

Aalborg Universitet

Networking as a strategy for innovation and marketing

Rasmussen, Erik Stavnsager; Jørgensen, Jacob Høj; Goduscheit, René Chester; Bergenholtz, Carsten

Publication date: 2007

Document Version Publisher's PDF, also known as Version of record

Link to publication from Aalborg University

Citation for published version (APA): Rasmussen, E. S., Jørgensen, J. H., Goduscheit, R. C., & Bergenholtz, C. (2007). Networking as a strategy for innovation and marketing. Paper presented at IMP Journal seminar 2007: Networking as a strategy for innovation and marketing, Trondheim, Norway.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- ? Users may download and print one copy of any publication from the public portal for the purpose of private study or research. ? You may not further distribute the material or use it for any profit-making activity or commercial gain ? You may freely distribute the URL identifying the publication in the public portal ?

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

IMP Journal seminar 2007

Networking as a strategy for innovation and marketing - <u>a paper proposal for the IMP journal</u> -

Erik S. Rasmussen
University of Southern Denmark
Department of Marketing and Management
Campusvej 55
DK 5230 Odense M
Denmark
era@sam.sdu.dk

+45 6550 3370

Jacob Høj Jørgensen René Chester Goduscheit, Carsten Bergenholz

All:

Aalborg University, Center for Industrial Production Fibigerstræde 16 DK 9220 Aalborg SV, Denmark,

0. Abstract

Through two in-depth case studies we intend to show in this paper, that innovation, marketing, the search for new business opportunities are interlinked in what could be labeled as networking as strategy. But being entrepreneurial, innovative and searching for new business models is a quite difficult task for these two firms who are used to operate in a stable environment with incremental product development. It was evident for both firms in the case studies that access to information and new business was crucial in the process and could only be obtained by seeking new partners. Relation building to new partners became an important part of the process and the classical themes — trust and control — became major issues for both firms.

1. Introduction

The classical IMP approach, as described in e.g. (Ford 1997; Ford et al. 1998; Gemünden 1997; Gemünden, Ritter, & Walter 1997; Håkansson 1982; Medlin 2004; Turnbull, Ford, & Cunningham 1996) has naturally had its focus on marketing and purchasing and to some extend on management but only in few cases has it encompassed themes like innovation and entrepreneurial behavior in and between organizations. But as e.g. Peter Drucker expresses it, marketing, entrepreneurship and innovation are just different words for the same activities in an organization. To this could be added the concept of networking as yet another word for these activities. Whether we use the concepts marketing, entrepreneurship, innovation, or networking it all has to do with the type of activities that makes it possible for a firm to bring new products and services to the market and makes them able to be seen in the market.

As it is argued in (Gressetvold & Torvatn 2006) innovation is a part of the focal activities of all firms, not just high-tech or bio-tech firms. Every firm has to renew its offering, whether it is a product or a service, on a regular basis. Innovative activities must thus be seen as just a natural part of a firm's internal and external activities as sale, marketing and procurement; see e.g. (Allio 2005; Berthon, Hulbert, & Pitt 1999; Bessant & Caffyn 1997; Burns & Stalker 1994; Chesbrough 2004; Christensen, Anthony, & Roth 2004; Drucker 1985; Drucker 1998; Freeman 1991; Håkansson & Eriksson 1993; Hargadon 2003; Haryson 1997; Johnsen & Ford 2000; Markides & Geroski 2005; McMeekin et al. 2002; Ritter & Gemünden 2003; Von Hippel 1988). Our theoretical and analytical point of departure is thus that innovation (and other entrepreneurial activities) must be seen as a day-to-day networking activity just as marketing/sale and purchasing. In fact, as we intend to show

in the analysis of two of our case studies, innovation is very tightly linked to marketing and purchasing activities. In practice, it can thus be difficult for especially smaller firms to separate e.g. innovative and marketing actions.

In this paper we intend to discuss the conceptual foundations of the way firms can manage innovative and entrepreneurial processes through a number of external networks. We intend to discuss how these firms can use the same networks for marketing (and in some cases for purchasing). This discussion will be supplemented with examples from a number of case studies in Denmark, smaller or larger firms that have worked over a longer interval of time with innovation in networks as a major strategy. We intend to focus especially on two firms from which we have rich information obtained through several meetings, interviews, observations etc. extending over more than a year¹.

