

# The role of a community in contributing to the development of start-up technology companies

*Competitive paper*

*Jari Ruokolainen*  
*jari.ruokolainen@nbl.fi*      *Finland*      *Tampere University of Technology*

## ABSTRACT

This study reports the role of a small community in constructing the market for a new actor's product. This study looks into the existing purchasing theories and creates a taxonomy how a community acts as a purchaser. The taxonomy helps understand how communities develop their capabilities by employing entrepreneurship. The tourism industry in Phuket needs innovative information technology solutions to ensure its competitiveness. The multiple case study approach is applied including several embedded levels: community, industrial district and actor. This study emphasizes that success in a new business is depending on customers' and entrepreneurs' joint contributions to develop their community. The results indicated that business is more than competing against each other: it is also about working in order to help the community develop itself by fostering new actors.

**Keywords:** Purchasing, community, group tacit knowledge, start-up technology companies

## INTRODUCTION

In the literature, there has been much discussion about purchasing in enterprises, for example, by Spekman (1993) Keough (1993) and Shapiro (1985). The view point that has been discussed relatively scantily is the role of a community as a purchaser. O'Donnell et al. (2002) do not mention cooperation in purchasing in their study, but they mention that small companies, even if they compete against each other, tend to assist each other. This assistance could have a purchasing dimension. The information sharing in purchasing can be a competitive advantage and therefore sharing of it is sensitive. The information regarded to companies' cooperation in purchasing might not be accessed easily.

Customers can buy from local suppliers to ensure that a community also has the essential competencies in the future. Customers guarantee their own future by taking care of their critical suppliers. The buying transactions in a community can happen individually by a company, but customers, even if they are competitors, can have a real or unspoken agreement to buy from a certain supplier. Knowing how the community works as a purchaser probably includes a lot of tacit knowledge, which is not readily available for outsiders. For a new supplier producing complex, high technology products, entering a small community market can be a challenging task due to the lack of a first reference, a foothold in a community.

Actually it is reported that start-up technology companies have problems finding resources for marketing with marketing resources rarely easily or inexpensively available (Leonidou and Katsikeas, 1996). In Huang and Brown's (1999) view, more than 40 percent of start-up companies have problems with marketing. Marketing can be problematic for start-up technology companies planning to produce a complex product for several reasons. Firstly the technology market is volatile and skeptical (Moriarty and Kosnik, 1989; Beard and Easingwood, 1996). Secondly, technology entrepreneurs are seldom market oriented (Freel, 1998). Actually Autio (1995) says that growth can even be discarded in new technology based firms.

It would be interesting to know how communities work as a purchaser. The large enterprises forms also a community and their purchasing practices have largely studied in the literature as referred earlier. One can ask that if there are similarities between companies in industrial districts and in large enterprises in purchasing practices. This author limited the scope of this study on small communities and new actors such as start-up technology companies. From start-up technology companies' point of view it is essential to know how communities work as a purchaser. Thus, the research question of the present study is how a community purchases from new actors? The new actor can be a new company run by an entrepreneur or a new function in a community. This function can be a resource supplier, for example, a university. This article studied first the known purchasing practices in large enterprises and then it investigated if the literature supported the approach that was selected. After that case studies were executed.

Attention has been directed towards the software industry in Phuket. This study introduces two case studies including several embedded levels. Two case studies are executed with the first one related to building business between new software companies and a tourism industry and with the second one related to building a relationship between a university and a software industry. Phuket needs to offer business models based largely on information technology solutions such as

web-reservation systems in hotels. The new information technology can fade the existing business models and make new ones to flourish.

## **BASIC CONCEPTS**

As this paper discusses about a community, its industry, start-up companies and entrepreneurship, the present concepts and their relationship are needed to be clarified and defined in the context of the present study. The New Oxford Dictionary (1999) defines a community as a district or a country considered collectively, especially in the context of social values and responsibilities. In particular, a group of people who live in the same area can form a community. A community is formed by a set of actors with some shared elements. The substance of the shared elements varies widely in each situation to influence lives and values. The term community is widely used to evoke a sense of collectivism. An element of collectivism is collaboration. Spekman (1993) describes collaboration as a mutual commitment to the future and a balanced power relationship.

