

## INTER-ORGANIZATIONAL COLLABORATION TO DEVELOP BATIK BANYUMAS SMESCOMPETITIVENESS

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**Abstract:** *The purpose of this study is to examine some important fundamentals of collaborative processes, the drivers for inter-organizational collaboration and the logic behind how such processes can be important for competitiveness development. This study particularly emphasizes collaboration among Batik Banyumas small and medium sized firms (SMEs), collaboration as a process (that takes place among various actors, such as SMEs, large companies, universities and/or public actors) and takes a specific view from a resource-based perspective. This study rests upon both qualitative and quantitative data. The empirical data was collected in banyumas regency through batik banyumas collaboration case, which constitutes this multiple case studies. This study used three methods for gathering data, direct observation, indepth interviewing, and analyzing documents. Batik Banyumas' SMEs may benefit from viewing inter-organizational collaboration as a route to access or acquire resources that later can be transformed into capabilities. A specific form of inter-organizational and cross-sector collaboration of interest in this study is Triple Helix based collaboration – a theoretical concept that has received significant recognition especially from policymakers. Resources, interaction, motives to collaborate, negotiation and commitment, evaluation and learning, and actors are important components of collaborative processes for Batik Banyumas' SMEs.*

### INTRODUCTION

By looking closer into the process of working together in the pursuit of common objectives, and primarily among SMEs, such view of collaboration emphasizes the dynamic relationship that exists between the actors involved and elements of this process that can be important for understanding competitiveness. The general outline of this study consists issue of why actors (and particularly SMEs) engage in inter-organizational relationships and how such collaboration is constituted; thus attempting to contribute to obtaining insights that can advance the theoretical discussions on how firms build competitiveness through collaboration. The main perspective applied in this study is based upon notations suggesting that learning

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and innovation often are identified as fundamentals for competitive advantage emanating from collaborative processes. Learning can be viewed as the valuation and assimilation of new, external information where the results of learning are innovations to the firm (Cohen and Levinthal, 1990). Innovations become important since they provide the firm with new products and services that can be offered to customers, and thereby improve a firm's competitiveness (Rahab, Istiqomah, Najmudin, 2013). To this background, innovation and learning on a firm level as well as in different collaborative constellations has hence been of interest (Rahab, Anwar, Priyono, 2016).

The point of departure of this study is basically inspired by the resource-based view of strategy, where resources possessed by actors enable them to achieve competitive advantage due to that these resources are valuable and rare. Resources that are valuable and rare can lead to the creation of competitive advantage, after being transformed into capabilities. Such advantage can be sustained over longer time periods to the extent that the actor is able to protect it against resource imitation or substitution. Inter-organizational collaboration is from this perspective viewed as a route to access or acquire resources that can be transformed into capabilities (Rahab, Anwar, Priyono, 2016). Such transformation is facilitated through learning from and together with partners in inter-organizational collaboration. This study focus on collaborative processes between SMEs and other actors that jointly try to develop their competitiveness.

## **RESEARCH METHODS**

This study rests upon both qualitative and quantitative data. The empirical data was collected in Banyumas regency through batik banyumas collaboration case, which constitutes this multiple case study. This study was observed 5 (five) batik small firms (i.e., Batik SD, Batik MD, Batik Papringan, Batik Ksatria, Batik Tata) Case consists of collaborative processes inter-firm networks between Batik Banyumas' SMEs. The strategy has been to collect data from several sources and then document the data in a case study archive for each case in this multiple-case study. For example, the data generated through interviews have been summarized and reflected upon simultaneously during the conversations, since it builds up the next question in the session. Thereby, the choices of relevant material and interpretations are integrated along the way when you are talking with people on the basis of themes. Notes have been taken during formal meetings and follow-up interviews. Analyzing the material started by reading it as a whole, looking for particular ideas, similarities and differences, i.e., coding, categorizing and analyzing. The material was processed several times. Data have been collected from many different sources such as interviews with people from different organizations active in inter-organizational collaboration, written documents, observations, and newspaper cuttings. This has made it possible for me to question the collected data

and to see irregularities or regularities in the data. The combination of observations and interviews was also used to gain a more comprehensive understanding of the studied phenomena. Most of the data collection and data reduction has been accomplished by research team.

In this study have chosen the resource-based view of strategy as theoretical perspective and also use other theories as theoretical concepts for complementary devices to better understand the phenomenon under study. This research an attempt to explain why Batik Banyumas' SMEs entered into inter-organizational collaboration based on theoretical frameworks.