2. Innovation and networks

As a starting point it is necessary to define what is understood by innovation in networks. One way to do this could be to use the definition by Regis Cabral as a foundation, see e.g. (Cabral 1998; Cabral 2003), too:

"Innovation is a new element introduced in the network which changes, even if momentarily, the costs of transactions between at least two actors, elements or nodes, in the network." (Cabral 2004)

The advantage of this definition is that it clearly links the two concepts innovation and networks. To put it in another way; innovation, seen from this point of view, is networking activities per se as interorganizational networks are the locus of much innovation. The fluid and evolving nature of the network has thus a tendency of enhancing the innovativeness of the partners involved (Powell et al. 1996). One of the problems with the usage of the terms network and networking is though, that the understanding and definition of the term networks and networking differ between researchers. Ritter et al. (2003) describe e.g. different sorts of links between organizations as one point of view:

Interactions/episodes: A single exchange or incident between two organizations **Relationships**: An aggregate of episodes or interactions between two organizations.

_

¹ The empirical research has taken place in the project NEWGIBM; New Global ICT based Business Models supported by the Danish Ministry of Science and Higher Education. For more information see www.newgibm.dk

Networks: The entire web of relationships that an organization is engaged in with other organizations (and the web of relationships of these organizations)

By this definition of networks, Ritter et al. have a rather narrow understanding of the term: One can only speak of a network when a number of established relationships are involved in a web between the organizations. This narrow understanding of networks as a composition of relationships is challenged by more broad understandings of networks as consisting of information flows between organizations, as in e.g. (Braha & Bar-Yam 2005), and not necessarily long-term relationships between the organizations.

Thus, the understanding of interorganizational networks and collaboration is by no means monolithic: It differs between the different researchers of the network phenomena. The extended definition of an interorganizational network will form the basis for our research model that will be used to set up a framework for the research process as we intend to present in the final paper.

3. Innovation, entrepreneurship and networks

Amongst others Peter Drucker, see e.g. (Drucker 1985; Drucker 1998), sees innovation and entrepreneurship as two sides of the same coin. Innovation is the tool by which entrepreneurial oriented firms can change the business model of the firm making it possible to develop a different product or service. Entrepreneurship is thus a part of the change activities of all firms – activities that include marketing (and purchasing), too. Entrepreneurship and innovation seen in this way is just two concepts for the same activity. This type of activity is taking place as a networking process in the firm and external related to firms and other actors. Marketing (and to some extend purchasing) can from this point of view be seen as a specialized part of the networking activity.

This means that different types of activities in the firm such as innovation, seeking new market opportunities, searching for new suppliers, etc. must be seen as part of an overall strategy that could be labeled 'networking'. In this vein we prefer to use the term innovation instead of product development, which in our research setting must be seen as a rather limited activity connected only with the design of new products and not with e.g. a new business model connected to a new product or service.

In the same way, entrepreneurship seen from our point of view is not the same as the founding of a new firm. Instead it must be seen as a much broader concept linked to the emergence of a new business model – in a new firm or in an old one. Entrepreneurship is thus, as mentioned earlier, a concept linked to the change of all types of activities in the firm, typically resulting in a new market position for the firm – or a new firm. Innovation is a part of this entrepreneurial process, meaning the tool by which the entrepreneurial firm can change its business model. This can imply a change in products, the emergence of new products, the offering of a new service concept for the market, etc.

Seen from the above mentioned point of view, marketing seen as part of a firms strategy is a crucial part of the innovative activities of a firm. Through the strategic marketing the firm is able to establish itself in a new position in the market e.g. by building relations to a new segment of customers or by developing a new offer for its existing customers.