As the concept industrial district can be related to the concept community, therefore, the meaning of it and its relations are also discussed here. Becattini (1990) defines an industrial district as “- a socio-territorial entity which is characterized by the active presence of both a community of people and a population of firms in one naturally and historically bounded area”. Park and Markusen (1994) define an industrial district as “- a sizeable and spatially delimited area of trade oriented economic specialization, be it resource-related, manufacturing, or services.” Italian law defines that an industrial district is any local area in which the number of employees within a specific industrial sector is 30% above the national average and where firms with less than 100 employees predominate. In this present article the industrial district consists of the actors such as firms, institutes and community of the people specialized in the certain sector forming mini clusters. Porter (1998) defines clusters as “geographic concentration of interconnected companies and institutions in a particular field”. This author would like to propose that a community can consist of one or several industrial districts that even overlap each other. However, one of the industrial districts can be dominant.

An industrial district can often be driven by entrepreneurs and start-up companies as in this study. A start-up company can be defined as one in the process of setting up business or one which has been in business for a short time, but has not yet traded their product commercially (Bank of England, 2001). In this study, the present researcher study investigates new establishments, which are either new companies or new functions in a community. Entrepreneurship is defined as an examination of how, by whom and with what effects opportunities emerge to create and exploit future goods and services (Shane and Venkataraman, 2000).

As it was mentioned earlier the knowing how the community works as a purchaser probably includes a lot of tacit knowledge. Tacit knowledge is knowledge that people carry in their minds. It is therefore difficult to access. Often, people are not aware of the knowledge they possess or how it can be valuable to others. Tacit knowledge is considered more valuable because it provides context for people, places, ideas and experiences. Effective transfer of tacit knowledge

generally requires extensive personal contact and trust. Tacit knowledge can be transferred only through personal experience or interactions with an expert (Senker, 1995). Based on Polyani's work (Nonaka, 1994; Davenport and Prusak, 2000), tacit knowledge is personal, rooted in action, with commitment and involvement in a specific context. It consists of paradigms, viewpoints, beliefs and concrete know-how such as crafts and skills.

In order to know how the community might work together for surviving, the concepts related group tacit knowledge is needed to be visited. Erden et al. (2008) discuss about group tacit knowledge. Group tacit knowledge is stated to be a result of social actions which engage individuals in collective practice. The way, how these individuals connect their activities, makes the system mindful. This means that a group, which uses the group tacit knowledge effectively, shares common mental models. It is also said to include collective practical skills, expertise and cognitions. It is deeply rooted in actions and cannot be learned by reading and talking. The tacit knowledge in a community can be assumed to be constructed largely from the same building blocks as group tacit knowledge. The group tacit knowledge definition can be also in some extent used in defining the tacit knowledge in networks. However, there can be some difference between the tacit knowledge in a group and in a community. For example, group tacit knowledge is grounded on close and active cooperation but tacit knowledge in a community can be based on loose cooperation but long term inherited knowledge of the community in question.

The new concept introduced in this study includes the community interest to develop its business capability by fostering new competence. The interest can be described by two ends of the line in which, at one end, the single customers take care of their own interests and at the other end, the community interest is strongly coordinated as in an enterprise which has a central purchasing function.

## **LITERATURE REVIEW**

Several researchers have divided purchasing practices into two categories (Spekman, 1993; Hayes et al., 1988; Shapiro 1985). The first one includes traditional purchasing practices, which are based on competition. The second one includes purchasing practices, which are based on partnership. In the traditional purchasing process the suppliers are allowed to compete against each other, and the suppliers are kept at arm's length. The aim is to use competition to gain the best delivery, price and quality terms. Conversely, partnership purchasing practices mean among others entering the market together with a supplier and sharing the profit equally. According to Spekman (1993), Hayes et al. (1988) and Keough (1993), long-term cooperation used in partnership purchasing is believed to bring better benefits than short-term cooperation used in traditional purchasing. Long-term cooperation and working together openly bring in practice benefits which are not achievable by the traditional purchasing approach. Close and long-term cooperation with a supplier helps the purchaser use the suppliers' capabilities to advantage more than traditional purchasing. According to the scholars above, these benefits may include radical price cuts, improved product quality and more innovative products. Monzka et al (1998) discussed that the bilateral communication behavior and joint-problem solving have an imperative role in making the relationship successful.

