds of cooperations are important for achieving competitive advantages in business. This importance was strongly indicated during the beginning of the 1990's, when the number of alliances grew with as much as 25% annually (Bleeke & Ernst, 1995). Strategic alliances have been used successfully by e.g. IBM, who

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used alliances in many areas such as marketing, research and production. IBM also created alliances in new business areas to *"harness the capabilities and the dynamism ... in order to do things it would be hard to do alone"* (Krubasik & Lautenschlager, 1993, p. 56). Harrigan (1986) suggests that due to technological and economical changes, cooperations have been of great importance in international business since the mid 1970's.

The printing industry has historically been a fragmented industry (Gilboa, 2002), consisting of many privately owned small- and medium sized companies. This is still the general situation (Gilboa, 2002; Kipphan, 2001), as approximately 90% of the printing companies worldwide employ less than 20 people (Kipphan, 2001). However, the situation is constantly changing with mergers and bankruptcies. Also, the technological advancements in printing have been rapid, which has resulted in expanded printing capacities in Western Europe and the US (Birkenshaw, 2004; Smyth, 2006). This situation has led to continuous price reductions and commodization of printed products.

Since the mid 1990's, professional digital color printing has been a part of the printing industry landscape. Digital printing affects several segments of the media industry by offering the possibility to produce small editions at a competitive cost, and to customize printed matters to be used in e.g. one-to-one marketing (e.g. Peppers & Rogers, 1993). However, one should bare in mind that there are drawbacks with digital printing such as lower print speed, and that the cost is fixed and does not decline with the length of the print run. This makes it more expensive to use digital printing than conventional printing for larger editions.

The fast technological development is not only a fact in the printing industry but also in many parts of the media industry, which now use digital workflows. This has introduced new possibilities in managing the value system to cut costs and make workflows more effective. Due to this development and the convergence of the media industry, the competition within the printing industry is not only in-industry, but involves a wider spectrum of communication companies. The changed industry landscape and competitive situation have created a need for broader competence within a company. Control over many different resources and competences are important, and this can be achieved either directly by ownership, or indirectly by cooperation (Håkansson & Johansson, 2002).

This faster and more aggressive competition, which is common in many industries, may lead companies to a more dynamic way of dealing with strategies. This is partly the situation in the printing industry, as some larger companies tend to act in a hypercompetitive manor (Mejtoft, 2007). Previous research (Mejtoft, 2007) suggests that alliances could provide the "creative destruction" (Schumpeter, 1942), which is needed in the printing industry's changing environment.

Research Objective

The objective of this paper is to investigate how alliances are used in the dynamic business environment of the printing industry, with a focus on cooperations in connection with digital printing.

Theoretical Framework

This chapter will introduce a theoretical description of important factors when using strategic alliances, followed by a section describing a theoretical framework for how companies may act in a dynamic business environment. The last section discusses the implications of strategic alliances in this business environment and emphasis concepts that are particularly important for this study.

Strategic Alliances

Strategic alliances can be described as a long-term, purposeful work between legally independent players to create and/or preserve competitive advantages against the surrounding world (Gulati et al., 2000; Jarillo, 1988; Todeva & Knocke, 2005). According to Jarillo (1988, p. 38), *"the critical component that makes a relationship take the shape of a 'typical market' is the high degree of (perceived) 'opportunity for joint value creation' between the two organizations"*. When alliances are formed, complementary assets are often one important criterion along with compatible corporate cultures and synergies between companies (Faulkner, 1995; Whipple & Frankel, 2000). According to Porter (1985) it is possible, for an individual actor, to focus on a small part of the value system, when being part of an alliance. This means that the actor can keep the organization at an optimal size and focus on core activities. Other activities and resources can be obtained through cooperation (Levin, 1998).

Bleeke & Ernst (1995) suggest, based on the relationship between partners engaged in cooperation, that six different types of alliances exists – *collisions between competitors*, *alliances of week companies*, *disguised sales*, *bootstrap alliances*, *evolutions to a sale* and *alliances of complementary equals*. They claim that the first two almost always fail, while only the last, alliances of complementary equals, is expected to be a success. The others are likely to end up in a merger or a sale. It should be noted that this situation may not be regarded as a failure since a merger or sale could benefit involved partners. Bleeke & Ernst (1991) show that only approximately 50% of strategic alliances can be regarded as successful for all parts after two years.

Researches such as Child et al. (2005), Faulkner (1995), Gulati et al. (2000) and Jarillo (1988) highlight the importance of decreased transaction costs in a strategic alliance. While e.g. Jarillo (1988) deems transaction costs most important and believes that participation in the alliance must be efficient in lowering transaction costs, Faulkner (1995) considers them to be subordinate to gaining control over resources. Faulkner (1995) also mentions speed to market (Lee, 2007) and spreading of financial risk as possible internal motives to engage in cooperation.

Regarding participation in strategic alliances, Håkansson & Johansson (2002, p. 146) suggest that actors in an alliance have *"differential knowledge about activities, resources and other actors in the network"*. Even if they have experience from similar areas, their experience is not the same. This causes different actors to have dissimilar, and sometimes conflicting, interests. Increased control from any part in the alliance is always achieved at some other parts expense. Sherman & Sookdeo (1992, p. 78) state that *"perhaps the biggest stumbling block to the success of alliances is the lack of trust"*. Thus, trust, or rather lack of trust may have an impact on alliances between actors.

