

Understanding development in business networks- Applying a combination of research methods on business network analysis

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Abstract

The purpose of the paper is to discuss aspects that require particular attention in qualitative methods for business network research, especially in case study analysis. It presents elements such as time which have an important impact on the research process itself and its subject. One application of a combination of methods that has been used in a longitudinal case study is introduced and commented. This case study illustrates the framework of an embedded case study that was carried out applying change-critical event-influence factor analysis during a ten year time period.

The findings suggest that for development-related studies in business networks a combination of real-time and retrospective studies should be considered. Event-based methods were applied and their variations in accordance to the research setting were found very suitable for understanding development process (see Hedaa and Törnroos 1997; Halinen, Salmi and Havila 1999 Bitner and Nyquist and Booms 1985; Bitner and Booms and Tetreault 1990). When this kind of research logic is applied the selection of methods, limitations and focus are crucial parts for reaching the requested research results without losing the line of thought.

The paper continues the methodological consideration that Halinen and Törnroos (2005) presented. It attempts to assist other researchers in designing their research logic by pointing out problems and aspects of importance of a completed research process¹. The paper contributes to the development of research methods that are applicable in a complex business network setting. It emphasises the role of time, scope and depth in data collection and analysis and the order of research process, which need to create a cohesive structure that may answer to research questions that concern development without distortion (cf. Vincze 2004).

Keywords: Method, development, dynamic, business network, critical event

¹ A completed research process is a „sample case study“, see Elo 2005

Introduction-Researching development in business networks

This paper discusses the method-related difficulties and alternatives of a complex research topic; development and dynamics in business networks. When the focus of the research has been reached, the research objective is established and the valid theoretical frame has been established then a relevant and valid method needs to be found. What kind of methodological alternatives are there for business network studies? This paper continues the discussion that Halinen and Törnroos (2005) initiated on network research². There is a plethora of methods to study growth, development, incidents and tendencies in business relationships (i.e. dyadic relationships). Many methodological schools are built to study a certain phenomenon only from a particular viewpoint, not necessarily the viewpoint we want to apply. When the number of actors grows the research methods get limited, many existing approaches do not take in consideration the interconnectedness at all. Business network researchers suffer from a lack of methodological literature; suitable tools and their applications have been very limitedly presented (cf. Easton 1995, Halinen and Törnroos 2005).

When studying a research questions outside the mainstream research, we might have a problem setting that does not match with the commonly used methods. What happens, when our viewpoint is different³? The relevance, validity and applicability of those methods are affected and other solutions must be found. But can we really apply "tailor-made" methods? And if we use a synthesis of methods, what are the disadvantages?

A combination of qualitative and quantitative methods is one alternative (Alasuutari 1999, p.212) for complex issues. However, this paper is limited to discussing qualitative methods and combinations of methods. The paper concentrates on examining case study methods. The key issues are the selection of the cases, securing access to them, organising the theoretical framework for research, collecting and administering data and analysing and completing the collection of data (cf. Aaltio-Marjosola 2001)⁴. It is not that simple when we are examining business network development related topics. The author suggests that a combination of compatible methods that share theoretically coinciding views could be considered as one alternative not to exclude dynamics and interconnectedness.

The paper focuses on the application of critical event-event network type of perspective (Hedaa and Törnroos 1997, p.2-6). It starts with a general discussion on development and on important issues that influence our choice of method, particularly the element of time. In the following part it presents one alternative way to research development in a business network context, which has been applied in an empirical case study, then it discusses and shortly analyses the disadvantages and advantages of the application of this combination method⁵.

Particularities of network studies

Business networks are gaining importance both in research and in reality. The capabilities, the dynamics and mechanisms of business network type of organisations have become highly interesting topics (see more in Powell 1990, Achrol and Kotler 1999). Business networks bring an inherent complexity and dynamism into research as they evolve in time. Planning of research and its design, the selection of cases and the data collection and analysis become very complicated in a research process on business networks. The workload is higher and the access needs to be spread across the research objects. The interconnected and embedded nature of business networks makes it difficult to identify and select suitable networks for research.

Easton (1995) and Halinen and Törnroos (2005) point out typical problems related to network studies: the connectedness of networks, the representativeness and the choice of research unit, the network boundaries, the complexity, the element of time and the case comparisons. The concept of business networks itself indicates the arbitrary nature of any network boundary, but for research purposes the

² The author would like to emphasize the key role of Halinen's and Törnroos' paper, which has been a first practically oriented publication on crucial research aspects. Their ideas form the basis for the research case presented here.

³ This paper focuses on the application of a synthesis of research methods, it does not discuss in detail the theory of science and its implications on these research methods.

⁴ Original source: Hartley J. (1997) Case studies in organizational research. In *Qualitative methods in organizational research*, C. Cassell & G. Symon. (eds.) SAGE, 207-229.

⁵ The author would like to thank Professor Bernd Günter at Heinrich Heine Universität Düsseldorf who has kindly supported the development of the paper and who has contributed to the discussion, which the paper wishes to stimulate.

business network must be somehow defined and limited. The content of the business network is separated with a researcher-defined boundary from the context. The boundaries can be set on various bases, using structural bases, perceptions of involved business actors or using micro or macropositions (see Johanson and Mattsson 1988). Microposition is more dyadic, it is defined using the role that a firm has for another firm and its importance. Macroposition indicates identity, role, importance and relationship strength and forms a more suitable concept for identification of positions in business networks. Relationscape as a concept can be one useful tool in identifying business network configurations (Strandvik and Törnroos 1997). Network embeddedness offers one additional concept (see Fletcher and Barrett 2001). Halinen and Törnroos (2005, p.1289) discuss and present various model for network boundaries that can be applied in delimiting business networks for research purposes.

Network studies provide thorough descriptions and to reach these thorough case descriptions a good access is a necessity. Close, multiple and well-functioning relationships with informants in the business networks are the only way to get adequate material and cover the requirements of data sources in such complex objects.

Time aspects form one particularity since business networks are continuously evolving, having an on-going change process. The dynamic character makes business networks difficult to study as the element of time can have several dimensions in one study. According to Halinen and Törnroos (2005, p. 1291) the researchers need effective methods to trace network evolution, they should stay in touch with the rapid and fundamental change processes. They suggest that researchers should be on-line (using follow-up studies), be monitoring the changes on continuous basis.

Development as a phenomenon

Development stems from the dynamic nature of business networks. Development of business network and development of an individual actor in a business network context are both research topics which represents complex multifaceted phenomena. Understanding dynamics and evolution refers to a deeper view on the changes themselves, the flow of events and their stimuli. Development in business studies is often seen as a numeric process, such as an increase of sales or market share. This kind of development is only a part of a larger process, which is clearly limited to the interest and focus. A large increase of market share may, however, be caused by such factors and reasons that are purely exogenous, that have actually no causal connection to the company's activities, for example, due to the withdrawal of a large competitor from the market. If such an increase provides us valuable information about the development of the firm is questionable, if the context in which it takes place is unknown.

The impact of business network environment is notable not only in practise, in business, but also in research. The research object is embedded in a certain contextual setting that is not static. It actively influences the object directly and indirectly. The influence of third parties, external to the focal firm or focal network, must be somehow taken in consideration. Interconnectedness, dependencies, network effect and many sorts of linkages create a web of impact that can not be simply separated from the research object when studying its development.

Development has been examined applying time sequences, changes and phases in qualitative research on business studies such as marketing and internationalisation. Development in business network as a topic requires a rather longitudinal view that acknowledges the shortcoming of the research process, which is unable to reach a level of "truth", but goes behind any superficial analysis. There are many approaches that provide ideas for research approach selection, such as critical realism (Hunt 1991), systems views and functionalist approach (Sheth, Gartner and Garrett 1988; Alderson 1965). Halinen, Salmi and Havila (1999) discuss a perspective of critical events and enacted reality (however, research often has dyadic characteristics due to the difficulty of applying a network perspective). Dynamic evolution is not easily explained; it is feasible to describe and explore a development process, but to create a model explaining development is highly dependent on context and circumstances as well as the research frame and view. Tsoukas (1989, p.551) argues that even idiographic studies may generate explanations that are externally valid; idiographic research conceptualises the causal capability of structures, while it illuminates the contingent manner through which a set of postulated causal powers interact and give rise to the flux within the phenomena studied. Eisenhardt (1989, p.532) emphasises framebreaking insights and convincing grounding in the

evidence. Development is often studied using an inductive or abductive approach, although combinations of approaches are possible. Vincze (2004) applied grounded theory on development processes and illustrated the potential of this approach.

Limitations and development

Limitations as a tool to reduce complexity are vital in studying development and its setting, and particularly in a wider context such as business network. Halinen and Törnroos (2005) discuss the network aspect in research and point out the complexity of selecting focus and limiting perspective. They provide useful models for application in research.