In order to gain the benefits listed above, the trends in enterprise purchasing have been towards reducing the number of suppliers in order to get enough high volumes for the rest of the

suppliers. The target can also be on reducing spot-type purchasing in order to extend the visibility of the business for a supplier. The aim is to extend the planning horizon into the future. According to Spekman (1993), sharing information openly and knowing each other's business intentions let the partners independently set compatible goals that help maintain the relationship. Spekman (1993) writes that collaborative business partners acknowledge that plans are likely to change and they establish processes to facilitate the interchange of information upon which the future plans will be built on. Furthermore, instead of having legal contracts, the partners aim at increasing mutual trust. Petersen et al (2005) emphasizes the importance of the trust and quality of the information in order to make effective collaborative planning.

Collaboration between the partners does not mean that conflict will be avoided. According to Spekman (1993), disagreements and conflicts are endemic to any trading relationship. He continues to describe how the nature of problem solving has changed: "To a certain extent, dialogue and joint problem solving have replaced negotiations as the primary means of exchanging information. Through early involvement and open channels of communication, suppliers become committed to the final product and willingly share responsibility for its integrity and reliability."

The development path of the purchasing from a large enterprise's perspective is studied, for example, by Keough (1993). An enterprise can consist of several purchasing groups, for example, one for each factory. Keough (1993) proposes that purchasing in an enterprise passes several phases before achieving world class status. In the first phase, the purchasing groups operate individually, focusing on enhancing clerical and logistics skills. In the second phase, the groups concentrate on achieving the best price terms and the focus is on negotiation and cost analysis. In the third phase, the enterprise builds purchasing committees from the individual purchasing groups and nominates a lead buyer. In the fourth phase, the enterprise uses cross functional teams for problem solving. Some attention is also given towards supplier development. In the fifth and final phase, the enterprise has cross functional supplier teams for problem solving and supplier development. Trent (2004) writes that the trend in the enterprises is to build centrally led and coordinated purchasing functions.

Complement aspect to the previous reviews is to investigate what has been written about the small communities. Anderson et al. (2007) describe how a small geographic size of a market advances the social interactions inside the firm, between the firms and on a broader social context. They refer to the evolution of a small Scottish town called Aberdeen, which is nowadays known as the 'Oil Capital of Europe'. O'Donell et al. (2002) found out that small companies exchange information relating to their customers behavior, sharing the overload, supplying resources and assisting each other, although they compete against each other. However, there are scarcely studies on how these companies interact and share information concerning purchasing.

Markusen (1996) categorizes industrial districts into three classes, which are Marshalian industrial, Hub-and-Spoke and Satellite platform districts. Marshalian industrial districts and its Italianate variant emphasize the cooperation between competitors to share risk, innovation and stabilize markets. Usually strong industrial associations and governmental organization exist in such districts and they provide shared infrastructure for the industry in question. Marshalian industrial districts are characterized by small and locally owned companies, and long-term

cooperation with suppliers inside the district. In Hub-and-Spoke districts, the trade is dominated by one or several large companies, which are surrounded by suppliers. The cooperation of the dominant companies with suppliers includes long-term contracts and commitments. The Hub-and-Spoke districts can be differentiated from the Marshalian industrial district by the fact the hubs do not share innovations with their competitors. In Satellite platform districts, the companies have minimal intra-district trade. The Satellite platform district consists of externally owned and headquartered companies.

Companies in communities form seldom a structured purchasing organization as it can be in an enterprise. However, their interest at the general level can be assumed to be similar. The customers want to ensure that the essential resources or technologies are available at a price, quality and deliver terms that make them profitable. The practices for ensuring mutual commitment in communities can be different from enterprises. The customers of the community expect that their suppliers are, for example, committed to local values. The commitment to local values is assumed to create trust between local community members. Honig (1998) writes that in a small community in Jamaica, suppliers who attend the church and have married into the community generate higher profit.