4. Networking as a strategy

As discussed in the previous paragraphs networking is not just a method by which a firm can gain access to e.g. new customers (often to create benefits of scale in sale and purchasing for the smaller firms) but also a way to get access to new entrepreneurial or innovative opportunities; see e.g. (Mønsted 2007). Innovation is typically uncertain and even for larger firms this uncertainty has to be reduced by e.g. sharing knowledge and expenses with other firms or by securing relations to customers before the innovation is finished. In both examples it is necessary for the firm to see networking as a strategy. Innovative processes are characterized by a high level of uncertainty and complexity which, seen from the manager's point of view, has to be reduced in some way.

Strategic networks for innovation can be seen as a technique to get access to valuable information and as a way to share expenses with external partners, but also as a way to give legitimacy to e.g. an innovative project from external experts or recognized peers, see e.g. (Johannisson & Mønsted 1997; Mønsted 2007). If this is the case it is almost impossible to understand what is happening in these firms without an analysis of the relations and networks in which they are active. The network infrastructure is typically rather complex and often non-traditional organization models are used to make the networking activities possible; see e.g. (Child & McGrath 2001; Contractor & Lorange 2002; Heydebrand 1989; Ilinitch, D'Aveni, & Lewin 1996; Volberda 1996).

One of the key issues in networking as a strategic process is the dichotomy of the process. On one hand the network has to be accessible and open to some extent in order to make it possible to add new actors with the right competences and resources. On the other hand the processes in the network have to be controlled to avoid misuse of information and to avoid waste of resources. Control can be obtained in a formal way e.g. with the use of contracts or in a more informal one by establishing a culture that builds on trust between the partners. Networks can not be seen from a purely economic point of view but also as a cultural frame with trust as one of the key issues, see e.g. (Granovetter 1992; Granovetter & Swedberg 1992).

5. Analytical frame for the case studies

To be able to analyze the case studies it is necessary to present a research model that can sum up the different theoretical research traditions presented in the first part of the paper. Networking as a strategy for a firm will be seen as the overall concept encompassing all types of activities in a firm related to the search for new business opportunities, new customers and markets, innovative processes, etc. Entrepreneurship – or to be more precise entrepreneurial orientation as in (Covin & Slevin 1988; Covin & Slevin 1991; Covin & Slevin 1989) – will be seen as the propensity of a firm to search for new business opportunities, especially new business models. Innovation, as described in the previous parts of the paper, is an activity which from our point of view is the tool used by entrepreneurial oriented firms and not the same as product development. Marketing seen as a strategic task (and to some extent purchasing) is in the same vein a search for new market opportunities and not the same as sales activities.

Figure 1: Analytical model

| NETWORKING as a strategy | | | | |
|--|-----------------------|---------------------|-----------------------|--|
| ACTIVITES that are part of the networking strategy | | | | |
| (Purchasing) | Marketing | Innovation | Entrepreneurship | |
| | | | (new business models) | |
| THEMES relevant to all activities | | | | |
| Trust | Access to information | Opportunity seeking | Control | |
| | | | | |

Associated with these networking activities we find some principal themes as trust building between partners, the stride for getting access to information, opportunity seeking, and not at least how to control the networking process and the network partners and activities. This can be outlined as done in Figure 1.

In the next parts of the paper the two case studies will be presented and analyzed in accordance with this analytical model.

6. The first case study – K

The firm in this case study is, of course, disguised and it will be referred to as K. We intend to give a short presentation of the firm, its new business model and the development of this model during 2006. K is a Danish IT company, which provides solutions for public and private companies. It only provides IT to Danish companies. The solutions range from operation systems for public organizations to ERP solutions for large private companies. For the last few years a part of the strategy of the company has been to increase the customer scope to include the energy supply sector. As of ultimo 2005, the energy division has an annual turnover of 13 m€and 65-70 employees (out of totals of 400 m€and 2,800 for the entire company). As a point of departure K was operating in the B2B market. However, since 2001 it has been part of a consortium providing a one-stop electronic mailbox for Danish citizens. In 2006 the number of users for this solution is approximately 400,000.

The business model of K was based on the vision of merging its resources within the energy sector (as a provider of solutions for the energy supply sector) and its proximity to a large number of private households through the one-stop electronic mailbox. The use of the electronic platform of the electronic mailbox would ensure the initial penetration on the consumer market. The business model for K is to achieve ownership of the energy information of the consumer market. This processing and sale of the data is regarded as essential in a future where energy consumption should be reduced and valid estimation of the energy consumption and distribution will be high on the agenda.