Trust, Commitment and Control

Moorman et al. (1992, p. 315) defines trust as *"a willingness to rely on an exchange partner in whom one has confidence"*. Morgan & Hunt (1994, p. 22) state that the presence of both commitment and trust are important because they make alliance partners *"resist attractive short-term alternatives in favor of the expected long-term benefits of staying with existing partners"*. Child et al. (2005, p. 60) discuss the importance of the actual human resources involved in an alliance and stress that *"the growing ability of each partner's staff to understand and predict the thinking and actions of the other's can provide a further basis for trust between them"*. Interpersonal trust is a key factor to build trust between partners in an alliance and failure to build such trust often results in failure to achieve a close cooperation.

To handle this situation control is deemed as essential in strategic alliances (Geringer & Herbert, 1989; Medcof, 1997). According to Jarillo (1988), it is necessary, through agreements, to divide risks between partners in the alliance to maintain long-term trust. Trust becomes more important if the risk is higher. Apprehension of risk and lack of trust are factors that change over time (Ring & van de Ven, 1992). Das & Teng (1998, p. 495) emphasize the importance of control and suggests that trust and control can be separated, as *"even with minimum trust the partners still can develop a fairly high level of confidence, if adequate control mechanisms are in place"*. Partners in an alliance sometimes feel insecure about how much information concerning their own organization they should hand over to other partners. However, communication is a foundation for fostering trust and commitment (Morgan & Hunt, 1994), and it is important that the information is timely and correct (Moorman et al., 1993).

Gulati et al. (2000) indicates that if one part in an alliance believes that they could produce a better return by working outside the alliance, they may be caught in a race to learn and exploit as much as possible from partners, and later on exit the alliance (so-called learning races). Accordingly, Jarillo (1988) describes how opportunistic behavior from one part affects the alliance in a negative way. In these cases the trust between partners decline, and consequently the commitment to the alliance fails. A dissolution of an alliance should, however, not automatically be regarded as a failure as the learning experience may have been the goal (Hamel, 1991).

Resources

As mentioned earlier, gaining control over resources is an important reason for forming alliances (e.g. Faulkner, 1995; Jarillo, 1993; Levin, 1998). Resources can come in many forms; they can be physical (e.g. production facilities or raw material), intangible (e.g. brand or knowledge), or organizational capabilities (e.g. routines or a combination of assets, co-workers etc.) (Collis & Montgomery, 2005). According to Barney (1991, p. 101), a company's resources *"include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness"*. Resources can be controlled directly, by ownership, or indirectly through relationship (Håkansson & Johansson, 2002). Indirect control can be achieved by a relationship with an actor with direct control over the resource, in other words through cooperation. Actors' knowledge about and experience of resources is of great importance, and Håkansson & Johansson (2002, pp. 147-148) suggest that resources are heterogeneous and *"there are always further possibilities to use the resources in a different way or in a different setting"*. Resources are unique and when they are combined, they can never fully be imitated by a competitor (Collis & Montgomery, 1995; Gulati et al., 2000).

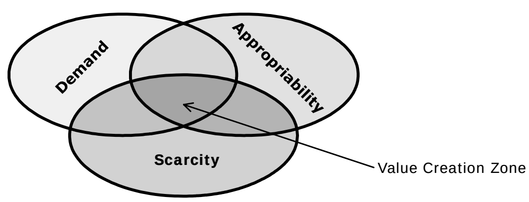

Figure 1. Demand, Scarcity and Appropriability determine the value creation zone (Collis & Montgomery, 1995, p. 120).

The ability to directly or indirectly control resources can create competitive advantages. However, resources should not be valued alone, as they should be put into context with market forces. This is further developed in the Resource Based View of the firm (RBV) (e.g. Collis & Montgomery, 1995; Wernerfelt, 1984), which combines the internal (i.e. resources) and the external (i.e. industry structure) perspectives on strategy. Collis & Montgomery (1995) describe three important market forces – demand, scarcity and appropriability – necessary to consider in order to determine the value of a resource, service or product. Where these factors meet, is called the *value creation zone* (Figure 1). To constitute a real value all these market forces should be well represented, but *"resources are only valuable if they meet customers' needs better than those of their competitors"* (Collis & Montgomery, 2005, p. 35). It is easier to sustain a competitive advantage by providing value based on resources that are hard to copy.

Gulati et al. (2000) state that the RBV has not given much attention to finding the source of value creating resources outside the company. Strategic alliances can give access to resources not currently present within the company and by combining different resources and knowledge in an alliance, the network structure itself becomes a valuable resource (Gulati et al., 2000). On the downside, this type of integration in an alliance can create a risk for locking companies into unproductive relationships (Gulati et al., 2000).