An example of a highly horizontally integrated community was presented to this author by one of the Japanese electronic manufacturing companies. They reported having a central storage area for a group of companies operating in the same area. The benefit of having a centralized purchasing and storage area was to build sufficient volume for a supplier and to ensure the turnover of the stocks. In order to guarantee high stock turnover, the different companies agreed on the purchase items, suppliers and what components they planned to use in their future products. In other words, they shared their product roadmaps. According to this Japanese company, the benefits that this company gained through horizontal and vertical cooperation were significant.

### **Conclusion on the literature**

Customers in a community can operate independently, or they can operate with close cooperation and share information. In addition, some of the customers use traditional purchasing practices in the community, targeting the best delivery and price terms, but some of the companies in a community use the partnership approach to thus cooperate closely with their suppliers. The assumption is that the community forms different kinds of purchasing structures, which mean various types of practices to adopt a new supplier. Based on the above, the following quadrant can be applied in taxonomy.

*"Insert Table 1 Near Here"*

In the first quarter, the customers operate independently without close cooperation with their competitors or suppliers. In the second quarter, the customers cooperate with each other and they apply the traditional purchasing approach towards the suppliers. They use their joint purchasing power to squeeze the supplier. In the 3<sup>rd</sup> quarter, the customers enter into a partnership with a supplier individually without cooperating with each other. In the 4<sup>th</sup> quarter, customers work closely with each other and jointly with their suppliers. The community dimension, which is

assumed to be orthogonal to the other two dimensions, can include the integration of community values: for example, the community might be liberal or conservative. This indicates how a supplier should adopt the community's values in order to become a trading partner.

The creation of the trust in order to achieve seamless cooperation horizontally in purchasing can take a long time especially in a situation in which an industry is new in a community. Erden et al. (2008) has created a four level model, in which the quality of group tacit knowledge is discussed. It can be assumed that it is a long trip from the first level, group as assemblages, up to the fourth level, collective improvisation. Similarly it can be assumed that in order to develop coordinated purchasing in a community, which needs tacit knowledge and trust among the actors, can take several years or even decades.

If the examples of the industrial district (Markusen, 1996) are used, it can be assumed that the Italianate variation of the Marshallian industrial district belongs to the 4<sup>th</sup> quarter in Table 1. The companies presumably cooperate in purchasing and build long-term relationships. Hub-and-Spoke fits in the 3<sup>rd</sup> quarter because the individual companies have long-term relationships, but do not coordinate purchasing with their competitors. In Satellite platforms, the companies do not have a long-term relationship with local companies and they do not coordinate purchasing. Therefore, it can be assumed that companies within that district are found in the 1<sup>st</sup> quarter.

## **METHODS AND DATA**

Two different cases are analyzed in this article. In the first case, the aim was to find evidence of vertical and horizontal integration and its effect on purchasing practices in a community between software companies and a tourism industry. In the second case, the aim was to study how a human resource supplier, a university, was integrated within the same software industry and how the software industry was integrated horizontally with the university. These two cases had several embedded levels: a community level, a district level, and an individual actor level. Phuket represented the community level, the tourism and software industry represented the industrial district levels in the community, and software companies, hotels and the university represented the individual actor level (see Table 2).

*“Inset Table 2 Near Here”*

The multiple embedded case study approach has been used in this study. Embedded case studies are discussed by Yin (1994). Multiple case study analyses was conducted by employing Within the case and Across the cases -method (Eisenhardt, 1989). Within-case analysis for each case preceded the cross-case analysis (Eisenhardt, 1989; Miles and Huberman, 1994). The first step in the within-case analysis was to analyze companies and then what kind of cooperation the companies with other companies in the industry. The view point of the suppliers also was then discussed: analyses were executed how the companies cooperated with their suppliers. In cross-case analysis phase the similarities and differences between the cases in terms purchasing practices were compared between the industries. The 2x2 matrix is employed in analysis to compare the categories as proposed by Eisenhardt (1989). The concepts from the theoretical framework facilitated characterization of the cases and their framing in terms of aspect (Ragin, 1992). The analyses were verified by interviewing of the head the associations in each industry

sector and by studying further the related to literature. The justification for choosing a case-study strategy is that it facilitates holistic understanding of complex phenomena that are not easily separable from their context (Halinen and Törnroos, 2005; Yin, 1989). In this study the complexity was clearly visible as the several embedded layers were discussed. According to Eisenhardt (1989), case-study research allows the researcher to focus on understanding the dynamics present within single settings. Thus, it maximizes the realism of the context at the expense of precision and generalizability (McGrath, 1982).