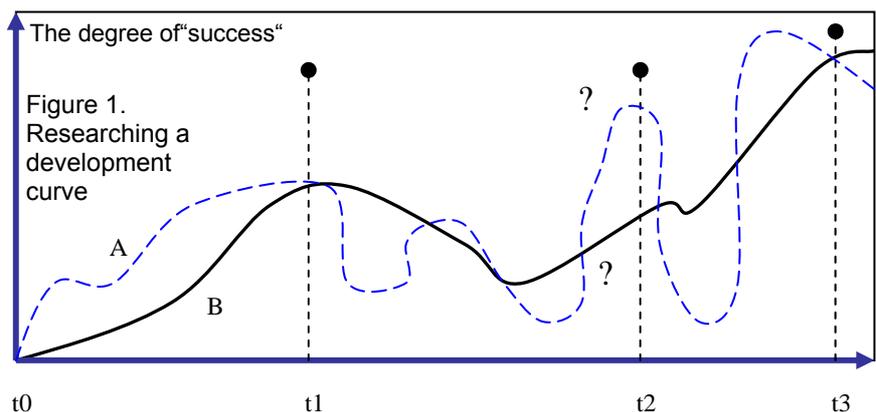
The network perspective is dynamic, focusing on both structure (content) and processes (how dyads, nets and networks evolve). This dynamism must be taken into consideration when the limitations are planned and defined. Möller and Halinen-Kaila (1997, p.11-15) identify the following as units of analysis: the actor (organisation, person), the dyadic relationship and the net of relationships. They see transactions as episodes in the long-term relationships and emphasise the embeddedness of relationships in nets and networks as well as the role of the past for understanding the present.

There are many alternatives from a focal firm perspective to focal network perspective that can be used to set the focus and define the difference between internal and external. The limitation needs to be further clarified when researching development: what is the type of research question we are attempting to answer is not always simple to explicate. If development is seen as changes and evolution in a certain time frame, then is it only the visible changes that we are interested or should we take a look at the reasons behind the changes? Critical events and influence factors may offer suitable concepts for studying change and development in its context. Then again, what is a critical event? Influence factors may be numerous, how can we make sense? This is discussed more in part *The application of a combination model*, where one alternative way of research is presented and commented.

Time element in researching development

Process models in business research apply often phases or stages that follow each other in time. The logic is built chronologically. However, the time dimension in research deserves more attention, it incorporates bias influencing research. Time has a role not only in empirical material but also in research itself. Time as an element may guide the research process indirectly influencing its flow and evolution, but also the outcome. Vincze (2004, p.90-92) criticises scholars for using cross-sectional data once the outcome is evident, providing snapshots. She argues that the stages described do not fully capture the process realised by an operating company in international expansion. Her point is valid and pinpoints the time-bias effect. Time is related to access in a methodological sense; it is hard to find real time research processes that investigate events on the spot and not retrospectively with the knowledge of the outcome limiting further consideration.

When development is examined it is important the time dimension is explicitly stated and taken into consideration. Time has various influence mechanisms, even the selection of time period for research may be a factor that affects radically the outcome of the research, see Figure 1. If we take a development of cooperation as a topic and compare the outcome in turnover, line B, or the perceived performance from a partner's perspective, line A, we might have very different curves. If the outcome is compared in time period t2 after the first successfully managed conflict the results of the analysis look very different. Selecting a perspective using easily defined measurable variables like line B might give a highly different view to the same phenomenon than a more complex perspective where the subjectivity plays a greater role.



Combining a process view and a case study

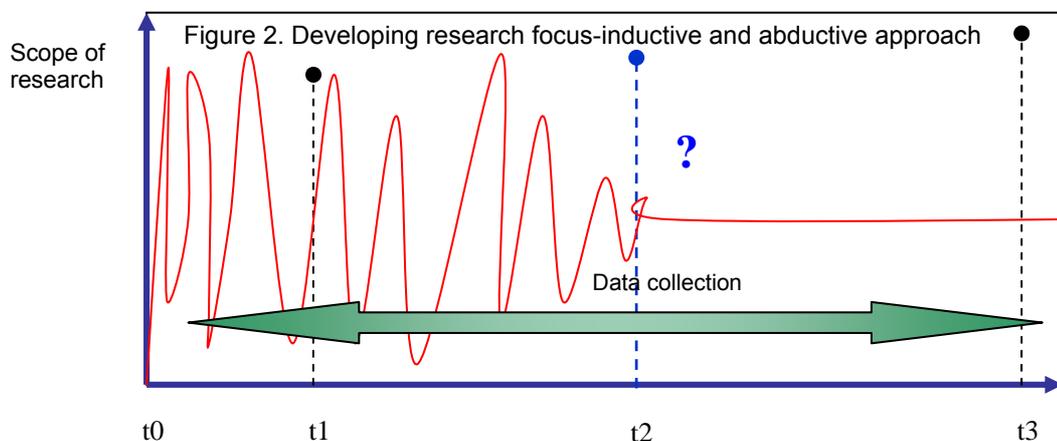
Longitudinal studies illustrate well the problems of time and selection of the view. Several scholars see advantages and suggest that longitudinal process research provides a different more in-depth dimension in the research, inserting the research into a rich temporal setting (e.g. Perry 1998, Mainela 2002, Vincze 2004). A qualitative research approach makes the research process interactive and not glued to the original mind-set of the researcher, which enriches the quality of the research (Alasuutari 1995, p.142-148).

To carry out case research means often that the researcher and the research target have an interactive relationship and the research develops as a process from stage to stage (Aaltio-Marjosola 2001). Case study research can be continuous or proceed in phases to analyse changes, processes and development. Action research and interactive research provide one alternative for longitudinal research and interaction (Gummesson 2001). The negative aspect of case study when using longitudinal study is its time-consuming nature and the costs (cf. Elo 2005).

The process-based analysis is the only method that allows a continuous research process to run in real time and monitors the overall evolution of the business network. Still, the focal elements of interest must be assessed and studied systematically; which leads to a vast data collection where a large part of the data is secondary, in a supportive role only. However, this supportive data increases the reliability of the core research data and its analysis as the researcher analyses all material to be able to identify possible hidden influences or reasons.

The paper presents a combination model (Fig. 6), which is tested in a longitudinal case study and discusses the methodological aspects that occurred with the application of this combination, its limitations, its advantages and disadvantages. One objective of the paper is to illuminate the difficulties and solution alternatives of method selection for respective research settings. The view is rather limited to idiographic research, but even idiographic studies may contribute with their instrumental nature (Tsoukas 1989; Stake 1995). In this paper mainly inductive and abductive logics are considered for understanding, describing and exploring business network development and dynamics⁶. Theory building or testing is not discussed in the paper.

Data collection and its logic is a significant part of research; it impacts the outcome by limiting the material available and therefore our view and framework development. Inductive and abductive studies stem from the empirical material and follow those indications that are found from the material collected. Generally, it seems that for development phenomena a deductive approach is not preferred due to the vast potential of elements to be tested and excluded. A kind of iterative thinking may be applied in the early stages of a research process when searching for the general frame. One logic for inductive and abductive applications is the rather chaotic and massive data collection and analysis in the beginning of the study process, which creates a better understanding of the phenomenon in question and then leads to the clarification of the research questions (t₂), selection of theoretical frame and methods, see Figure 2.



⁶ See expansion discussion with Grounded theory approach in Vincze (2004)

Synthesis of approaches may be useful, for example, deductive approach can be used in the more mature stage. Abductive approach follows several leads and hints unfolding during the research period, whereas an inductive approach attempts in the end to validate the key assumptions it has established during the process.

Understanding the phenomenon in general is a prerequisite for successful case studies. If the assumptions guiding a research process are set based on wrong or distorted perceptions and/or partially incomplete data and these failures are not corrected in the early phases of a case study, the quality of the research results is not enough high to claim reliability and validity. Investments in the early research phases are crucial to avoid fundamental problems set a priori, see Figure 2 period t0-t2.

The research frame sets the outline for the organisation of a research process. The research questions related to development in business network require such a methodological frame that yet acknowledges the shortcomings of the research process not being able to reach the "reality", but goes far beyond assumptions of linear growth or any numerical analysis. The suitability of many quantitative models is often reduced for research concerning complex business networks. Also the application of some qualitative research methods per se creates compatibility problems. Gummesson (2001) introduces an interactive research model, which refers to evolving research methods during the research process. This idea solves the problems of non-fit of an a priori set method that may well occur in later phases of a research process. Gummesson's view captures the element of surprise in the research process itself⁷. Surprises and unexpected elements may bring comprehensive changes for business networks and individual actors (cf. Hedaa and Törnroos 1997; Meyer and Skak 2002).

Research design and strategy

Research approach and perspectives form strongly the creation of research design, how we design and formulate the study as a structure, as an activity and what kind of strategy we use. Case study is a versatile system to study a defined piece of a development process in a certain context. Whether the study is explorative, descriptive or explanative study has a great impact on the research design and system. Explanative studies should be able to explain the phenomenon in such a manner that it does not leave room for exceptions, this is rarely the case in business studies where case studies are mostly very context-dependent entities and do not easily offer adequate sample population for such studies. Deterministic approaches are usually supported by quantitative research. Idiographic case studies are not suitable for supplying probabilities or tendencies, only in the sense of offering instrumental value, i.e. assisting in understanding other similar cases. Intrinsic case studies instead offer unique rich information (cf. Stake 1995). Development in business network in itself already implies the importance of time and change. Such topics are not comparable in an absolute sense.