## **RESULT AND DISCUSSIONS**

Most of literature review and research acknowledge that the resources possessed by actors, might enable them to achieve competitive advantage. Resources can lead to the creation of competitive advantage, especially after being transformed into capabilities. This study show that many Batik Banyumas' SMEs may benefit from viewing inter-organizational collaboration as a route to access or acquire resources that later can be transformed into capabilities. A specific form of inter-organizational and cross-sector collaboration of interest in this study is Triple Helix based collaboration—a theoretical concept that has received significant recognition especially from policymakers. This study find that the triple helix approach despite its seemingly simple and straight-forward implications did not describe how collaboration is constituted in practice or provide any advice or implications on how such collaboration should or could be managed (Leastadius, 2007; Rahab, Anwar and Rawuh, 2016).

Based upon review literature, This study used both the Actors-Resources-Activities model (Håkansson, 1987; Håkansson and Johansson, 1992; Håkansson and Snehota, 1995) and the Process Model of Collaboration (Ring and Van de Ven, 1994) were identified as models offering interesting pieces of the puzzle to develop a better understanding of collaborative processes. The Actors-Resources-Activities model may be understood to depict collaborative processes as interaction between actors who participate in collaborative activities to utilize or access resources. The Process Model of Collaboration (Ring and Van de Ven 1994) instead pointed towards the importance of recognizing the function of negotiations and commitment in inter-organizational collaboration, viewed as a cyclical process of regeneration. In an attempt to utilize the strengths and also to seek to illuminate the weaknesses with the Actors-Resources-Activities model and the Process Model of Collaboration this study suggest a new combined framework on collaboration based on the literature review, my case studies and on these two models. The main components in the framework are (1) resources, (2) interaction, (3) motive to collaborate, (4) negotiation and commitment, (5) evaluation and learning, and (6) actors.

Since first study approach originates from the main theory used in the project and the findings reported, the resource-based view of strategy, this study consequently take the stand that resources or the quest for resources is the central theme behind inter organizational collaboration. Subsequently resources are viewed as the key to competitiveness since resources are important for an actor's capability, and inter organizational collaboration is an efficient way to access or acquire these resources.

Resources are hence in the centre of attention and these resources can be financial, physical, human, technological, reputational or organizational (Grant, 1991; Anwar, Rahab, Priyono). However, as Penrose (1959) claimed, it is the service that a resource renders that provides the owner with value and not the resource itself. By transferring resources into capabilities and services, a firm may develop its competitive advantage. This is what the Actors-Resources-Activities model stresses when essentially viewing the firm as a resource entity being dependent on different kinds of resources, and consequently the main concern for an actor is to make the best use of the resource constellation available in the network of collaborating partners.

In these efforts, it is important that resources are not perceived as given. Resources always have unexploited dimensions that can be explored and developed in interaction with other actors. It is through the continuous resource combining and recombining that new resource dimensions are identified and further developed (Håkansson and Snehota, 1995). This study revealed that for a network of collaborating SMEs, especially know-who knowledge was important since it functions as a mediator for accessing and acquiring other types of knowledge resources. A relationship can in such sense be viewed as a resource in itself, when the relationship can be utilized to change the use and thereby the value of other resources. This study addresses the issue of combining resources from different actors in performing key activities in innovative processes.

Resources can consequently be viewed as an outcome from the interaction between the involved actors in the collaboration due to that the resources are jointly created, accessed and utilized. Therefore interactive activities are a basic element in collaborative processes between collaborating actors. This view is well in line with the Actors-Resources-Activities model. Interaction can be viewed as the core of what collaborative processes are about since it is through interaction that a common ground between actors is identified, new understandings emerge and joint or individual actions are decided upon. Ring and van de Ven (1994) regard the collaborative process as gradual development and evolution consisting of a repetitive sequence of cycles facilitated by negotiation, commitment, and execution stages, which result in a common ground and a base for future actions.

Based on experiences from these case studies, Ring and van de Ven's view of interaction on a meta-level, and the actual collaboration becomes abstract when

discussed in a general (theoretically) rather than in a practical settings where the actors engaged in collaboration adopts a more narrow view when focusing on activities such as for example product development and joint marketing. This is supported by Håkansson and Snehota (1995) who describe interaction as rooted in the exchange of products and services and concerned with how the collaborating partners choose to organize the flow of goods and information.

Both these models do not specifically discuss actors' motives to collaborate and the role actor motives plays in different stages of collaboration. These models do hence not include motives as a dimension but instead actors' motives are taken for granted with the hidden assumption that collaboration is something that the actors expect to benefit from.