Hypercompetition - A Dynamic Competitive Environment

In today's industries, it is becoming more difficult to accomplish sustainable advantages (e.g. Thomas, 1996; Wiggins & Ruefli, 2005) since demand, scarcity and appropriability (Figure 1) of a resource are changing factors. This has lead hypercompetitive behavior to increase in importance. Hypercompetition is competition in a *"high velocity environment"* (Bourgeois & Eisenhardt, 1988, p. 816) and is characterized by *"intense and rapid competitive moves"* (D'Aveni, 1994, p. 217). The aim of this strategic approach is to disrupt the status quo and *"move quickly to build advantages and erode the advantages of their rivals"* (D'Aveni, 1994, pp. 217-218) thus creating an endless series of small competitive advantages. Companies acting in a dynamic hypercompetitive business environment have to be agile in spotting new opportunities, developing short cycle strategies, abandoning old cash cows and meeting customers' current and future needs. Also, hypercompetition even makes it important for companies that currently have obtained competitive advantages in the industry to challenge them before their competitors undermine those advantages already achieved. It is important for a company to *"realize that control of the evolution of competition in the market is more important than earning current profits"* (D'Aveni, 1994, p. 238).

According to D'Aveni (1994) competition occurs on four different arenas; *cost and quality*, *timing and know-how*, *entry barriers* and *deep pockets*. Companies move between these arenas once the competitive environment has escalated and competitive options have been exhausted in the current arena. This means that instead of only playing the game, it is better to change the rules, scope and players in the game.

An actor in a hypercompetitive environment makes progress by trying to modify the world in accordance with their own needs by disrupting advantages made by others and changing the rules of the competition. D'Aveni (1994, 1995) defines seven key elements of a dynamic approach to strategy in the new 7S's framework: *superior stakeholder satisfaction*, *strategic soothsaying*, *positioning for speed*, *positioning for surprise*, *shifting the rules of the game*, *signaling strategic intent*, and *simultaneous and sequential strategic thrusts*. This theoretical framework is based around disruption, and the seven elements represent how to form visions, capabilities and tactics to create disruption of the status quo on market elements in a dynamic strategy.

Forming visions for how to create disruption is important. Among *stakeholders* of a company, shareholders should, traditionally, be prioritized. Narver & Slater (1990) suggest that creating superior customer value is a major goal for companies producing commodity products. This is becoming an important success factor, even though it means putting customer and co-workers before shareholders. Customers, in general, are very interested, capable and inexpensive business developers (Magnusson, 2003), and understanding the customer may create advantages against competitors (D'Aveni, 1994). Lead-users are important for *strategic soothsaying* to predict future customer value and a close relation with these customers is a very valuable source for product and service innovations (Thomke & von Hippel, 2002; von Hippel, 1986). This soothsaying can form the basis of where the company should focus the future disruption of the market (D'Aveni, 1994) and how existing and future customers can be served.

Developing capabilities for *speed* and *surprise* are important for creating disruption and generate temporary advantages, which is necessary to create one advantage after another and stay ahead of competitors (D'Aveni, 1994). Bettis & Hill (1995) believe that introduction of new production technology changes the competitive landscape and may create *"gusts of 'creative destruction'"* (Pisano, 1990, p. 173). Dynamic capabilities can be a way to ensure long-term competitiveness (Teece et al., 1997). By acquiring more general resources, it may be possible to take the competitors by surprise and catch them *"off guard through an unexpected action"* (D'Aveni, 1994, p. 274) and prolong the time the activity is unique (D'Aveni, 1995).

Almost every industry has unwritten rules of how to behave and how to compete conventionally (DiMaggio & Powell, 1983). The tactics of disruption are to attack these conventions and *shifting the rules* of the market to undermine the advantages of competitors and make it possible to create temporary advantages for oneself (D'Aveni, 1994). By *signaling strategic intent* towards competitors, it is possible to *"forestall moves from competitors and encourage customers to wait for their products rather than buy competing products that make it to the market sooner"* (D'Aveni, 1994 p. 278). By having a *simultaneous and sequential strategic thrust*, a company should be able to move on to the next advantage at the same time as the competitors respond to their first attack on the market (D'Aveni, 1994). Instead of having a linear strategic intention as when following one of the generic strategies (Porter, 1980), a company acting on a dynamic market should be able to attack on several fronts with a series of thrusts against competitors.

Influence of Hypercompetitive Behavior on Strategic Alliances

In the climate of rapid change, companies need to respond quickly to external forces in order to remain competitive. Acting on such a market implies acting faster and constantly trying to disrupt the status quo. This, however, may have both positive and negative effects when working with strategic alliances.

Faulkner (1995) suggests seven common external forces that describe why alliances are formed; *turbulence in markets*; *economies of scale and/or scope*; *globalization of the industry*; *regionalization of the industry*; *fast technological change leading to ever-increasing investment requirements*; *shortening product life-cycles* and *high economic uncertainty*. As seen in the previous section, many of these forces touch upon those conditions that a hypercompetitive-like environment (Bourgeois & Eisenhardt, 1988; D'Aveni, 1994) deals with.

Hypercompetitive behavior is based on taking the opportunity to create disruption to the market and shift, with both speed and surprise, the rules of the industry to the company's favor (D'Aveni, 1994). Trust is important between partners (Child et al., 2005; Morgan & Hunt, 1994) and damaging trust and engaging in opportunistic behavior may have a severe impact on the alliance and be *"costly because the damage to one's reputation can influence not just the specific alliance in which one behaved opportunistically, but all other current and potential alliance partners"* (Gulati et al., 2000, p. 209).