The new network started in December 2005 at a meeting between two representatives of K and two academic researchers. K representatives presented their visions within utility solutions. The initial thought was to provide the consumer market with solutions, which could help the Danish consum-

ers to survey and control their energy consumption. However, it was clear for K that in order to reach a wider range of private energy end-users, they had to collaborate with other organizations. The K representatives agreed on trying to set-up a network of organizations with a view to develop utility solutions for private customers.

Through the next few months after the initial meeting, K in collaboration with the research group contacted and visited potential partners for the network. In March 2006, the entire network met for the first time. The place for the meeting was the conference rooms of K. The participating organizations were K, two utility providers, a software developer, a telecommunication company and a provider of specific devices for energy consumption in households. The meeting was set-up as a brainstorming seminar, in which all the participants could give their input about potential intelligent utility solutions. The next meeting was carried out in August 2006. In October 2006, K and four utility providers (out of which one organization participated at both meetings mentioned above) joined forces in developing a solution for the customers of the utility provider customers. The solution will be based on an internet IT portal, which K currently employs for the end-users within other areas than the utility sector.

The final solution for K is thus a program developed in close collaboration with one of its existing customers in the energy sector. This solution is not at all as ambitious as the ideas presented in the end of 2005 and in the beginning of 2006 and is more a software solution with a customer database than an intelligent utility solution.

7. The second case study – T Data

The firm in this case study will be referred to as T and T Data for its subsidiary. We intend to give a short presentation of the firm, its new business model and the development of this model during 2006 and the beginning of 2007. The focus of T Group is complete industrial automation solutions. These include the production of control panels and electrical switchboards, the development of software for control, adjustment and monitoring systems, the development of PC software for industrial IT applications, and the development and production of control electronics. The solutions are developed in close collaboration with the individual customer, with the prime focus on special assignments and solutions relating to the electronic control of mission-critical industrial processes, individually tailored to suit customers and to meet specific requirements effectively. T is organized

as a holding company with six subsidiaries, one of these – an IT provider – is the company in focus in the case study.

As the products of the T group are quite complex, tailor-made for each customer, and typically involve a large number of elements and a large number of sub-suppliers the need for coordination is extremely high. The optimizing of these complex sales and production processes has thus led to the design of a portal solution by the subsidiary – T Data – approximately 5 years ago. This solution has primarily been used by T itself and some of its major customers for collaboration in larger projects. A few copies of the project portal have been sold to other firms than T and are still in use by these firms. The need for a new portal that is more flexible and which can include other types of information than documents as telephone, video, etc. has been evident for the last two years. T data therefore initiated the development of a new portal in the end of 2005. Soon it became clear that the development of the portal and the continued improvement of it would be too expensive for T if the company were the only one to use it. Therefore T data had to think of a solution which could be sold in a larger market. This implied considerations regarding service of the portal, marketing, sales, and other issues too which the firm had not needed to take into consideration before.

It was the intention of T Data to program the portal all the way through as they did with the old one. Programming is quite expensive in Denmark and to keep expenses low T Data got in contact with a Danish firm – A – with expertise in outsourcing of IT programming. During the spring and summer of 2006 the two companies T Data and A worked together on the programming with A as a subcontractor for T Data. During this process it became clear that T Data and the other T companies did not have the necessary competences needed for marketing and sales of a software product all over Europe. Increasingly A thus became a partner with expertise in sales and marketing supplementing the competences of T Data. During the autumn of 2006 it became obvious that the programming of the new portal used too many resources and didn't lead to the expected results. In a meeting between A, T Data and the researchers, representatives from A therefore suggested stopping the development of the new portal (which up to this point had been very expensive) and instead to build on an existing solution as e.g. Microsoft Share Point. Together with this A had a proposal for the marketing of the portal including name, design, prices, marketing channels, etc. T Data did not accept these proposals as they would like to have a finished software program with several tests before any sales efforts were launched.