*Negotiation and commitment* are two important components in Ring and Van de Ven's (1994) process model. It is through processes involving negotiation and building commitment the actors develop shared expectations in a process where possible uncertainties are determined and a governance structure is agreed upon. The focus is according to these authors on the formal bargaining process, but at the same time (as empirical findings in this thesis indicate) the partners learn to understand each other and trust evolves. This mutually agreed view is then put into a formal contract or in the form of an informal mutual commitment, where the actors involved expect that other actors fulfill the agreed commitments.

*Evaluation and learning* are also important activities in collaborative processes since each actor continuously evaluates the costs and benefits from their participation in the collaboration. The result from this evaluation is an important input to learning since it influences the actors' decision to continue to collaborate or not, and how to calibrate their resource input in order to achieve the best outcome possible from the collaboration. However, what comes out from an inter-organizational collaboration is not solely determined by initial conditions. Rather, inter-organizational collaboration goes through sequences of evaluation based upon learning regarding how the collaboration is organized, about the joint work methods and processes, and on how the environment affects the collaboration. This leads to readjustments of joint and individual objectives to collaborate and also on how the collaboration process should be organized.

Ring and Van de Ven (1994) argue that it is human factors that make the collaboration emerge, evolve, grow and dissolve over time. I share this view when my experiences from the studied cases convey that activities and resources are not coordinated and combined spontaneously. They are purposefully directed by actors who systematically try to influence one another and thereby try to renegotiate the direction or the terms for collaboration. Overall, in collaborative processes are actors central due to that actors are the ones performing activities,

controlling resources, possessing knowledge and capabilities and learn from collaboration.

The result of study is a proposed new framework that - basically building on the Actors-Resources-Activities model (Håkansson, 1987; Håkansson and Johansson, 1992; Håkansson and Snehota, 1995) and the ProcessModel of Collaboration (Ring and Van de Ven, 1994) and the empirical results from this study and its appended papers - has the ambition to better capture important elements and processes involved in inter-organizational collaboration.

This synthesized framework integrates vital components in collaborative processes such as (1) resources, (2) interaction, (3) motives to collaborate, (4) negotiation and commitment, (5) evaluation and learning, and (6) actors. This framework adopted from Johansson (2008). Figure. 1 visualizes interaction between vital components in collaborative processes.

By combining elements from established models addressing inter-organizational collaboration, the suggested framework builds on the tradition of cumulative scientific work. Based on this study's empirical findings, the offered framework however also aims at extending our understanding of collaborative processes and its underlying logic by *first* integrating central components in inter-organizational collaboration (actors, activities and resources) with a process-oriented view (the cyclic interplay between motives, negotiation and commitment, and evaluation and learning forming an ongoing or continuous collaborative process); *second* by highlighting actor motives/motive congruence and the role of

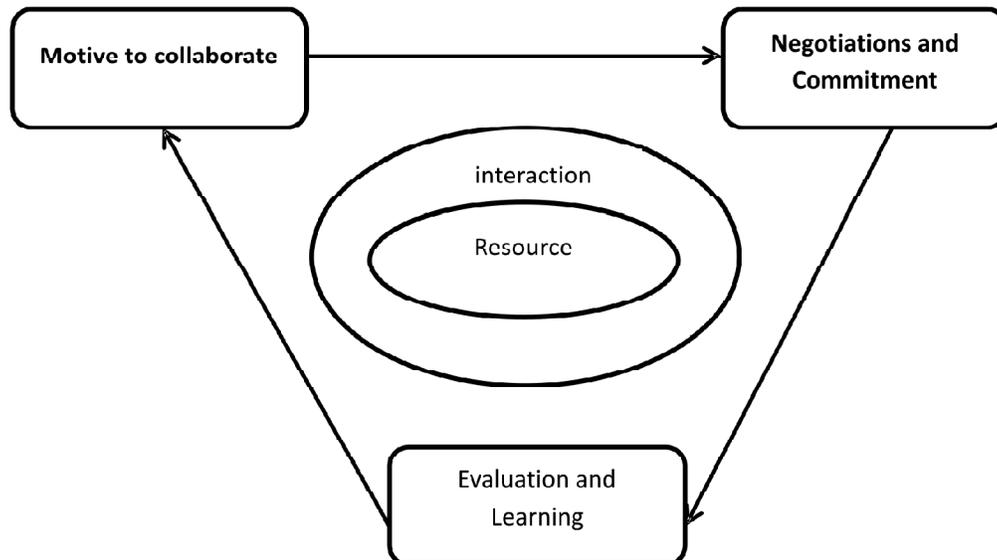


Figure 1: Interaction between vital components in collaborative processes

learning in collaborative processes – factors that in this thesis' empirical studies come forward as central variables for understanding the logic of collaborative processes. The proposed framework may hence be understood to combine the models of Håkansson et al and Ring and Van de Ven when it stresses the importance of interaction between actors engaged in the collaboration since this interaction interlinks activities which combine resources, and often via learning creates new resources or new creative usage of old resources. Unlike these two models, however, the proposed new framework specifically denotes the importance of understanding actors and their motives as well as how these actors as a base for future collaborative actions evaluate and learn from their previous experiences. Hopefully this also contributes to 'de-mystifying the magic' behind the positive helices that, according to Etzkowitz and Leydesdorff, are the dynamic mechanisms behind a functional cross-sector collaboration.