Having dynamic capabilities is essential when acting in a hypercompetitive environment (Teece et al., 1997), and this is dependent on a flexible organization form (Volberda, 1996). An opportunity with alliances is to gain control of resources and knowledge without direct ownership (Håkansson & Johansson, 2002), and thus, increasing the flexibility and dynamics in resource control. The flexibility in the alliance structure is important and Lorange (1990, p. 27) proposes that joint ventures *"are always in a state of evolutionary development"*. Bleeke & Ernst (1991) conclude that nearly 40% of the alliances in their study gradually broadened the scope of collaboration after the alliance was formed. This flexibility to change an alliance also made the success rate higher. Rothaermel (2001) illustrates how incumbent firms in the pharmaceutical industry gain superior performance in a highly competitive environment using strategic alliances. Further on, Rothaermel et al. (2006) found indications that combining vertical integration with outsourcing and alliances have a positive effect on the company. This illustrates the flexibility in combining several strategies to create successful company structures.

Alliances can be seen as an enabler that provides dynamic resources and capabilities to foster a hypercompetitive behavior. On the other hand this behavior can damage the possibilities of maintaining long-term alliances. Strategic alliances can, consequently, both function as a barrier for entering an industry or market, but at the same time they can be a shortcut in to an industry or market for the companies who are a part in them (Gulati et al., 2000).

Methodology

This study was designed as a qualitative multiple case study (Yin, 2003) with two case companies. The printing houses were selected to be comparable, i.e. similar size, company structure and market potential. Qualitative case studies make it possible to gain deeper knowledge of the behavior behind the strategy used in the industry (Robson, 2002; Saunders el al., 2003). According to Yin (2003, p. 9), a case study should be considered when *"a 'how' and 'why' question is being asked about a contemporary set of events, over which the investigator has little or no control"*.

Business strategy and organizational culture in a company are often a direct reflection of the founder and the CEO, which are the persons responsible for the business development in the organization (e.g. Beal & Yasai-Ardekani, 2000; Harrigan, 1985; Porter, 1996; Schein, 1983). Collins & Montgomery (2005, p. 3) state that *"because the impact of corporate strategy is so pervasive and long lasting, it has more important consequences than most other managerial decisions. Setting corporate strategy, therefore, is a critical task and responsibility of the CEO"*. Therefore, the CEO at each printing house was chosen for an interview.

During the interviews open-ended general questions were asked and depending on the answers follow-up questions could be adjusted to the situation (Robson, 2002). The interviews were all conducted at the company of each respondent during the period from spring 2005 until spring 2006. Additional information has been collected by telephone, email, and from the companies' websites.

In the Results chapter, each printing house has been presented separately, while the empirical material has been analyzed with respect to the question areas regarding strategic alliances, resources, trust, commitment, control, and the competitive landscape.

Results of the Case Studies

Company A

Company A is among the larger graphic arts companies in Sweden and consists of several subsidiary companies. They are also a part of a larger communication group. Earlier their business focused on print, but because of a change in direction they have tried to move focus from print to more general print and communication services. Also, during the last couple of years they started to incorporate complementary services into the organization, and this integration was mainly done organically and not through acquisitions. These services were to a large extent based on non-printed solutions like electronic documents etc.

Today Company A have large production volumes in offset print, but, during the last couple of years, they have started to develop services for digital printing. Until recently, they only had access to digital printing through an alliance with another printing house.

Ways to Cooperate

Company A currently has three important two-way cooperations and a couple of smaller cooperations to be regarded on a subcontractor level. The respondent's view of a two-way cooperation was a cooperation where the involved companies offer each others services, and in some cases even have common marketing campaigns. In general, Company A experienced a great value from alliances and are constantly searching for new partners in different work areas and on different levels.

In the search for new cooperation partners Company A try to benchmark the competition and they see no limitations to the form of cooperation. New cooperations can be alliances, subcontractor agreements and potential acquisitions. In some cases they searched for opportunities to develop new services, and in others to gain complements to existing activities. Although, one limitation the respondent emphasized was the geographic location of potential partners, they believed that being located in the same area is important for a successful relationship.

A couple of years ago, Company A took a strategic decision to start offering digital printing as a production technology to their customers, even though they did not choose to invest in the technology themselves. Instead they formed a strategic alliance with a smaller full service digital printing house. The idea behind this cooperation was, according to the respondent, to have a two-way alliance. Company A used this partner for digital printing, and the partner used Company A for conventional printing.

Company A's main reason for cooperating was to give their costumers access to a complete range of solutions, by extending their knowledge and resources into neighboring areas. These were both activities in the value chain of print media, but also complementary services such as e-documents. They found it important that the alliance partner complemented their business and had something that was highly valued by the customer, e.g. better price, performance, service or production, since the vision of Company A was to fulfill "all" their costumers' needs through a full service concept. They did not see in-industry companies as their only partners, but also creates tighter ties with important customers to develop new and accurate services. Through cooperation with costumers they believed that they developed accurate services for their customers. In some cases they even started cooperations with customers to create new offers with the intention to create future competitive advantages.

The respondent believed that cultural difference between companies can cause problems in alliances and should be considered when deciding on partners for cooperation. The actual size of the companies is also important, in larger companies it is easier to dedicate human resources to nurture the alliance. In smaller companies the focus is mainly on production. According to the respondent, another difference linked to both cultural traditions and company size, was how they look at cooperation with competitors. In the printing industry, direct control over resources has traditionally been seen as a competitive advantage.