During the next months the programming of the new portal took place building upon a Share Point 2007 solution, but it did not reach a level that could be launched in the market. In February 2007 the managing director of T stopped the project and the manager of T Data decided to leave the firm as soon as possible. The manager of T Data was allowed to take the remaining parts of the project with him but to pay for the expenses of T if it became a success.

8. Analysis of the case studies

In both cases we find quite large and well-established firms with a strong ambition towards the search for new business opportunities which are not directly in line with their core activity and core competence. Each firm can thus be said to have an initial strong entrepreneurial orientation leading them towards innovation and new markets. The first phase in the development projects can thus be said to be the initial entrepreneurial orientation of the overall management of the firm. In accordance with the research model in Figure 1 this phase can thus be seen as the decision of the firm to actively search for new business opportunities through networking.

When the initial decision has been taken (typically by the general management of the firm as we see in these two case studies as well as other cases) the search for new business opportunities starts. This is primarily done by looking at existing business models and evaluating these with information from outside the firm. Very often this implies an innovative brain-storm process with questions like: Could we move this business activity to this area instead? Or, the market is looking for this or that kind of business or service, are we able to provide it by 'twisting' our existing business in this direction? A typical activity in this phase is taking part in a 'Blue Ocean' workshop.

In the third phase we typically see a split in the activities as indicated in Figure 1. The firm is still looking for new business opportunities often combined with a search for new markets but the innovative activities become increasingly more important. This implies that the firm tries to develop its existing business offerings toward the new opportunities that have been identified. In both case studies this is done by starting a process of developing new software from the existing programs. The new business model is now typically described in a short presentation with a few keywords that promise several features that are not developed yet. At this time the project will normally have been given a name expressed in one or two words that promise some new features. At the same time it

becomes obvious for the focal firm and the manager in charge, that the firm lacks some competences before it is able to develop the new business model identified earlier. The management and persons involved thus start a search for partners with the necessary competences.

In the fourth phase possible new partners have been identified and contact has been established. In this phase relation building is in focus, e.g. through several meetings, joint projects, or even social arrangements. At the same time the focal firm and its manager evaluate the new partners and discuss internally whether these partners are the most suited for the task or if new partners should be contacted. During this relation building phase the partners will be allowed to be more and more involved in the project and as we see in the case T Data the partner can even at this step of the process change the direction of the project totally. During the process it becomes evident for the focal firm and the partners if the new business model is feasible and some partners will have to leave the project. The role of a partner can even change during this phase as we see in both cases. Trust and control are the two major themes in this phase for the focal firm and for the partners, too.

In the last phase the new business model has to be evaluated in accordance with the initial decisions of the firm to invest in the search for new business opportunities and in accordance with the market opportunities identified. In both cases the final business model has changed a lot during the process. For firm K the new program is developed in close collaboration with one customer and it is much less ambitious than the initial presentation indicated. For firm T the idea of entering the software market with a portal solution has been abandoned with a loss of several million D.kr.

Figure 2: The five phases of networking

| Case K | Case T and T Data | | |
|--|--|--|--|
| First phase: The initial entrepreneurial orientation of the management | | | |
| Before initiating the project in focus in a section of K, the | It has been very difficult for T to expand its activities to | | |
| board of directors had drawn up a vision paper of K that | new types of business and the CEO (and major stock- | | |
| should lead to a more innovative and opportunity seeking | holder) had therefore been looking for new business op- | | |
| firm. The manager of the section of K in focus had thus | portunities away from its core business. The portal solu- | | |
| an acceptance from the overall management before he | tion had shown to be a new business area for T with a | | |
| launched the project. | promising potential. The manager of T Data was thus | | |
| | allowed to start the project with a large investment in | | |
| | programming and development. | | |

Second phase: Searching for new business opportunities

The new project in the focal department of K identified the new business opportunity by attending seminars, work-shops, brain-storming sessions, etc. This raised the idea in the department that its existing programs to industrial consumers could be changed into more intelligent programs aimed at private consumers.

The program from T data had been developed into a portal solution which was able to support a large number of activities and documents between T, its customers, and its suppliers. This portal was sold to a few companies that were not customers at T. These contacts together with the need for a new portal solution inside T initiated the development of a new portal.