The suggested framework may also be understood as a way to capture dynamic capabilities in inter-organizational collaboration. Dynamic capabilities concern an actor's ability to integrate resources and to reconfigure internal and external competencies. The focus of dynamic capabilities is on how resources are developed and how they are integrated within the actor's organization – an essential task for all actors and organizations seeking to secure or develop competitiveness. In the proposed framework can the origins of dynamic capabilities be derived from the 'resources' they build on, the 'interaction' with partners where these capabilities are employed, and the 'actors that on the bottom line possess and make use of these dynamic capabilities. More research is however needed in order to verify this proposed framework on how collaboration processes are constructed and function. Aspects that deserve more attention from future research are e.g. how negotiations and trust-building activities may be accomplished in collaborative constellations, or which methods and approaches that (besides concrete joint projects) may be utilized for stimulating collective and individual learning. Recognizing that the framework suggested in Figure 3 basically depicts a collaborative process, another avenue for further research is to try to apply the framework to different development phases of collaborative initiatives.

## **CONCLUSIONS**

Actors-Resources Activities model and the Process Model of Collaboration are important model to understand and explain collaborate process. Resources can lead to the creation of competitive advantage, especially after being transformed into capabilities. This study show that many Batik Banyumas' SMEs may benefit from viewing inter-organizational collaboration as a route to access or acquire resources that later can be transformed into capabilities. A specific form of inter-organizational and cross-sector collaboration of interest in this study is Triple Helix based collaboration – a theoretical concept that has received significant

recognition especially from policymakers. Resources, interaction, motives to collaborate, negotiation and commitment, evaluation and learning, and actors are important components of collaborative processes for Batik Banyumas' SMEs.

### **IMPLICATION AND RECOMMENDATION**

Several recommendations can be given to policy makers aiming to enhance innovation and economic growth by promoting innovation systems or other collaborative arrangements. This study will here use the opportunity to try to formulate a few guidelines for policy-makers, building on 'lessons learned' from this research.

First, top-down initiatives have, as this study and also previous research have indicated, limited chances to lead to success. Consequently, building 'networks for others' as the top-down approach tries to do, is not a suitable strategy. The individual actors' motives are the key to successful implementation of innovation system initiatives. Taking the view of Alfred Marshall (1890; 1919) the emergence of an innovation system or a cluster of geographically co-located firms in the same line of industry should be a natural, self-organized process, implying that the evolution should be fertilized from the bottom-up, motivated by the needs of an industry and assigning policy and policy makers a limited (and preferably supporting) role. In other words, a politically motivated cluster or innovation system initiated through gathering firms from different sectors together and imposing upon actors the task to start building the sought-for system has only very limited chances to become successful; at best stimulating opportunistic rent-seeking behavior from actors such as commercial companies and universities. Instead, policy initiative can be of great importance when policy-making institutions stimulate the self-organized emergence of bottom-up initiatives to create innovation systems of geographically co-located firms in the same line of industry. This implication should apply also to the many consultancy organizations that today operate in the 'grey zone' between the public and private sector.

Second, policy-makers should reflect upon how the region's knowledge or competence base is embodied in university research and/or as an industrial core competence based in SMEs and/or large companies in the region, and how this may serve as a base for the emergence or the further development of an innovation system. A local knowledge or competence base embedded in the region is an important element and a foundation for the development of any regional innovation system. The case of green innovation in this study illustrates the importance of a local knowledge base and also the importance of demanding local customers, as well as how university research may promote and support the development of a functioning innovation system.

Third, while reflecting upon the region's knowledge or competence base, policymakers should also consider how new technology or new trends could affect

the further development of this regional core competence. Important here is to identify actors that in e.g. technological foresights may contribute with the knowledge and insight required by starting a dialogue targeting future challenges and opportunities. The role of public actors in such dialogues is to act as a promoter that initiates exchange and collaboration in these early phases e.g. by organizing meetings or by acquiring knowledge or other resources that other actors do not possess.

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