Partners must agree upon what they want to accomplish together and why, and one of the most important things when Company A engages in an alliance is that there is *"a clear measurable value for all parts, otherwise the will to cooperate fades away fast"*. This value can be hard to distinguish in the beginning of a relationship, but by starting a cooperation loosely by trying to solve a common problem, the relationship can grow deeper over time. Regarding the time aspect, Company A always calculates that their major alliances will "last forever" and they try to dedicate human resources to ensure that the alliance survives.

Resources and Use of Resource

Company A believes that the future potential in conventional printing presses are limited, and that *"offset printing is very standardized [between different companies] and effective, which makes it hard to create any additional profits [using conventional printing]"*. Instead they feel that opportunities lie within digital printing. In general, making a resource unique in the printing industry today requires working with the parts that are not standardized, "*it is in the services that it is possible to differentiate [from the competitors]"*.

The focus of Company A is changing from production to services, which, in some cases, leads to cooperation around services instead of physical recourses. Cooperation around services is harder than around products and it is hard to change the scope of an alliance by e.g. lifting the cooperation from production to a development level. According to the respondent, Company A has not had any cooperation that started at a production level and then moved over to a service development level.

Relations and Agreements

The respondent suggests that when cooperating at a high level, like a two-way cooperation or cooperation in service development, the individuals involved in the cooperation becomes important. At that level it is necessary for the involved parts to have the same or similar way of thinking for the business to work. This is, however, less significant in a subcontractor relationship.

An offer proposal can be the first embryo of an alliance. If it works well and both parts are satisfied, it can lead to agreements of cooperation and in an extension it can lead to a joint business plan. A business plan, or some kind of agreement that describes how the cooperation should proceed is important. The respondent believed that it is important with some kind of management in detail, so both parts feel that they have control over the cooperation. *”You have to have a business jointly with your partner, were the goals are clear. With a ‘if you help me, I help you’-business plan, it is hard to build a lasting relationship”*. The further into the cooperation they get, the more important Company A believes that a written agreement is. Such a document should also describe how the cooperation, if it becomes necessary, will end.

Commitment, Trust and Risk

The respondent suggested that integration in an alliance is important. To create a tight connection between the partners in a cooperation, it is an advantage if the companies have employees physically working at the other company’s premises. Company A always wants to have a key-account manager in their cooperation, an employee who works at the other company. They believed that *“for a cooperation to last, you have to sit together and breathe the same air”*. The respondent emphasized the importance of having direct contact between employees on all levels in the companies in the alliance. Maintaining trust and commitment is important since there is a major economical risk involved in being part of an alliance since there could be economic consequences due to actions and decisions from others in the alliance.

Company A see cooperation very much like a marriage, trust becomes important and it is not possible to hide everything from your partners. *”It is like love and passion, you cannot have forced partnerships”*, and you have to work actively to maintain trust and commitment in the alliance. If one part is unfaithful, the trust declines fast. To maintain trust Company A will try to distribute almost all internal information, with the exception of purely strategic documents, to their alliance partners. This is, according to Company A, a major risk in cooperating, since it becomes harder to conceal strategic intent.

Company A believed that tensions in relationships tend to develop when the alliance becomes successful and one part increases sales due to resources or services that are controlled through the network. When this situation occurs it is possible that one part in the alliance will start to see the other as a competitor and instead procure the resources to the company. This is what the respondent pointed out to be the major risk in maintaining an alliance.

In Company A's case, judging from the respondents words, their cooperation regarding digital printing took an unexpected turn when they decided that they should invest in digital printing production equipment in one of their subsidiaries companies. The strategic decision to internally control the digital printing resource was a result of two major factors; lower printing cost and higher print quality, which made the resource attractive to own. This decision resulted in their alliance partner in digital printing to cancel any further cooperation between the two companies.

Company B

Company B is among the larger print- and communication companies in the graphic arts industry in Sweden. Historically their strategy has been growth by acquisitions of strong companies in the industry. They believed the competition in the printing industry to be hard and stated that *"if you are just selling print, you are one out of a hundred that bids on a job and the lowest price usually wins"*. Company B illustrated the changing industry environment by regarding their *"competitors to be something else today that they were 10-15 years ago. Back then you mentioned names of printing houses, but you don't any more. However, it is exciting to see the landscape [of competitors] change."*

To avoid price competition, Company B objective is to be a service provider in the graphic arts industry. *"If you can ally yourself with your customer and be their partner, it is possible to be a part of their development and understand their needs. Then a long-term relationship can be established."* According to the respondent, a majority of Customer B's end-customers are active within the manufacturing industry.

In a series of strategic decisions, Company B has integrated the complete value system of print and graphics production. They have also purchased and internally control both conventional and digital printing technologies. According to the respondent, this was necessary to gain competitive advantages as a provider of complete solutions and not only be a subcontractor on the market. Although they have this focus on the actual production resources they believe that customer contact is important and they try to directly contract end-customers. This makes it possible for them to offer a cost effective solution, even if they not always have the lowest production price.

Today Company B's major revenues come from conventional printing. However, they do feel that they have to change direction and focus more on building system solutions for their customers to be able to continue as an independent company. Company B's major sales efforts are, right now, concentrated on system solutions. This can e.g. be creation of systems for template based print production, where the customer can create original material and produce it at any printing house, not exclusively at Company B.