Third phase: On the lookout for new partners

It was obvious for K that if they should be able to develop an intelligent utility solution for use in private homes they needed a lot of information from other types of firms than the ones the usual had relation to. They initiated thus several meeting with firms from both the energy sector and other types of firms, like insurance, social security, and electronics for households.

During the development of the new portal it became clear for T Data that they had to keep expenses down by outsourcing as mush of the programming as possible. This was done by using a Danish firm and its relations to programmers in e.g. Pakistan. The relation to A though developed into more than outsourcing and A became the major partner on the marketing and sales side.

Fourth phase: Relation building

After several meetings with a lot of different firms K had to focus its efforts on the relation building to a few central partners. The problem was that several of the possible partners found it extremely difficult to see any business model for them in the project.

The relation to A became very tight with meetings at least one time a week and T Data had increasingly to rely on the evaluations of A. When the managing director of A told T that the solution, they had worked on for a year, would not be feasible, the manager of T Data accepted it after a few days consideration.

Fifth phase: A new business model or back to core business?

In the end of the relation building phase K had to realize that it could not establish close relations to a large number of firms and initiate the new project in this network. Instead they had to focus on one firm in the energy sector and to develop a much less ambitious solution than the one intended.

The project had to change its course totally and the manager of T Data thus had to tell the CEO of T that all the money used on programming the portal had been wasted. During the next four months T Data had to prove that they could build a new portal on a Share Point solution but they were not able to convince the CEO and the project was called of.

As it can be seen from this analysis and from the case descriptions the first reasoning behind the networking strategy is how to find new opportunities. Both K and T are <u>not</u> firms that are volatile and actively engaged in new business activities. They could instead be characterized as stable firms with a large number of customers that bye the same product almost year after year. They are used to operate in a stable environment but with a lot of technological development. For both firms it was

thus quite new to search for new market opportunities instead of focusing on incremental technological development as they were used to. During this search process it became evident for both firms that access to information from the market was crucial for the development of a new business model.

Two themes can be seen clearly in the relation building – or networking phases – other than two previously mentioned; Trust and control. Trust building to a large number of potential partners was a key issue for K during the meetings and talks with other firms. But at the same time it was essential for K not to give up control of the project and the final solution. It was thus extremely difficult for the potential partners to see any business opportunity in the project when K intended to be in charge of the project. Seen from the researchers' side of desk at the meetings with K and partners it was obvious that the partners to a large extent did not trust K. The meetings were highly controlled by K and the partners commented on the suggestions and proposals from K, but were in no way engaged in the development of the project.

In the case of T Data trust between the supplier A and T Data did slowly evolve into a more close relation and eventually to a partnership where both partners had to trust each other to be able to finish the project. Clearly A came more and more in control of the project to an extent where they practically took the decision to stop the programming of a new portal.

9. Conclusion

One of the major conclusions from the analyses in this paper is that a firm's networks; internal and external, for marketing, entrepreneurial activities (new business models), innovation (and to some extend purchasing) can only to some extent be separated in a meaningful way; neither in theory nor empirical. But even if all these networking activities are mixed up to form a complicated picture it is clear that the ambition of seeking new business opportunities comes first. The first step in the search for new business is to realize that the firm has to be oriented towards entrepreneurship. This is typically done – as we can see in the two case studies and in several others of our cases – through networking activities. The networks give access to information for the firms and make it possible for them to see their existing resources and competences in a new light. Networking can thus be seen as a new way of seeking opportunities in the market combined with the innovation of existing products and services.

To seek new business models for the firm is thus done by a combination of seeking new market opportunities and innovation. Networking is not just finding a new partner for marketing, purchasing or innovation but is a strategy by which firms pursue new business opportunities. This is done in a combination of finding new markets or new partners in the market, being innovative finding new products/services or new ways of using the existing products/services, and searching for new business models.