The local governmental organization, Software Industry Promotion Agency, helped identify the software companies and create contacts with the representatives of these companies. The local governmental organization listed seven clearly known software development companies in Phuket. The sampling plan was done carefully in order to gain understanding of the software industry in Phuket. The selected companies represented well the software industry in Phuket. Table 3 gives an overview of the interviewed software companies.

*"Insert Table 3 Near Here"*

Three hotels were selected to gain understanding how the hotel business work together in Phuket.: a hotel with several hundredths of rooms from Phuket Town, a hotel with less than 30 rooms from Phuket town and a hotel with several hundreds of rooms from next to the Patong beach. In both cases sampling methods were well in line with the description in Eisenhardt's article (1989). The aim of the sampling was study the replication of the results in different types of cases. The case selection rested on literal replication logic (Yin, 1989).

From the seven software companies six were successfully interviewed. A total of six software companies' managers, two of their customers and a representative of the human resource supplier for the software industry, were interviewed. In addition, three hotel managers, representatives of Software Industry Promotion Agency, representatives of a government tourism organization, and representatives of a tourism industry association were interviewed. The Table 4 describes when and where interviews were executed

*"Insert Table 4 Near Here"*

Data for the analysis was collected in a two month period when this author stayed in Phuket. A semi structured interview method (Wood, 1997) was employed at the sites of the companies: open questions were repaired and additional remarks and comments as well artifacts were collected. The meaning of the site visits is emphasized by Wood because of the limitation of verbal communication. Data triangulation helped in terms of enhancing the trustworthiness of the results: numerous telephone discussions, email correspondence and secondary data including artifacts as supplement to the interview data. The original data collection was not target at the study the problems described here but rather on understanding the marketing entry problems of the software companies in Phuket. The original scope of the study was altered with the comments made by a Thai entrepreneur on his problems getting good graduates for his purpose from a local university. Together with the university it was decided to focus on the understanding the phenomena in largely among Thai software entrepreneurs. Eisenhardt (1989) explains the

importance to alter the data collection method if a new theoretical inside can be provided by gaining as much depth as feasible.

## **CASE DESCRIPTION AND ANALYSES**

### **Phuket**

Phuket is an attractive tourist destination place with more than six million visitors annually. It forms an intensive community around the tourism industry, which is the main source of income for many businesses. Several destination places are offered for tourists such as hotels next to beaches, golf courses and diving sites. According to the chairman of the tourist industry association in Phuket, there was a demand to actively develop the infrastructure in order to keep the island a competitive tourist destination place and to attract new tourists.

#### **The tourism industry's vertical integration into software companies and its horizontal integration**

One of the key tasks for the tourism industry association was to improve the information technology infrastructure. A big portion of the hotels did not have their own web sites. The chairman of the tourism industry association explained that the importance of tourist agencies was decreasing because more and more tourists directly reserve their hotels through the Internet. There was an increasing need for software suppliers. The software industry in Phuket provided systems to do online-booking, directory services and financial accounting. The software business was relatively new to Phuket. Most of the companies were set-up in the year 2000.

An entrepreneur of a company producing accounting software mentioned that his company used a customer as a beta test site in order to support the development of its first software system. With the help of local beta test sites, local needs were introduced and taken into account in the development of the system. One of the key needs mentioned by the accountant on that customer was the fact that the electricity supply was irregular. An account system should be able to minimize damage to the database. The key accountant of the customer mentioned that local support for them was essential: if some system failures happened, then local support was needed instead of getting support from Bangkok which would have taken time. The entrepreneur of the company explained that the accountant of the customer company had recommended his system to other potential customers in Phuket. The reason behind the recommendation could be that the accountant wanted to ensure the availability of the services by anchoring the supplier to the community.

The entrepreneur of another software company advised that an important reason for his successful market entry was that the first reference customer actively shared his experience with the use of his product with existing and potential customers in Phuket. After successfully implementing the product, the entrepreneur stated that selling was easier. The entrepreneur also mentioned that he didn't give any discount to the first reference customer due to the fact that other customers would have required the same discount. The supplier developed the first version

of the software alone and didn't use the beta test sites. He didn't have any previous contacts with potential customers. The market strategy of this company was that the entrepreneur actively kept close contact with existing customers and tried to keep them satisfied. One of the customers mentioned that they wanted to cooperate with this supplier, but they expected the supplier to develop its capability to design complex systems.