When examining development in the context of business network many scholars suggest the application of a process view (Alasuutari 1995), which has a progressive logic (Pettigrew 1997). Pettigrew (1997, p.338) defines process as: "a sequence of individual and collective events, actions, and activities unfolding over time in context". Van de Ven (1992, p.169) sees process as a logic to explain a causal relationship in variance theory, as a category of concepts referring to activities of individuals and organisations and as a sequence of events that describe how things change over time. Longitudinal characteristics and case study methods are used for descriptions and explorations (cf. Yin 1984; Bonoma 1985; Eisenhardt 1991; Alasuutari 1995; Van de Ven and Poole 1995). Case study is suggested as a suitable research method for real, complex situations where the case is analysed as part of its environment using several research methods for data collection and multiple material sources (Yin 1984; Christiansen and Hansen 1987; Hirsjärvi, Remes and Sajavaara 1997).

Phenomenological studies in a business network context set different requirements on understanding and including elements of the context and setting of the research topic. Easton (1995) pinpoints the appropriateness of case study for research in industrial networks due to the embedded character of network relationships. Vandelin (1974) emphasises the opportunities to study different aspects and their relation, also to the environment, and the use of the abilities of *Verstehen* of the researcher. Triangulation is another suggested combination of research methods to study a phenomenon (Denzin 1978; Alasuutari 1995; Stake 1995; Silverman 2001).

⁷ See interaction in research in Alasuutari 1999, p.142

Although the research strategy is often descriptive in network studies, the event-based logic of research is in line with Tsoukas' (1989, p.559) two levels view on idiographic research, which requires concrete empirical research. Tsoukas claims (ibid): "*To produce explanatory knowledge the researchers re-describe their object of explanation in a theory-important way, postulate the existence of multiple generative mechanisms that are potentially responsible for the occurrence of the events under study... The researchers look for the contingent ways in which the postulated mechanisms are intertwined, which will generate the flow of experienced events.*"

Supplementing the process view with events – event networks in a longitudinal case study

Events and incidents have been used in various forms as research tools to organise processes or tasks, for example the Critical Path Analysis and PERT techniques originate from defense industry but they have been commonly used in project management. Service and quality management and customer satisfaction research all have utilized techniques based on incidents to identify essential parts of processes the impact of which is to be understood (see Bitner and Nyquist and Booms 1985; Bitner and Booms and Tetreault 1990). These processes take place in interaction in a business relationship, they may be sequential or simultaneous (cf. Ramaswamy 1996, p. 396). Whether the relationship is between private customers or companies does not change the fact that some of these very minor looking events may stimulate enormous problems. There is a lot of literature examining critical incidents on dyads, but less literature describing the critical events taking place in triads or larger networks. The critical event approach in research (Flanagan 1954; Olsen 1992; Voima 2000) is very relevant for business network studies, when it is applied on a larger scale.

Processes include different types of events, occasions of importance that form the development in some manner. According to Ramaswamy (1996, p.404) event is an occurrence that triggers a change in the state of the system. Pettigrew's (1997, p.338) view on processes has a slightly different reasoning, but it is most suitable for business networks since it does not concentrate on examining causalities but events instead. He defines a process as: "a sequence of individual and collective events, actions, and activities unfolding over time in context" (ibid).

Flanagan (1954, p.327) describes the nature of a critical event: "an incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effect". Olsen's Critical Incident Technique (Olsen 1992), with a process-oriented view stressing the critical episodes in addition to the critical acts, focuses on the triggering factor. Easton (1995) presents event-sampling studies, where an idea of what happens and why, is collected using selected events only.

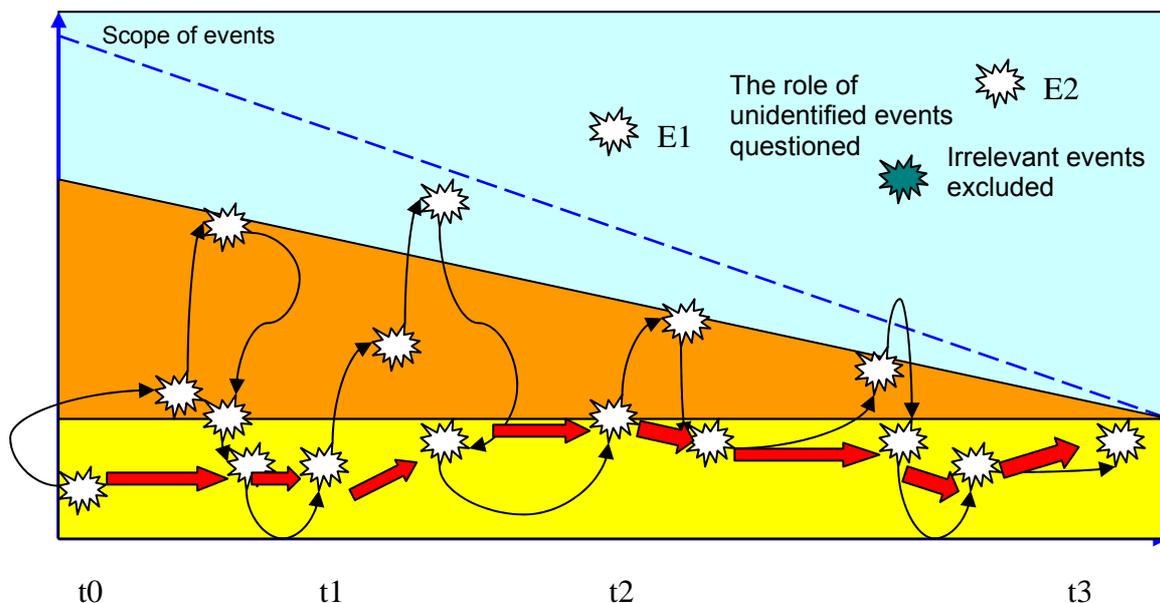
However, there are many dimensions or levels in events; they can be of general nature overwhelming situations that affect all actors researched, like recession or war. On the other hand, critical events may be stem from a disagreement between two individuals. Halinen, Salmi and Havila (1999) have discussed interaction and analysed critical events on a dyadic basis. The structure of a development process does not follow any general pattern that could be simply de-installed and analysed. We can not be sure that after an introduction phase a growth phase will follow. There is no *general* causal connection between influence factor and critical event or the next event, which leads to a certain change. There can be a chronological order, tendencies or probabilities, but linear causal relationships are rather rare. Even very negative events may be followed by positive events; losing a distributor in one area may mean that a better and larger distributor can take over. Instead of searching for causalities, this paper emphasises the scope of the linkages; it seems that change is more a result of several causes rather than just one factor.

Development may be seen as a flow of events, as an event network (Hedaa and Törnroos 1997, p.2-6). This flow is interconnected, but not predictable or explainable in a sense that it could be applied as such for another similar development process. According to Hedaa and Törnroos (1997, p.9) event networks may appear as streams of interconnected events i.e. event trajectories. They define event networks as time based connected event relationships. They represent a temporal-theoretical perspective of networks in business (Hedaa and Törnroos 1997, p.5). The trajectories of connected events can be seen as the key cohesive determinant for change of business networks. The analysis of critical events can give a rich view on the phenomenon studied. Time as an element should not be

ignored (Halinen and Törnroos 1995; Anderson and Mattsson 2006), because it is an important element which organises the events in certain order for the researcher. Chronological order per se is a factor which may explain logics.

Another significant consideration in organising research for critical event is the reasoning of a critical event, its source and background. A critical event must be first perceived, then understood, in order to analyse it. A development process consists of numerous events which are not all relevant to the research questions, see dark explosion in Figure 3. Not all critical events are easily identifiable and traceable, see Event E1 and E2 in Figure 3.

Figure 3. Analysing events



One typology basis may be constructed on the basis of origin. Is the event having endogenous origin, i.e. is it stemming from inside our focal research subject, or is it having an exogenous origin, i.e. it is inserted by third actors or external environment. The degree of criticality should be defined a priori to make a distinguishing line between normality and critical events.