As it can be seen from the two case studies networking as a strategy is quite a complex task for many firms, and maybe especially for firms like K and T that are used to stable markets and a few, tight relations to its partners. It can be extremely difficult for this type of firm to accept the insecurity in a process where you search for new partners, new business models, new markets, and maybe new sub-suppliers. Strategy for these firms is typically the same as a thorough plan with a lot of details, milestones, etc. and not the same as opportunity seeking in a direction you don't know. For both K and T the original intention of the project was not in any way fulfilled at the time of this paper. Maybe the projects in the end will be a success, but the ambitions of both firms have not been reached.

One conclusion to be drawn from the two case studies is thus, that if a firm is not used to use networking as a strategy the managers will not beforehand realize the amount of work and problems involved in the network building. It is quite difficult for a well-established firm to change its way of strategizing from planning to seek opportunities and new business models in the market.

References

Allio, R. J. 2005, "Interview with Henry Chesbrough: Innovating Innovation", *Strategy & Leadership*, vol. 33, no. 1, pp. 19-24.

Berthon, P., Hulbert, J. M., & Pitt, L. F. 1999, "To serve or create? Strategic orientations toward customers and innovation", *California management ement review*, vol. 42, no. 1, pp. 37-58.

Bessant, J. & Caffyn, S. 1997, "High-involvement innovation through continuous improvement", *International Journal of Technology Management*, vol. 14, no. 1, pp. 7-28.

Braha, D. & Bar-Yam, Y. 2005, "Information Flow Structure in Large-Scale Product Development Organizational Networks," in *Smart Business Networks*, P. Vervest et al., eds., Springer, Berlin, pp. 105-125.

Burns, T. & Stalker, G. M. 1994, The Management of Innovation Tavistock, London.

Cabral, R. 1998, "Refining the Cabral-Dahab Science Park Management Paradigm", *International Journal of Technology Management*, vol. 16, no. 8, pp. 813-818.

Cabral, R. 2003, "Development, Science and Science Parks," in *The Oxford Companion to The History of Modern Science*, J. Heilbron, ed., Oxford University Press, New York, pp. 205-207.

Cabral, R. 2004, "The Cabral-Dahab Science Park Management Paradigm applied to the case of Kista, Sweden", *International Journal of Technology Management*, vol. 28, no. 3, pp. 419-443.

Chesbrough, H. W. 2004, "Managing open innovation", *Research Technology Management*, vol. January/february, pp. 23-26.

Child, J. & McGrath, R. G. 2001, "Organizations unfettered: Organizational form in an information-intensive economy", *Academy of Management Journal*, vol. 44, no. 6, pp. 1135-1148.

Christensen, C. M., Anthony, S. D., & Roth, E. A. 2004, Seeing What's Next: Using the Theories of Innovation to Predict Industry Change Harvard Business School Press.

Contractor, F. J. & Lorange, P. 2002, "The growth of alliances in the knowledge-based economy", *International Business Review*, vol. 11, no. 4, pp. 485-502.

Covin, J. G. & Slevin, D. P. 1988, "The influence of organization structure on the utility of an entrepreneurial top management style", *Journal of Management Studies*, vol. 25, no. 3, pp. 217-234.

Covin, J. G. & Slevin, D. P. 1991, "A conceptual model of entrepreneurship as firm behavior", *Entrepreneurship Theory and Practice*, vol. 16, no. 1, pp. 7-25.

Covin, J. G. & Slevin, D. P. 1989, "Strategic Management of Small Firms in Hostile and Benign Environments", *Strategic Management Journal*, vol. 10, no. 1, pp. 75-87.

Drucker, P. F. 1985, Innovation and entrepreneurship Harper & Row New York.

Drucker, P. F. 1998, "The discipline of innovation", Harvard Business Review, vol. Nov.-Dec 1998.

Ford, D. 1997, *Understanding Business Markets: Interaction, Relationships and Networks* Dryden Press, London.

Ford, D., Gadde, L.-E., Håkansson, H., Lundgren, A., Snehota, I., Turnbull, P., & Wilson, D. T. 1998, *Managing Business Relationships* John Wiley & Sons, Chichester.

Freeman, C. 1991, "Networks of Innovators: a synthesis of research issues", *Research Policy*, vol. 20, pp. 499-514.