The respondent said that their business idea is to provide the end customers with all services connected to the production process, as long as the end-product is produced on paper or the Internet. A major difference between being a print provider and a systems solution provider, according to the respondent, is the time-to-decision, which is much longer when a customer is going to decide on purchasing a new system for creating (print) media. In contrast to buying print, these decisions often involve top level management. In some cases Company B has agreed to finance the development of some services and the business model has been in the form of “pay per use” of the service.

Company B stressed that they have changed how they approach their customers. Earlier they printed larger volumes, but lately they have changed their strategy and now they try to apply a more on-demand approach. Even though they feel that they do not really support their own printing business by sometimes recommending customers to print less or not to print at all, the respondent thought that this is a better strategy in the long run. According to the respondent their customers’ profit from smaller inventory and less discarded volumes using an on-demand approach. In some cases Company B has signed agreements with customers to make Company B the legal owner of the customers stock, and the customer is invoiced when material is ordered from the stock. This is, according to the respondent, an example of a win-win situation where customers reduced their costs for stock keeping and discard volumes and Company B gains control over handling, structuring and printing the customer’s information.

Ways to Cooperate

Company B has a strategy of integrating both knowledge and production resources to be able to handle their customers needs, their cooperation is not intended for complementary resources and knowledge. Company B emphasized the importance of close customer relations and even tries to create cooperation with some of their customers. They have, for example, purchased printing equipment in joint-ownership with a customer. However, they have also created alliances with companies that offer similar services and products to be able to utilize each others production capacity when needed. This involves mostly production resources such as printing and finishing. According to the respondent this type of cooperation requires that several companies are a part of the alliance since the lack of available resources is often a phenomenon that happens to many of the companies in the industry at the same time.

The geographic location of the alliance partners was less of a problem. Although, in some cases, especially when discussing digital printing and fast delivery times, the location is important since the alliance partner need to be close to the customers to make fast deliveries possible.

The respondent emphasized the importance of personal contact. Company B even terminated cooperation with one of their partners, when their contact moved to another company. Instead they started cooperation with this person's new employer. Even though the need to cooperate often comes from below in the organization, it is a management decision to decide upon alliance partners and secure the appropriate quality etc.

Resources and Use of Resource

The respondent believed that uniqueness is important in printing and the best way to create something that is perceived as unique is by customizing activities around their printing resources and create full service solutions for their customers. They want to *"find smart solutions together [with their customer], to produce e.g. personalized products"*. Controlling these strategic activities and also the resources they are based around are valuable according to the respondent. Cooperation in this area is not an alternative for Company B, and they either develop their activities in-house or procure and integrate them into their organization.

Company B was rather disappointed with the print quality that the digital printing presses produced and the quality of the actual presses. They first tried to utilize a depreciation time of five years, but now they feel they have to use a maximum of three years due to fast technological development.

The respondent felt that the use of personalized print is currently rather uncommon in Sweden, and that it is the customers' databases that are the largest obstacle for customers to start using variable data printing. Obsolete information and bad structure are, according to Company B's experience, quite common in customers' databases. This is the reason why Company B in many of their complete solutions for customers take control and handle the customer's databases as a part of the service.

Direct Control over Resources

Company B wants to do *"the majority of the added value in-house, but it is not sure that this is the case in five, or even in three years. It is possible that we [in the future] will use subcontractors to a larger extent, depending on how the market develops. Anyway, we will always have the ambition to work closely with the customer and, with the use of service solutions, be the one with customer contact."*

As mentioned, Company B, stated that they have focused on creating services in connection to graphic production, which makes it possible for customers to choose different print providers. Company B currently owns their own printing equipment and they do not, however, think that this behavior will have a negative effect on their print production, since they believe customers to be unstructured in the way they work and therefore rather choose full service concepts. Having printing resources, both conventional and digital, is seen, by the respondent, as an important issue if competitive advantages in the printing market is desired. They believed it to be a trust issue, since they do feel that it is hard to hand over the responsibility for printing to alliance partners. *"As long as real people are our customers, they will be rather unstructured and this means that there will be no time to use partners."*

Discussion

This paper provides two examples of how strategic alliances are used in the printing industry to create competitive advantage for its actors. The case companies were chosen for their obvious similarities, such as size and company structure. However, during the study more similarities became clear such as strategic goals, how they handle the market and to some extent how they are positioning for the future. Even though these similarities, the way they internally and externally are strategically structuring to meet future demands are to some extent different. In this chapter these differences in handling and utilizing alliances will be discussed.

According to theory, alliances are created when the actors believe that they can get an added value by being a part of the alliance (e.g. Faulkner, 1995; Gulati et al., 2000; Jarillo, 1988). This is also the case for the investigated companies in this study, as they believe that by cooperating and engaging in different types of alliances, they can achieve a better result than working on their own. It should be noted that even though the cooperations illustrated in this paper have different purposes, both companies have retained contact with their customers.

It was the intention to enhance customer satisfaction that convinced them to engage in alliances. Either by extending their business to offer a wider array of complete services (Company A), or by being able to ensure additional capacity, whenever needed, of resources already present in the company (Company B). The main reason for cooperation, in both cases, was gaining access to different kind resources.