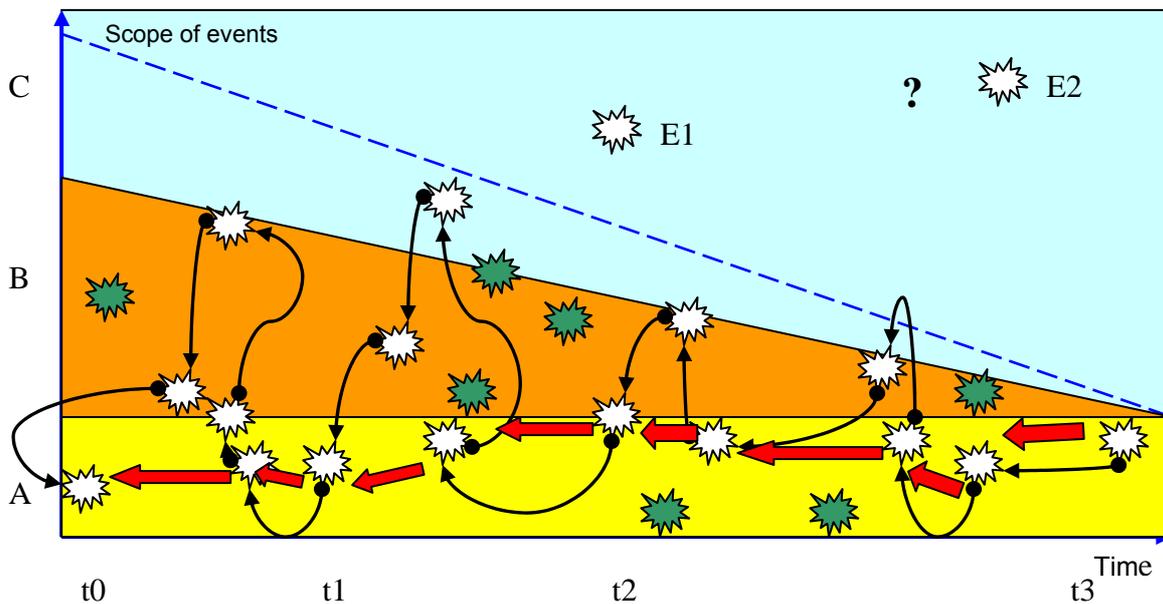
There are research problems in the critical event-related methods, the definitions and perceptions are subjective and they vary according to situations. Perspectives and evaluations have an inherent bias. Critical event for one is not critical for the other, for example, if the atmosphere of one business relationship is disturbed it does not necessarily influence all actors of the business network. A great problem is that many critical events are invisible or purposefully hidden, which make it close to impossible to capture a holistic view of a development process, see Figure 4. There might be a very small group of persons knowing the whole story and if the researcher does not have any access to this group vital information might be left outside the research material. Distortion of information flow is common particularly when it comes to information with negative character to the participants. It is considerably easier to get information about the development of a successful project than a failure. Therefore, it would be recommendable to include such information sources that complement each other and use triangulation both in data sources and methods to cover all potentially "grey areas", see the dark explosions in Figure 4. Still, it is not realistic to assume that we could claim having a full picture in any circumstances. When the researcher has a good access, preferably from inside the object of research, this naturally increase the reliability of research.

The research starts with some basic view and questions, see Figure 4 area A, then it expands to collect and analyse a wide variety of potential critical events, area B. After the researcher has developed a general understanding to the research questions the inductive type of research may alter its nature to more abductive searching. When the material starts getting saturated enough it may be assumed that the answers to the research questions are being received. After a careful analysis one picture is being created and it can be retrospectively "tested" or reconstructed, see Figure 4. Critical

events remaining outside the areas A and B have been excluded by the researcher's choices or by access problems, events E1 and E2 have not been included and their impact is unknown. The narrow arrows imply that there is a linkage between events, either based on time or on other factors. The thick ("reconstruction") arrows indicate the route that the research would have had if the material had been limited only to a priori set assumptions on the a priori decided material selection. The arrows do not indicate any causality necessarily, it could be that events could have taken place in a different order. This order of events is very specific and context-related.

A typical characteristic for this type of research project is flexibility, it is common that the setting decided in time t_0 is not fully applicable after time t_1 in Figure 4. The researcher should be able to follow leads, even to less focal area C in Figure 4, and simultaneously concentrate on essential events, this makes research difficult and chaotic. Focus in this type of research is not static, but dynamic, it evolves in itself without losing its character.

Figure 4. Sensemaking in critical events and event flows



Navigating in research using research questions as a focus and positions as an organisational tool

The research questions form the focus that guides the evolution of the research process itself. Complexity is unavoidable in business network research, but the core research questions and circumstances must be clearly defined not to get lost while examining a complex development process. There comes a limit what is feasible and what is not, if only the information of area A and B are accessible, the researcher must limit the study to this level, see Figure 4. A difficult and strategic decision is to select the focus and the limitations of the study, what is the unit of analysis and what is context. Using a single company perspective- a focal firm view- we run into risk of choosing a firm that might not be involved in the process as thought during the period of research. If the researcher is unable to adapt the research to the evolving situation, the study will not be able to fully contribute to the research questions. The focal firm view is clear and rather simple to apply. Using a multiple firm view- a focal net view or a business network view or even a macro network view- we create a very complex and time-consuming design for the study, which has several overlapping dynamic evolution processes like Figure 4. The linkages, connections and relationships must be sorted out, organised, analysed and understood.

Halinen and Törnroos (2005) analyse the problems and models applicable for network related studies and provide a useful framework for method related thinking and design. They also give emphasis on the importance of planning procedure which has as a prerequisite an adequate understanding of what is going to be examined. Positions of firms in a business network can be used as tools. Comparing micro- and macropositions (Johanson and Mattsson 1988) and using illustrations and models of

business network actors is considered very useful, since it helps organising the analysis of business network development.

Access to material and the role and position of a researcher

The topic and the research method need to have a good fit, but adequate access⁸ must be given. Access is one key success factor for the research process itself. It is most difficult to study a piece of a phenomenon, which the informants try to keep hidden. In business network access can be rather easily improved. Naturally occurring data is more available in an interconnected interaction (cf. Silverman 2001). When several data sources and collection methods are used, then some parts of the research subject can not hinder the research completely. The usage of secondary data and external data sources, such as industry specialist interviews, market related data, industry statistics, interviews of competitors and customers as well as suppliers give valuable supportive information for the development of a certain firm or a business network. This type of access is relatively easy to organise, but it becomes more complex when a company's internal material is requested.

A participant and action research perspective (Alasuutari 1994; Gummesson 2001) implies a different access, when the researcher is already connected to the research topic and has some knowledge of its logic and function, it is assumed that the research process can be more relevant and more reliable in its execution. For informants it can be either a positive factors that they do not have to explain basic terms from zero to the researcher, but it can be a hindering factor if the researcher has contradicting interests/status⁹. Insider view has its advantages and disadvantages, but in complex development topic analysis its advantages are greater than disadvantages. Researcher's role varies, it can change during the research process as long as the research process does not get severely disturbed or interrupted. Gans (1968) and Van Maanen (1978) differentiated between the roles of participant researcher according to the active or passive nature of the participation and the engagement and distance. They specified the differences between full participants, the researcher-participant and the full researcher. Action research (Gummesson 2000; Cook 2001) provides an interesting approach. However, ethics can become a problem if the research objects start questioning the usage of methods and information and their true purpose. It is beneficial to build such a system where the research object are informed about the general goals of the study what it comes to their internal interests, they need to know that there is no conflict of interest in order to provide unfiltered and reliable material.

Experience and pre-knowledge may enhance the reliability and quality of the research and assist particularly in assessing managerial implications (cf. Gummesson 2000). Pre-knowledge and understanding of a certain market or geographical area and culture can be prerequisites for studying particular issues¹⁰.

The application of a combination model- both real time and retrospective analysis

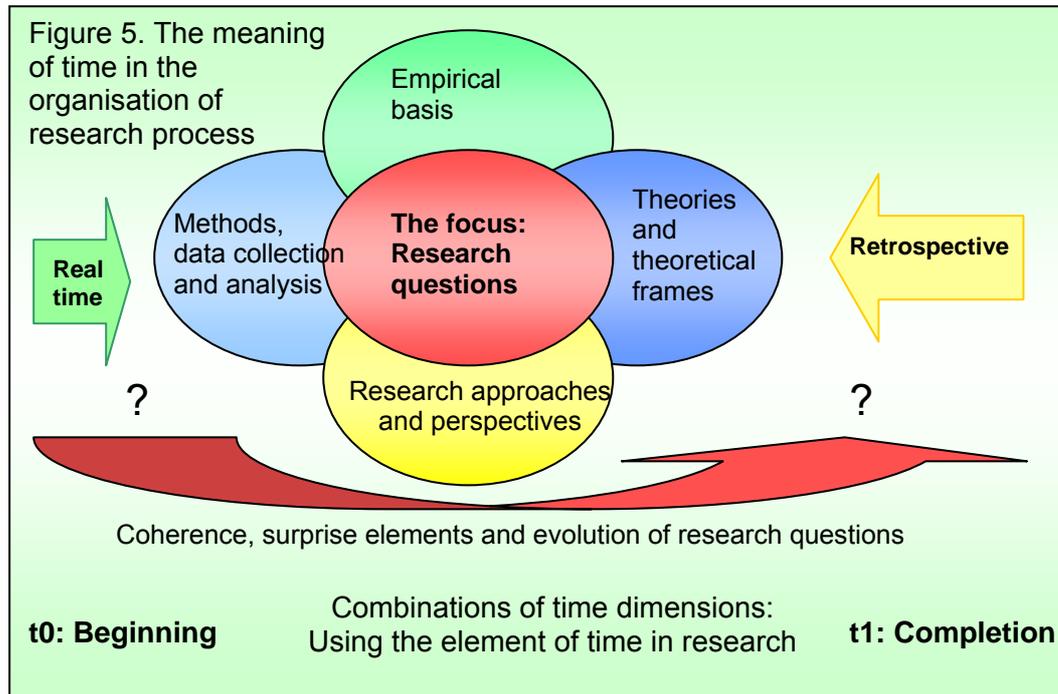
Time and sense-making mechanisms are not minor considerations. The disadvantages of purely retrospective research are relative little discussed. Vincze (2004) emphasises time in research putting forward the important notion of awareness, when the researcher already has the outcome visible he/she may organise the research process differently. The implication toward manipulation is valid; shortcuts might be preferred due to cost-efficiency. A tentative note for organising research process is made put in a time frame, see Figure 5. If the process starts first at the time t1 (Figure 5) it is a real danger that a researcher suffers from certain blindness to "other" than the clearly visible part. This can be subconscious too. On the other hand, many events are not traceable afterwards or the informants are no longer available. If started at time period t0 (Figure 5) everything is new and nothing has been pre-decided. This is a great advantage, which increases relevance and reliability. The validity of

⁸ the respective informants and managers must accept and be able to support the process

⁹ If the researcher represents organisations or companies in addition to neutral university institution this might have a relatively strong impact on the perceptions that the informants build on interest conflicts or information flow.