Gemünden, H. G. 1997, "The Development of IMP - An Analysis of the Conference Proceedings 1984-96," in *Relationships and Networks in International Markets*, H. G. Gemünden, T. Ritter, & A. Walter, eds., Elsevier Science, Oxford.

Gemünden, H. G., Ritter, T., & Walter, A. 1997, *Relationships and Networks in International Markets* Elsevier Science, Oxford.

Granovetter, M. 1992, "Problems of Explanation in Economic Sociology," in *Networks and Organizations: Structures, Form and Action*, N. Nohria & R. G. Eccles, eds., Harvard Business School Press, Boston, pp. 25-56.

Granovetter, M. & Swedberg, R. 1992, *The sociology of economic life* Westview Press, Boulder and Oxford.

Gressetvold, E. & Torvatn, T. 2006, "Effects of Product Development: A Network Approach", *The IMP Journal*, vol. 1, no. 2, pp. 60-83.

Håkansson, H. 1982, International Marketing and Purchasing of Industrial Goods: An Interaction Approach John Wiley, Chichester.

Håkansson, H. & Eriksson, A.-K. 1993, "Getting Innovations Out of Supplier Networks", *Journal of Business-to-Business Marketing*, vol. 1, no. 3, p. 34.

Hargadon, A. 2003, *How Breakthroughs Happen: The Surprising Truth about How Companies Innovate* Harvard Business School Press.

Haryson, S. 1997, "From experience: how Canon and Sony drive product innovation through networking and application-focused R&D", *Journal of Product Innovation Management*, vol. 14(4), pp. 288-295.

Heydebrand, W. V. 1989, "New Organizational Forms", *Work and Occupations*, vol. 16, no. 3, pp. 323-357.

Ilinitch, A. Y., D'Aveni, R. A., & Lewin, A. Y. 1996, "New Organizational Forms and Strategies for Managing in Hypercompetitive Environments", *Organization Science*, vol. 7, no. 3, pp. 211-220.

Johannisson, B. & Mønsted, M. 1997, "Contextualizing entrepreneurial networking", *International Studies of Management & Organization*, vol. 27, no. 3, pp. 109-136.

Johnsen, T. & Ford, D. 2000, "MANAGING COLLABORATIVE INNOVATION IN COMPLEX NETWORKS: FINDINGS FROM EXPLORATORY INTERVIEWS", 16 th IMP Conference. Interactions and Relationships. Bath: University of Bath.

Markides, C. C. & Geroski, P. A. 2005, Fast second: how smart companies bypass radical innovation to enter and dominate new markets Jossey-Bass.

McMeekin, A., Tomlinson, M., Green, K., & Walsh, V. 2002, *Innovation by Demand: An Interdisciplinary Approach to the Study of Demand and Its Role in Innovation* Manchester University Press.

Medlin, C. J. 2004, "Interaction in business relationships: A time perspective", *Industrial Marketing Management*, vol. 33, no. 3, pp. 185-193.

Mønsted, M. 2007, "Strategic networking in small high tech firms", *The International Entrepreneurship and Management Journal*, vol. V3, no. 1, pp. 15-27.

Powell, W. W., Koput, K. W., Smith-Doerr, & Laurel 1996, "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology", *Administrative Science Quarterly*, vol. 41, no. 1, pp. 116-145.

Ritter, T. & Gemunden, H. G. 2003, "Interorganizational relationships and networks: An overview", *Journal of Business Research*, vol. 56, no. 9, pp. 691-697.

Ritter, T. & Gemünden, H. G. 2003, "Network competence: Its impact on innovation success and its antecedents", *Journal of Business Research*, vol. 56, no. 9, pp. 745-755.

Turnbull, P., Ford, D., & Cunningham, M. T. 1996, "Interaction, relationships and networks in business markets: an evolving perspective", *Journal of Business & Industrial Marketing*, vol. 11, no. 3/4, pp. 44-62.

Volberda, H. W. 1996, "Toward the Flexible Form: How to Remain Vital in Hypercompetitive Environments", *Organization Science*, vol. 7, no. 4, pp. 359-374.

Von Hippel, E. 1988, *The sources of innovation* Oxford University Press, New York, Oxford.