The case companies believe that they can perform better on the market by utilizing alliances (cf. Rothaermel, 2001). When analyzing how the case companies structure their businesses, their vision for success is consistent with the findings of Rothaermel et al. (2006), as they are combining vertical integration with various kinds of cooperations. Vertical integration in the digital printing industry has been deemed as an important success factor in earlier research (Mejtoft, 2006).

The major difference between the cooperations of Company A and Company B can partly be described by the degree of dependence between the companies and their partners. Company B has digital printing equipment, but also cooperations that ensure them (and their partners) additional production capacity whenever needed. Since they have digital printing in-house, they are not totally dependent on their cooperations to ensure delivery to their customers. Company A, on the other hand, was more dependent on their cooperation in digital printing than Company B, as they have developed services for their partners printing equipment. The results also confirm this difference in dependence since Company A more clearly states the importance of long-term trust and commitment in the alliances (e.g. Jarillo, 1988; Medcof, 1997; Morgan & Hunt, 1994; Ring & van de Ven, 1992). According to the respondents, trust and commitment are closely related to the employees involved in the alliance (Child et al., 2005).

In accordance with the literature (Faulkner, 1995; Whipple & Frankel, 2000), the respondents thought that the corporate culture and the size of the companies in an alliance was important. One of the respondents stressed the differences when working with companies of significantly smaller size. Larger companies often regard a situation with different perspectives of e.g. how investments should me made, agreements when cooperating and demands from owners. Nevertheless, the company might be, in some cases, less important than personal chemistry. This was exemplified by both companies, as they stated that, in many cases, the actual persons are more important than the company behind.

It should be noted that the need for dedicating human resources (Child et al., 2005) may increase in importance, the more strategic the alliance becomes. As mentioned earlier, Company A decided to use alliances to gain access to new resources and knowledge. It was also this company that stresses the importance of dedicating human resources to nurture alliances, and that information is important to maintain trust and consequently commitment in the alliance.

When acting in a dynamic market a company always takes risks, this is also the case when cooperating with others (e.g. Jarillo, 1988; Morgan & Hunt, 1994; Ring & van de Ven, 1992). In the cases illustrated in this paper, the risk-taking between the companies is different. Company A has chosen to have more strategic alliances which imply that the risk is more focused to the actual alliance. On the other hand, Company B has the knowledge and basis for their production of digital printing in-house. This concentrates the main risk inside the company and not in the alliance.

The level of risk in these cases are different, and so are the ways they try to handle it. Company A focused a lot of effort on creating trust and commitment in their alliances. This is done both by dedicating human resources and by formal agreements between the partners. To lower the risk in an alliance the respondent always tries to formulate their intention in written agreements between the different parts. The agreements should cover all aspects of the cooperation, especially the economic issues, and even include how the partnership should be ended if one part wants to contract out of the alliance.

Company B on the other hand has strategically chosen to limit their capacity of e.g. production equipment to a reasonable capacity, and cooperate to increase this capacity when needed. This limits the risk in ownership. Theoretically it should be easier to cooperate to gain access to new resources when the resources are plentiful in supply. This is the case in the printing industry, which, in this case, limits the risk for Company A.

Even though cooperation with other companies that can provide resources for production and render it possible to enhance customer satisfaction, both companies in this study emphasis the importance of cooperations with customers. Working close to lead-users is a way for these companies to try to predict future customer value (D'Aveni, 1994; Thomke & von Hippel, 2002; von Hippel, 1986).

Hypercompetitive Behavior and Alliances

As has been discussed in the theoretical framework, many external conditions that Faulkner (1995) deems important for alliances to be formed touch upon those of a highly dynamic environment (Bourgeois & Eisenhardt, 1988; D'Aveni, 1994), e.g. turbulence in markets, fast technological development and short product life-cycles. Both companies tend to work in a hypercompetitive manor, since they are striving to work broader then just the printing sector and thereby change the rules of competition in the industry by for example offering non-printed solutions to their customers. Further on, they are focused on always maintaining customer contact and trying to deliver a high customer value by working close to their customers. However, one major difference between the two is their approach to printing sector.

Although Company A and B are quite similar, their strategic directions with respect to printing resources do diverge. While Company B believes that the actual control over the printing resources are crucial for their future survival, Company A has deemed the future to be in providing services where the actual output can be indirectly controlled through alliances in order to move more quickly between different services. Consequently, the vision of Company B is clearer set on outputs that can be produced in the traditional printing industry and preferably at the companies own production facilities. Company A on the other hand has set a more customer centric focus, which, according to the respondent, might lead the company to exit the traditional printing industry in the future. Although Company B has a more traditional vision, they emphasize the importance of long-term cooperation with their customers, which, according to respondent, might lead them to revaluate their strategic path in the future depending on customers needs.

Introducing a hypercompetitive-like behavior often means accelerating the competition in the industry and moving the industry into, what D'Aveni (1994) notes as, a hypercompetitive state. The degree of hypercompetition and its existence in different industries has been discussed and there are empirical data that both support (e.g. D'Aveni, 1999; Thomas, 1996; Wiggins & Ruefli, 2002) and give reasons to question (e.g. Gimeno & Woo, 1996; Makadok, 1998; McNamara et al., 2003) the shift to a hypercompetitive state. Previous research (Mejtoft, 2007) suggests that some companies in the printing industry tend to work according to the principles stated by D'Aveni (1995) to handle a hypercompetitive market. If this is the general case in the printing industry is still left to investigate. Nevertheless, the competition in cost/price and quality is hard (Birkenshaw, 2004; Smyth, 2006) and it can be noted that a transition into service oriented companies, by integration, is taking place (Mejtoft, 2006).