¹⁰ If a business network has a strong local characteristic it can be impossible to carry out high quality research if the researcher can not communicate with the language of this business network. Language might need particular attention, since communication and culture have a strong impact on the research material and its interpretation. Rich data and deep understanding assist in formulating the study in such a manner that it supports the outcome and the enables the answering of the research questions without distorting the meanings.

research can be positively influenced as well, it can be examined and analysed again and again and data can be added to arrive in some acceptable conclusions less predetermined.



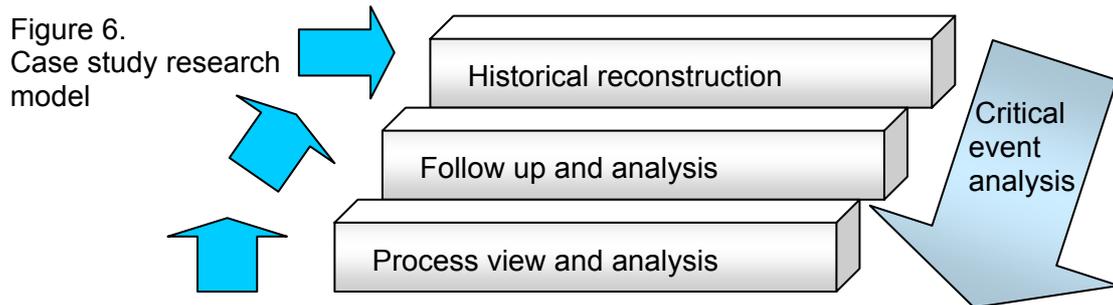
The research method combination used to study development must be versatile and flexible but also scientifically traceable and auditable. It must be designed to exclude structural wholes and grey areas. Research methods should be able to create such data and analysis models that the issue of incommensurability is in order and the research audit is covered. The danger of creating a totally subjective idiographic study is real. Reliability has a temporal notion as well, since the timing of research action may distort results or have unintentional bias if the dynamic character of the business network context is not inherent in the research process.

An example of a case study

In the study presented here (Elo 2005) the setting of a single embedded case study (Yin 1984, p.41) was chosen, where the main emphasis was on one case firm and its internationalisation process. Webster (1991) emphasises the role of analysis and planning and, particularly, an adequate understanding of functional interdependencies. The impacts of interdependencies, interconnectedness and embeddedness were necessary to take into account already during the planning of the research process.

The research model of this study was based on two types of strategies. First, descriptive strategy describes and analyses the development of a firm into a new geographical market and the internationalisation process relating to this market. Second, explorative strategy was applied to discover the critical events during this internationalisation process.

The previous research and the above views on method lead to a combination model that was applied and tested in an empirical longitudinal case study, see Figure 6. The model was used to study in real time, following development, using mapping and analysing backwards identified changes, event networks and trajectories. It would not have been possible in this case to plan in advance which events or changes would have lead to a significant trajectory and therefore this part of the method was applied both during the study and retrospectively in the final phase.

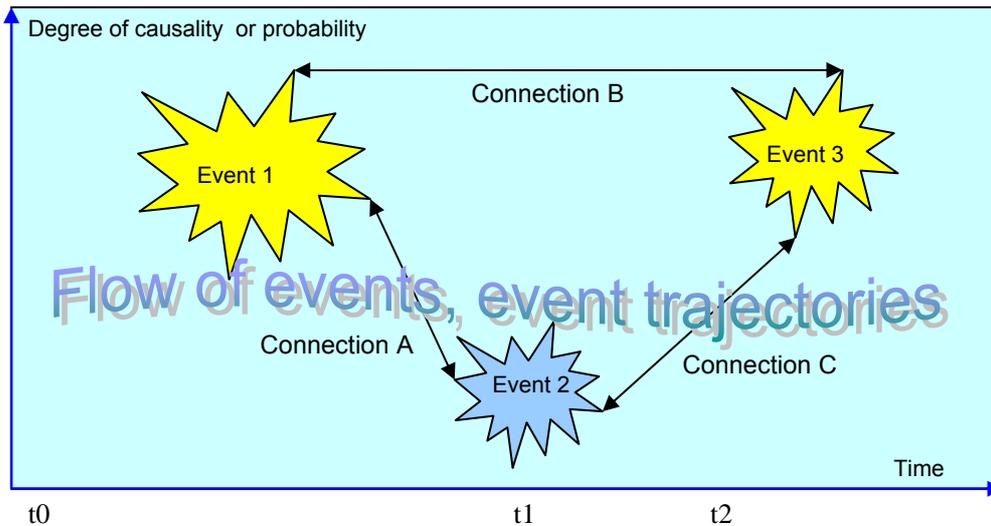


The structure of the study follows a process view, combining historical reconstruction and event follow-up with critical incident technique (cf. Mainela 2002; Ring and Van de Ven 1994; Flanagan 1954; Halinen and Törnroos 1995). The process view in this research has both a retrospective character, as some data is collected after the event has already taken place, but also a real-time character. Real time character is represented by my assessments, identifications, observations and interpretations of events which have taken place simultaneously as part of the fieldwork. The documentation of this is also found as written field notes and it is reflected in the inter-firm communication. It is important to note that the memories and interpretations reflect time and depend also on the person's opportunity to observe, as well as his/her subjective perception and interpretation of the event (Van Maanen 1979, Halinen 1994). The position of the informant and his/her real access to the research information are significant factors for ensuring a reliable, accurate and realistic view of the events. The researcher's dual role as a participant-researcher provided the opportunity to assess and insert the informants' views and perceptions into a context, which enhances the overall quality of the research material and data analysis.

Combination, a kind of event flow analysis, allows a more holistic approach where the outcome of an incident is perceived in a broader time frame and setting. In this study (Elo 2005) the hindering or facilitating factors are examined according to the influence factor, criticality of an event and the respective level of change (see Nummela 2002a, 2002b). Event flow analysis is highly complex and requires a framework that allows organization of events and the analysis of the connections between them.

An important notion is the nature of a certain critical event, the nature can be understood and analysed using typologies. Not only is an event itself of interest, but also its reason, its origin. The outcome of events or an event can be researched by identifying changes. Analysing change and critical events may create blurred categorisations, they might have various dimensions being both. Change as a research element needs its own categorization and limitation, not all changes are relevant to the research topic. A more holistic understanding can be reached by combining and using these three aspects on development: change, event and influence factor. There are numerous types of events and the connection between these events in time does not represent any deterministic impact or general causality. These linkages may differ greatly even between such events that seem to have similar nature, see Figure 6.

Figure 6. Connections and their character



It could be that there are events, which must follow a certain order, for example Event 1 must precede Event 2 chronologically, see Figure 6. It is also possible that there is a causal relationship (connection B) between Event 1 and Event 3, but not between Event 1 and Event 2. The critical events analysis follows a process-based logic. Since there are several levels of critical events, it is the impact of this critical event that counts as selection criteria (see more on the change dynamics in Halinen, Salmi and Havila 1999), regardless of whether they take place on the macro environment or on a micro-process between two individuals.

In this paper a triggering factor has two dimensions; it refers to both a visible and an invisible influence factor. Visible factors can be perceived and anticipated by management but invisible factors are hidden and unexpected implying reduced manageability. Surprises and unexpected changes in the business environment are such factors that are rather avoided by informants since it may be considered as a kind of personal failure. If this kind of variables are crucial for the outcome of the study the access of a researcher becomes one key issue.

Event trajectories and elements of analysis

Event trajectory view is demanding and time consuming. It requires a detailed and well organized research process with masses of information. It puts the partial trajectories together and forms an overall picture of one development process. The individual descriptions, stories, information and observations need to be analysed separately and again as an aggregate and then reanalysed by reconstructing the flow of events. A deep understanding and analysis is favourable, an interconnected dynamic view can not be fully supported if a partial approach is chosen¹¹. From a researcher's perspective the key issue is that she/he has clearly stated what is the focus and the applicable research design. Theoretical framework is the part that guides the overall design.