There were evidences that the tourism industry in Phuket was profoundly horizontally integrated. One of the hotel managers located in Phuket City described that they openly shared the information of the number of visitors with other hotels especially in Phuket City. They also shared the load in peak seasons with their rivals. In 2007 the hotels had agreed about common goals, for example, to increase the utilization degree of the rooms. The hotel also informed the other hotels about the suppliers that they felt to fit their purpose regarding the price and quality. The manager of the hotel described that the hotels in Phuket mostly used the same sources for example in order to purchase food for their restaurants.

The tourism industry association worked actively to improve the business infrastructure. The association had put much of its effort to obtain a new additional water reservoir. The head of the association discussed and the owner of one of the hotels discussed that he actively shared the information of his suppliers. He emphasized that the development of the Phuket community and its business was in his and in his hotel's best interest. The head of the governmental tourism office in Phuket stated that there was a lack of the skills needed to develop the information technology infrastructure in Phuket. It can be concluded that there was a strong tourism industrial association in Phuket.

The representative of the governmental organization stated that Tourist Authority of Thailand also worked actively to promote Phuket inside Thailand but especially abroad. The organization collected information of the number of visitors, the use of hotels, and it educated those employees who wanted to work in the industry by giving courses, for example, in easy English language.

Sharing information between the hotels and giving opportunities to the new actors seem to propose that the attitude to promote "common goodness" existed among the tourism industry in Phuket. In the organizational knowledge theory, the concept phronesis knowledge is discussed on the top of the other knowledge, episteme and techne, originally defined by Aristotle. According to Nonaka and Toyama (2007), the phronesis defines actors' ability to take action for common goodness in a specific situation. Erden et al. (2008) uses this concept as a building block in constructing a theory concerning the quality of group tacit knowledge. The tourism industry seemed to have a sense of collectivism in Phuket.

### **The software industry's vertical integration into a resource supplier and its horizontal integration**

Five software companies out of six complained that they had problems in getting human resources especially programmers. The university professor described that the local university was producing graduate students for software industry purposes, but the graduate students preferred capital area companies to local companies. The local companies also complained that

the students' skills didn't meet their needs. The comment from the university was that the local companies used outdated technology. The interviewer asked if the students had worked together during some of the university courses with local companies in order to get more experience. According to the interviewee, this kind of cooperation did not exist.

The entrepreneurs, who were interviewed, described that they did not have much cooperation in order to share loads or to share innovations. One of the reasons given by one of the entrepreneurs was that they had not used same technology. The entrepreneur stated that there was no sense for cooperation if they did not use the same type of software technology. The other entrepreneur said that they had cooperated with a hardware supplier and with a web-design company but otherwise not with other software developing companies. It was concluded that the software industry was relatively young in Phuket and the tradition for joint cooperation were not formed. Most of the companies were established in the early years of this decade. It might take several years before the software industry community can act in a coordinated way.

The software companies did not coordinate their efforts to express their joint interest and future plans to the university. This was very aligned with the observation that the software companies in Phuket did not cooperate among themselves. They could have created roadmaps of technologies that they planned to use. Furthermore, the local companies did not jointly try to improve their industry image although they could benefit from it. The university was active in setting-up events to demonstrate their students. The local Software Industry Promotion Agency (SIPA) worked aggressively to support the local software industry, although it was still relatively new in Phuket. The representative of the SIPA stated that the SIPA was a semi-governmental organization, which had a role in promoting the use of the software. The head of the local agency was also a teacher in a university in Phuket.

## **DISCUSSION AND CONCLUSION**

The aim of this study was to find out how small communities supported the market entry of new actors. Six software companies were studied in a small community. In addition, the difficulties of the university in producing suitable resources for the local software industry were discussed. The study showed that the integration of vertical and horizontal purchasing could differ inside a community depending on industrial districts and the maturity of them. The older industrial districts can have practices which the younger industries do not possess yet. In Phuket, the software industry was relatively young compared to the tourism industry. Therefore, the tourism industry had practices which the software industry did not have related to the cooperation and development of that specific industry sector. For example, the tourism industry shared actively the load but the software industry did not seem to have such sense of collectivism. The conclusion based on the literature with the note of taking time to mature group tacit knowledge in order to reach phronesis is supported by this study.