Having dynamic capabilities is important when acting in a hypercompetitive environment (Teece et al., 1997). In the case of Company A, alliances created an opportunity to act more hypercompetitively by offering them the ability to move faster to market, maintaining customer contact and gaining control of resources and knowledge without direct ownership of digital printing equipment. This is consistent with the findings of Lee (2007), that suggests that alliances might decrease the time to market. This makes it possible to better catch the opportunities of the market. However it was the recent strategic decision by Company A to purchase digital printing equipment that had negative effects on cooperation. Having direct control is quite a traditional way of working in the printing industry, and basically it is a step "backwards" to a more static way of competing that often made cooperation end in dissolution. Nevertheless, owning digital printing equipment became a great opportunity for Company A, when the value creation zone changed (Collis & Montgomery, 1995; 2005). Even though scarcity of digital printing has decreased due to more companies acquiring the technology, appropriability and demand increased for Company A (Figure 2). Appropriability mainly owing to decreased costs from the printing press manufacturers and demand due to applications and smart solutions developed during cooperation.

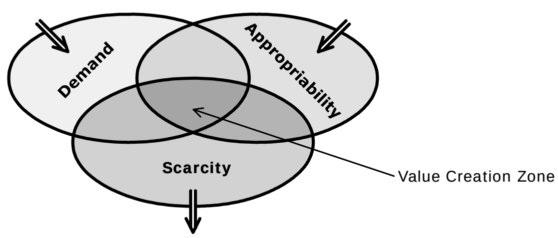

Figure 2. Changes of the value creation zone of digital printing Company A (After Collis & Montgomery, 1995, p. 120).

Even though purchasing the digital printing equipment, in this case, can be seen as a less dynamic way of competing, it may also be regarded as opportunistic behavior by Company A, which leads trust to fail and commitment to the alliance to decline. Although not purposely, this behavior leads the alliance to fail, which is consistent with the findings of Gulati et al. (2000), that suggest that a more opportunistic behavior on the market reduces the ability to maintain successful alliances. In other words, Company A used the alliance to learn from the partner, a so-called learning race (Gulati et al., 2000; Jarillo, 1988).

This situation is consistent with the findings of Bleeke & Ernst (1995), that suggest that an alliance that consists of equally strong companies with complementary resources is the type of alliance most probable to be successful. However, when Company A procured digital printing equipment the status quo shifted and became an alliance between competitors (e.g. Hamel, 1991), which is an alliance likely to end in dissolution (Bleeke & Ernst, 1995).

Due to the fast technological development of e.g. electronic publishing and the convergence of the media industry, the competition in the printing industry has become harder and is not only in-industry competition any longer. These industry changes have put pressure on individual companies and the need for a wider selection of services and products is evident. This has created a need for integrating additional activities in the value system, which has been identified as important in the digital printing industry (Mejtoft, 2006). This paper illustrates that strategic alliances can, in many cases, offer the means to obtain the advantages of vertical integration without the need of investing in development, resources and competence (Jarillo, 1993).

Conclusions

The case companies' primary reason to cooperate was to gain access to resources that could enhance customer satisfaction and to retain customer contact, which is important to be competitive in a dynamic business environment. This paper illustrates that strategic alliances and cooperations can be used in different ways and being part of an alliance can be regarded as successful and something worth nurturing. However, the more strategic an alliance becomes, the more important factors as trust, commitment and human resources become for the success of the alliance.

Creating cooperations that aim towards ensuring additional capacity is important in an industry, such as the printing industry, that is still largely focused on production. However, as the case companies illustrate, cooperating to gain indirect control over a partners resources is a way of being able to serve customers and to explore new business areas.

Hypercompetitive behavior, like being to opportunistic, clearly can have drastic negative effects on an alliance. Even though alliances can be an enabler to ensure working faster and more dynamic in the first place. This was illustrated by Company A, as they, during the phase of expansion in the digital printing business, cooperated in the areas of competence and physical resources to expand their business. When the opportunity availed it self to profit from the actual production and not only the services, they chose to purchase their own equipment. Utilizing alliances in this manor made it possible to act more dynamically and quicker on the market but also resulted in the failure of the alliance.

The competitive situation in the industry has made it important to offer full service solutions to customers including digital and conventional printing as well as complementary services in the value chain and additional services such as Internet solutions. Strategic alliances can offer the means to obtain advantages of a vertically integrated company without the need of investing in additional resources and competence, and the risk associated with such a strategy.

Further Research

The participating companies in this case study are two large graphic arts companies in Sweden. By studying these companies it has been possible to gain knowledge about how alliances are used in the dynamic business environment of the printing industry. However, the majority of printing houses in Sweden are small and medium sized companies. Even though the competitive situation for these companies is quite similar, since they are acting on the same market, their approach to cooperation and alliance may differ. Thus, a continuation of the investigation of the importance of alliances in the printing industry should include and focus on small and medium sized printing houses.

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