Development can be analysed through its elements. Marketing studies examine elements of potential, process and outcome when they investigate the development of certain activities or programs (cf. Ramaswamy 1996). Voima (2000) defines in her study three elements: source, process and outcome. It is not always possible to define the categories in such manner that there is no overlap between categories, i.e. there might be processes that can be the outcomes of another process, how should this process be categorised? There is no absolute categorisation possibility, typology is a better alternative. Simplicity and clarity assists the analysis. Here they are applied as *influence factor*, *critical event and change*. These three concepts build the basis for the analysis logic, the constructs used for this process research.

Implicitly any study on development in business network context incorporates the issue of time and embeddedness. Delimiting the focus and defining the research configurations are strategically

¹¹ The interconnected and interdependent nature of the actors and event-linkages requires a deep analysis

important parts of a research process in such a context. Analysing change creates multiple problems for definition. What is change and where it originates creates practical research problems. There are changes which have unexpected origins (cf. Hedaa and Törnroos 1997; Meyer and Skak 2002). Still, such changes may be most relevant for the study. How these changes may be incorporated into the study material methodologically clearly suggests for flexible data collection and analysis. Change originates from exogenous or endogenous stimuli. Change can be characterised as incremental or radical (Halinen, Salmi and Havila 1999). Nummela (2002) refers to alpha and beta level changes as first-order changes having incremental and some fundamental character and gamma changes as second-order changes having a revolutionary character and involving the system as a whole (see Chapman 2002). Incremental change influences the nature and content of a single relationship it is counterbalanced by the forces that maintain stability in the network structure. The radical change is caused by critical incidents that create changes leading to the dissolving of relationships or the building of new relationships (Mainela 2002). Change is either confined or connected; confined change remains within the dyad but connected change refers to change that is received and acted upon by other actors in the network (Halinen, Salmi and Havila 1999). Critical events may arise from the dyad including personnel changes, changes in organisational structure or changes in business, marketing or purchasing strategies as well as acquisitions, bankruptcies or partner-switching (cf. Elo 2005). Critical event may arise from change, but also the opposite is possible. Critical events may also arise from the overall business environment and include changes in technology, industrial structure and economic recession (e.g. Mainela 2002). Hedaa and Törnroos (1997) add another kind of change stimulus coming from nature.

Organising the problem areas in this case study

Time and event flow-related problems occurred continuously during the research process. Time needed to be captured in several dimensions. Real time character was represented by researcher's assessments, identifications, observations and interpretations of events which have taken place simultaneously as part of the fieldwork. The documentation of this was also found as written field notes and it was reflected in the inter-firm communication. It is important to note that the memories and interpretations reflect time and depend also on the person's opportunity to observe, as well as his/her subjective perception and interpretation of the event (Van Maanen 1979, Halinen 1994).

The position of the informant and his/her real access to the research information are significant factors for ensuring a reliable, accurate and realistic view of the events. Malinowski (1961) stresses the type of participant observer who stays in the field long enough to become invisible and affects the quality of the observation. A similar effect- reduction of reactivity is possible when the researcher has a position or a function in the "market". It is therefore normal to assist one another and to discuss interesting topics without colouring them according to one's current interests. Reactivity diminishes the quality of information; it refers to the role of informant who reacts while answering thus manipulation the content or nature of the information. Also, the longitudinal nature of the research process enhances the trustworthiness of the findings; it is not based on extraordinary situational factors, but rather as a part of the larger development process.

Triangulation¹² is the application and combination of several research methods to study one phenomenon, it uses combination and comparison to reach more valid research results. (Denzin 1978; Alasuutari 1995; Silverman 2001). Triangulation is used to increase validity, applying it as a tool to minimise the researcher bias in data collection and analysis. Denzin (1978) identifies four modes of triangulation: sources, methods, investigators and theories. Triangulation is carried out both at a source level, using several types and sources of data, as well as in theory, which combines two overlapping theoretical views in this study. Triangulation assists in avoiding erroneous conclusions concerning the processes at work in the study (Stake 1995). In this study the concept of triangulation functioned also in data collection as an accumulated form of source triangulation, when the informants are aware of the situation (cf. Silverman 2001, p.233).

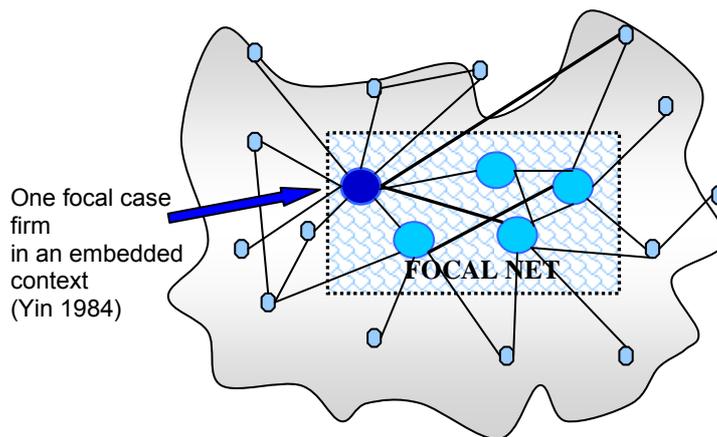
Axelsson and Johanson (1992) suggest that it is vital to examine the actors in the network, the relations between these actors and position in the network as well as the resources that can be mobilized for entry into a market. Also social relationships play an important role in international

¹² Triangulation stems from the research methods of social sciences using several sources and methods simultaneously

business (Björkman & Kock 1995; Mainela 2002; Madureira 2004), therefore the social dimension is incorporated into “actors” and the element of atmosphere.

To be able to establish convincing empirical grounding the number of secondary cases is decided according to the suggestion of Eisenhardt (1989) i.e. between four and ten, but the amount evolves according to the development and the main criteria is the importance of a certain business relationship on the overall development, not an exact number. The structural focus of analysis consists of the focal firm in a focal net and its focal dyads. The units of analysis are: the firm *Seller*, its immediate business net and the relationships between them. This implies that the internationalisation process is interpreted from the structural perspective of the Seller. The analysis is Seller-connected and does not change its central structural focus, see the Figure 7. This assists in systematic research.

Figure 7. Boundaries in the perspective- Focal net



Source: Modified from Halinen and Törnroos 2005

The focal net was constructed applying similar a logic as the ARA model (Håkansson and Johanson 1992). The constellation of this focal net was defined by the researcher according to the actors - the firms - and their activities - selling, buying, manufacturing, converting and other - and according to their resources - supply potential, know-how, manufacturing capacity, customer base etc. A kind of macroposition was used to create the focal net around the focal case company.

In the study “a map” of the business network was used as a plan to navigate through the evolution of these firms and their relationships (A-G), see Figure 8.

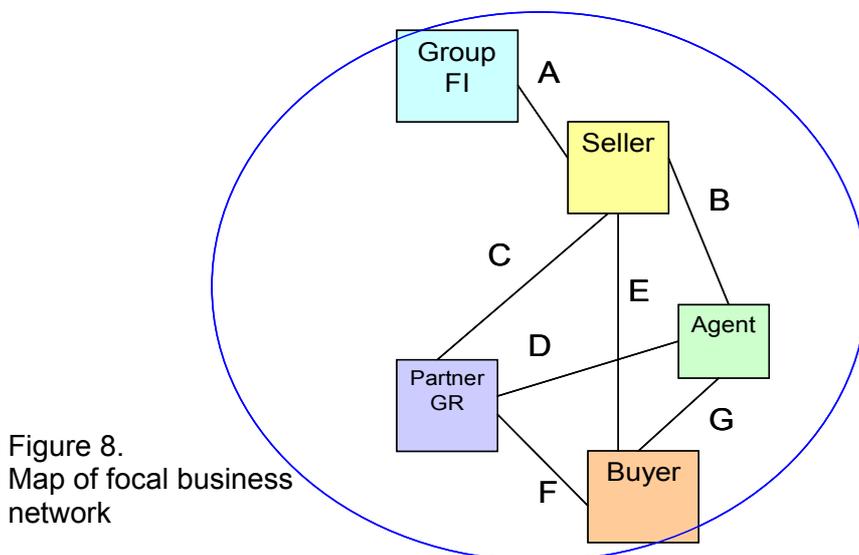
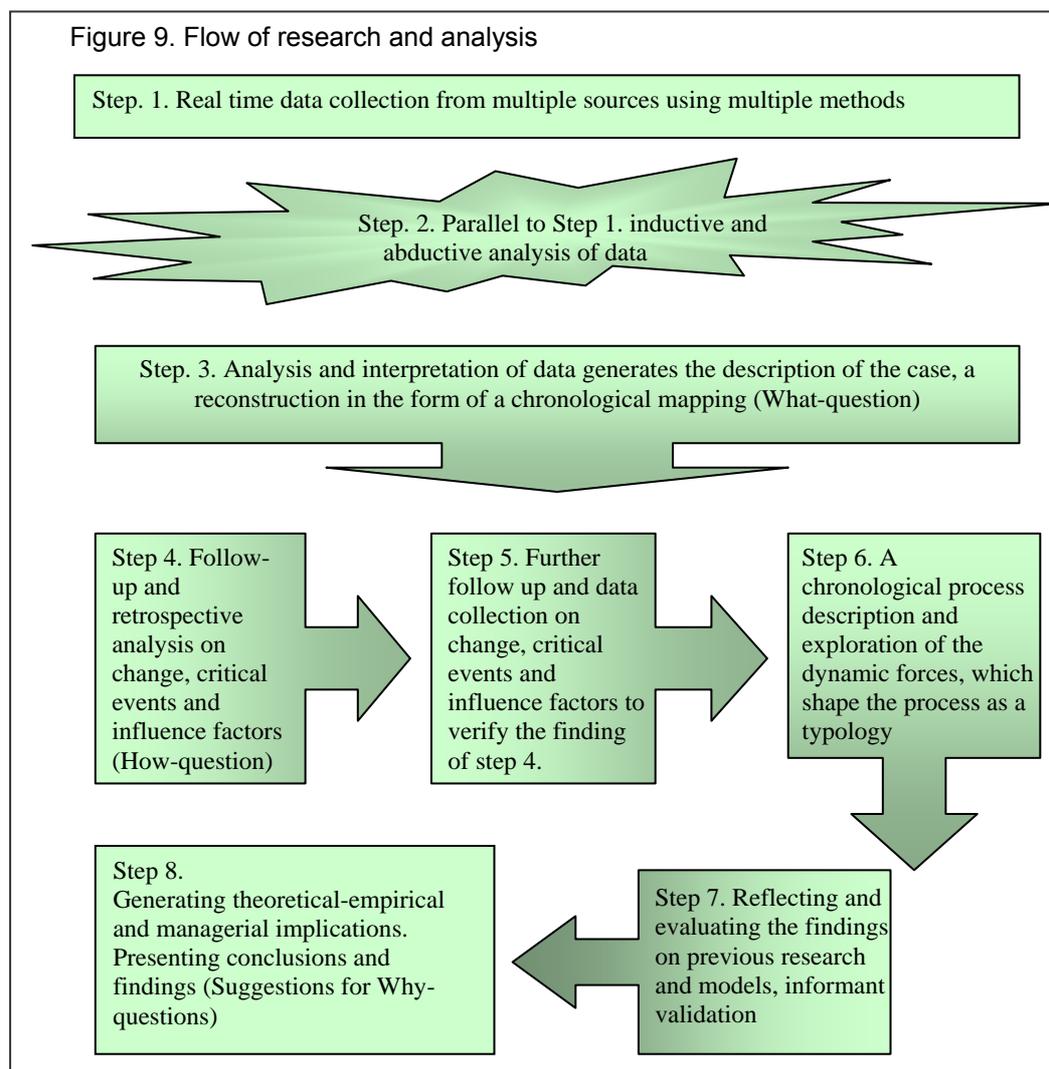


Figure 8. Map of focal business network

In this case the research frame functioned in stages, it evolved following the leads on rather flexible basis having the mapping as a guideline together with the research questions, see Figure 9.



Discussion and research implications¹³

An embedded case study with the character of “a case in cases”-study provided a fruitful research method. It did not limit unnecessarily the study, but it could provide a versatile and flexible frame for research. The sample study could have had a business network as a focus, but limiting the focus allows for more in-depth research and makes the research process more manageable. The advantages of a business network approach are quickly combined with disadvantages such as immense data and high complexity in analysis, therefore the research focus and the way research questions are to be reached need careful planning and attention, see Table 1. A reasonable fit is established between boundaries and outcome as well as scientific value. In this study a firm as focal actor was chosen since it makes it easier to draw the separating boundaries for methodological reasons and it is comparable to the focus of analysis in previous internationalisation theories.

The combination of methods of data collection and analysis enabled a deep understanding and a wider view than a single method would have given. The main advantage of the model was its practicality and the higher quality and trustworthiness of the research results. Practicality from the research problem view is apparent, but it can turn into impracticality if the planning and limitations are

¹³ The discussion is limited to a researcher’s view, but the model is basically applicable on business/company development processes as well. Managerial implications are not explicitly discussed.

not adequate. It could be recommendable to start with a pre-phase of study on purely inductive basis to collect the required level of understanding on the research object and then to continue on re-defining and limiting the research topic.

The method being “on-line” in real time and the re-examining of events going backwards in time turned out to be very practical and provided an extended picture on events and their nature. The

<p>Table 1. An evaluation of the synthesis model: change-critical event-influence factor analysed as an on-going process, through follow-ups and historical reconstruction</p>	
<p>Advantages: Enables a holistic view and rich descriptions Fits well with case studies A good fit with business network studies; applicable on dyads, triads and networks Flexible, dynamic and versatile Adaptable to different settings Adaptable to various research interests and research questions A good applicability on complex dynamic processes in time Suitable for longitudinal studies Enables a deep understanding of processes Enables “on-line and retrospective research” parallel to each other The level of analysis is adaptable The quality of research findings is improved and has a higher reliability and validity</p>	<p>Disadvantages: Very complex Increased workload and costs Requires good and wide access Difficult to organise Difficult to keep the line of thought during time Wrong limitation can result in losing the richness and essence of the study Definition problems Overlapping elements and categorisation problems Lacking criteria and tools No universal systems or criteria available for comparison Idiographic Subjective Lack of literature on business network applications</p>

combined analysis could be suggested for development related studies. It provides both a holistic view and a specific view on development and its element and the deeper analysis can be focused on the relevant events only. Connected events and processes opened up and increased the understanding of the development process in the context of internationalisation in a business network.

The problem area arises from complexity and limitation, also a close access or participant-action research position is almost necessary. The study had a rather macroposition-oriented emphasis on structure and this assisted greatly in keeping it in a frame during the longitudinal research process. Perceptions per se were too contradictory and did not present such a cohesion that they could have been used alone as criteria. On the other hand, strict limitation on particular companies would have restricted this study to an unusable torso.

However, to what extent the map of the researcher remains usable during the research process depends on the research objects, i.e. is highly context dependent and case-specific. The paper attempts to contribute to the discussion and development of the event view on business networks and development. The terms such as change, development or events also need sufficient definition from the beginning, otherwise the researcher will get entangled into evolving definitions that are no longer internally comparable considering the research process itself.

If the case study combination with change, critical events and influence factor analysis should be evaluated it could be rated as satisfactory and applicable. Such an approach can be recommended for similar research problems for researchers who believe to have an adequate access to committed informants. However, the idiographic nature of case studies has its influence on methodological choices too.

The theoretical and methodological discussion on business network research methods should continue. There are numerous aspects in business network studies which need clarification. “Test reports” that assist other scholars in forming their research processes are needed. The development of research tools for business networks is in an infant stage borrowing tools from social sciences and organisation sciences. However, the logic of business networks is not fully comparable to other networks. The economic character and the concept of benefit have strong implications on business networks, these forces must be incorporated into the methods too. One suggestion is that different typologies could be generated in such a sense that it would assist in categorisation of data and findings. Typologies have functioned as helpful concepts in discussing and comparing development in internationalisation processes, the idea could be applied in other development related contexts as well.

Another problem area is the context specific character and the lack of universal character: cases across geographical areas, industries or technologies are not comparable in scientific terms. But despite that, we need to find tools that have a wider applicability than just one case. Business network researchers have not developed any standards such as AEA program 1994 or MEANS criteria 2003 of European Commission for evaluation of case studies. If theory building is a target we must reconsider the aspect of comparability at least to the extent that is required to build aggregate studies on basic aspects. Comparability and evaluation models are prerequisites for formation of managerial oriented research implications on larger scale than on firm. The discussion on qualitative methods applied on business networks deserves more attention.

References and sources:

- Aaltio-Marjosola (2001): Case-tutkimus metodisena lähestymistapana.
<http://www.metodix.com/showres.dll/fi/metodit/methods/metodiartikkelit/case_tutkimus/etusivu> 14.11.2001
- Achrol, R.S. (1997) Changes in the Theory of Interorganisational Relations in Marketing: Towards a Network Paradigm, *Journal of the Academy of Marketing Science* 25 (19), p. 65-71
- Alasuutari, P.,(1995) *Researching culture: Qualitative method and cultural studies*, Sage Publications
- Alasuutari, P., (1999) *Laadullinen tutkimus*, Vastapaino, Tampere 3. Edition
- Andersson, Per and Mattsson, Lars-Gunnar (2006) in Solberg, Carl Arthur (ed), *Relationship between exporters and their foreign sales and marketing intermediaries*, Advances in International marketing, Volume 16, Elsevier Science. 2006 (forthcoming).
- Bitner, M.; Nyquist, J.; Booms, B. (1985): The Critical Incident as a Technique for Analyzing the Service Encounter, in: Bloch, T.; Upah, G.; Zeithaml, V. (eds.): *Services Marketing in a Changing Environment*, Proceedings Series, AMA, Chicago/III. 1985, p. 7-11.
- Bitner, M.; Booms, B., Tetreault, M. (1990): The Service Encounter: Diagnosing Favorable and Unfavorable Incidents, in: *Journal of Marketing*, 54 (January), 1990, p.71-84.
- Bonoma, Thomas V. (1985) Case research in marketing: opportunities, problems, and a process. *Journal of Marketing research*, vol 22, 199-208.
- Carlisle, K. E. (1986) . *Analyzing Jobs and Tasks*. Englewood Cliffs, NJ: Educational Technology Publications, Inc.
- Cook, John E. (2001) *Research Design and Execution*, Research Methodology, Sheffield Hallam University DBA 1, 26.10.2001, Working paper
- Christensen, C.R. and Hansen,A.J., *Teaching and the Case Method*, Harvard Business School, Boston, MA, 1987
- Denzin, N. (1978) *The research act*, Chicago, Aldine
- Easton, G. (1992) "Industrial networks: a review." in B.Axelsson & G.Easton (eds.) *Industrial Networks. A New View of Reality*. Routledge, London & NY.
- Easton, G. (1995). "Case Research as a methodology for industrial networks: a realist apologia", *Interaction, Relationships and Networks, Past-present-future*, edited by Turnbull, P. and Yorke, D. and Naude, P. 11th IMP Conference, Manchester 7th-9th September 1995, *Competitive Papers*, Vol. 1: 368-391.
- Eisenhardt, K.M., (1989) Building Theories from Case Study Research, *Academy of Management Review*, Vol.14, no.4,p. 532-550
- Eisenhardt, K.M., (1991) Better stories and better constructs: The case for rigor and comparative logic, *Academy of Management Review*, Vol.16, no.3
- Elo, Maria (2005) *SME Internationalisation from a network perspective, an empirical case study on a Finnish-Greek business network*, Doctoral dissertation, Abo akademi, Turku, 2005
- Eskola, Jari and Suoranta, Juha (2000) *Johdatus laadulliseen tutkimukseen*. Vastapaino: Tampere.
- Fivars, G. (Ed) (1980) *Critical Incident Technique*, American Institutes for Research.

- Flanagan, J. (1954). Original source: Critical Incident Technique, *Psychological Bulletin* Vol. 51, No.4 July:327-358 In Voima Päivi (2000) *Critical Incidents in Internal Relationships*, Swedish School of Economics and Business Administration, Working papers 420
- Fletcher, Richard and Barret, Nigel (2001) Embeddedness and the evolution of global networks. An Australian case study. *Industrial Marketing Management* 30, p.561-573
- Gans (1968)
- Gummesson, Evert, (2000) *Qualitative Methods in Management Research*, second edition, Sage Publication, Inc. London, New York
- Gummesson, Evert, (2001) Are Current Research Approaches in Marketing Leading us Astray?, *Marketing Theory*, vol.1,no.1
- Halinen, Aino (1994) Exchange relationships in professional services: a study of relationship development in the advertising sector, doc. Dissertation, Turku School of Economics, 1994 Turku
- Halinen, Aino and Salmi, Asta and Havila, Virpi (1999), in *Understanding Business Marketing and Purchasing, An Interaction Approach*. Ed. David Ford/IMP, 2002, Thomson Learning
- Halinen, A. and Törnroos, J.-Å. (1995). The Meaning of Time in the Study of Industrial Buyer-Seller Relationships In "Business Marketing: An Interaction and Network Approach", ed. by Kristian E. Möller and David T. Wilson, Kluwer Academic Publishing Co, USA, p.493-529.
- Halinen, A. and Törnroos, J.-Å. (2005) Using case methods in the study of contemporary business networks, *Journal of Business Research*, 58(2005) pp.1285-1297
- Hedaa, Laurids and Törnroos, Jan-Åke (1997) Understanding event-based business networks, 68. Working papers, Department of Management, Politics and Philosophy, Copenhagen Business School 1997 No. 10, 32 pp.
- Hirsjärvi, Sirkka and Remes, Pirkko and Sajavaara, Paula (1997) Tutki ja kirjoita. Tammer-Paino Oy: Tampere.
- Hunt, Shelby D, (1991), *Modern Marketing Theory: Critical Issues in the Philosophy of Marketing Science*, South-Western Publishing Co.
- Johanson, Jan & Mattsson, Lars-Gunnar (1988) "Internationalisation in Industrial Systems-A Network Approach", In Hood, N. & Vahlne, J.E. (eds) *Strategies in Global Competition*, New York: Croom Helm
- Madureira, Ricardo (2004) *The role of personal contacts of Foreign subsidiary managers in the coordination of industrial multinationals: the case of Finnish subsidiaries in Portugal*. University of Jyväskylä, 2004, 186p, Doctoral dissertation, Jyväskylä Studies in Business and Economics
- Malinowski, Bronislaw (1961) *Argonauts of the Western Pacific*, New York:E.P.Dutton
- Meyer, K. & Skak, A. (2002) Networks, Serendipity and SME Entry into Eastern Europe, *European Management Journal* Vol.20. No.2, 2002, pp.179-188
- Möller, Kristian and Halinen-Kaila, Aino (1997) Relationship Marketing: Its disciplinary roots and future directions, Helsingin Kauppakorkeakoulu, HeSE Print, 1997
- Möller, Kristian and Halinen, Aino (1999) Business Relationships and Networks: Managerial Challenge of Network Era, *Industrial Marketing Management* 28, p. 413-427
- Nummela, Niina (2002a) Change in SME internationalisation. A network Perspective, competitive paper EIBA conference 8-10.12.2002 Athens Greece
- Nummela, Niina (2002b) Change in SME internationalisation. A conceptual discussion, 12th Nordic Conference on Small Business Research 26-28.5.2002, Kuopio, Finland
- Olsen M.(1992). Kvalitet i banktjänster: Privatkunders upplevda problem med banktjänster-en studie med hjälp av kritisk-händelse-metoden. Doktorsavhandling vid Stockholms Universitet och Centrum för tjänsteforskning (CTF) Karlstad.
- Pettigrew, Andrew M. (1997) What is processual analysis? *Scandinavian Journal of Management*, Vol.13, No.4, p.337-348

- Perry, Chad (1998) Processes of a case study methodology for postgraduate research in marketing, *European Journal of Marketing*, vol. 32 no.9/10
- Powell W.W.,(1990) "Neither market nor hierarchy: Network forms of organization", *Research in Organizational Behaviour* , Vol. 12, pp. 295-336
- Ring, Peter Smith & Van de Ven, Andrew, Developmental Processes of Cooperative Interorganisational Relationships, *Academy of Management Review* Vol.19, No.1. January 1994, pp.90-118
- Silverman, David (2001), *Interpreting Qualitative Data, Methods for Analysing Talk, Text and Interaction*, London, Sage Publications
- Stake, Robert, E. (1995) *The Art of Case Study Research*, Thousands Oaks, California, USA, Sage Publications
- Strandvik, T. & Törnroos, J-Å.,(1997) Discovering Relationscapes-Extending the Horizon of Relationship Strategies in Marketing, New and Evolving Paradigms: The Emerging Future of Marketing, American Marketing Association Special Conferences, Dublin, 12-15.6.1997
- Tsoukas, Haridimos (1989) The Validity of Idiographic Research Explanations, *Academy of Management Review*, Vol. 14, no. 4 p. 551-561
- Yin, R.(1984): Case study research, Newberry park, CA, Sage Publications
- Yin, R. (1994) Case Study Research-Design and Methods, Applied Social research Methods Series, Vol. 5, 2nd ed. Sage, Newbury Park, CA
- Valdelin, J. (1974) "Produktutveckling och marknadsföring – en undersökning av produktutvecklingsprocesser i svenska företag", EFI, Stockholm.
- Vandelin, J. (1979) The Fact of Fiction in Organisational Ethnography, *Administrative Science Quarterly*, Vol.24, No.4, p.539-550
- Van de Ven, Andrew H. (1992) Suggestions for studying strategy process: A research note, *Strategic Management Journal*
- Van de Ven, Andrew H. and Poole, Marshall Scott (1995) Explaining development and change in organizations, *Academy of Management Review*, Vol.20 No.3, p.510-540
- Van Maanen, J. (1978) People processing: Strategies of organisational socialisation, *Organisations dynamics*, 1978
- Van Maanen, J. (1979) The Fact of Fiction in Organisational Ethnography, *Administrative Science Quarterly*, Vol. 24, No. 4, p. 539-550
- Vincze, Zsuzsanna (2004) A Grounded Theory Approach to foreign market expansion in newly emerging markets, Two Finnish companies in the Visegrád countries. Series A-4:2004, Doctoral dissertation, Publications of the Turku School of Economics and Business Administration, Turku
- Virtanen, Petri and Niinikoski, Marja-Liisa and Pekkala, Henrik (2005) Globaaliohjelman arviointiraportti, Net Effekt Oy, KTM Julkaisuja 4/2005 Elinkeino-osasto
- Voima Päivi (2000) Critical Incidents in Internal Relationships, Swedish School of Economics and Business Administration, Working papers 420
- Webster, Frederic E. jr. (1991) *Industrial Marketing Strategy*, 3. edition, John Wiley and Sons
- http://www.mindtools.com/pages/article/newPPM_04.htm