In the first case, between the tourism and software industry, horizontal and vertical integration seemed to be in place. The customers, the actors in the tourism industry, even if they were competitors, actively shared information about their new suppliers. The intensity of sharing information, future plans and innovation and, in addition, the strong industrial association and government organization proposed that the Phuket tourism industry formed a Marshallian

industrial district with its Italianate variant even if it included elements from Hub-and-Spoke industrial districts, for example, large international hotel chains. The tourism industry in Phuket had a strong sense of collectivism, which was built with the help of the government organization and the industrial association. However, breaking through to such a market could be far from easy, due to the fact that existing relationships with previous suppliers could be hard to disrupt. Discontinuities in the existing relationships or technologies might create the needed opportunities. On the other hand, the market entry for a new actor can be expected to happen fast due to strong horizontal integration if a positive example can be provided (for example, Ruokolainen 2008).

In the second case, between the resource supplier and software industry the vertical integration was weak and horizontal integration did not exist inside the industry. The industrial association did not exist for the software industry in Phuket at the time of the interview. However, the plan to establish one was in place. According to one of the entrepreneurs, the integration was weak due to the fact that the companies used different technologies. The companies felt that they did not have much to share with each other. Software companies had not formed common strategies or goals or identified what technology they wanted to rely on in the future. From the university's perspective, the lack of vision for future technologies among the software technology companies caused the problem for teaching and researching. The university would have needed a vision of the future technologies shared with the local companies in order to contribute to the development of the industrial district in question. It was quite a challenging task for the university to support all the technologies and to be in the front line in promoting the latest technologies into the community as the industry involvement was weak. It can be expected the market entry for a new actor can be as difficult as it was for the university in this case due to not having a homogenous market.

There was evidence that the tourism industry cooperated and had also long-term partnership like relationships with actors in the software industry as comments indicates and also with actors in other industry sectors like with a food-supplier. Thus, the tourism industry could be located in the quadrant into the upper right corner that can be called 'Coordinated Partnership Community Purchasing' (CPCP). The present author proposes that the tourism industry's purchasing mature level was close to a large enterprise coordinated purchasing function. The software industry in Phuket hardly seemed to have any joint cooperation and they acted individually in terms of purchasing resources or work, and they did not seem to have long-term cooperation with their supplier: this study was not able find evidence on that, and therefore, the present author proposes that the purchasing maturity of the software industry was close to the clerical type of the purchasing function in a large enterprise. This quadrant can be called 'Clerical Community Purchasing' (CCP). The way industrial district operates could be essential in planning the market entry.

**'Insert Figure 1 Near Hear'**

The firms and the networks of the firms are seen as complex adaptive systems comprising of interacting sets of organizational and social relationships in which each actor is pursuing its own goal (Stacey, 1996). According to this study and to the literature dealing with group tacit knowledge, the additional element which needs to be taken into account is phronesis, the

common goodness, in order to create effective networks. This common goodness can include elements of supporting the entrance of a new actor in order to improve and to extend existence of the network by bringing in new knowledge into the system. The definition for network and for group tacit knowledge may seem contradictory as the other emphasizes the goals of an individual and the other common goals of a group. However, the sense of the common goodness might not exist in a large extent in pure commercial networks which do not have the community or other similar dimensions to back-up the actions. Therefore, the lack of phronesis might prevent the market entry of new actors.

### **Contribution to theory, validity and further studies**

The results of this study in many aspects are supported by the previous studies that emphasize the co-operation between competitors (O'Donnell, 2002 ) and the role of the small societies (Anderson et al., 2007 ), although the purchasing dimension in a community has not been discussed widely as such earlier. Thus, this study contributes to the current scholar discussion by introducing purchasing behavior of communities including a taxonomy to understand it. This author expects that the marketing as well as the purchasing could be seen from time to time as an integrated part of either small or large communities and not only as a tool for executing the competition. The development needs of a society should also be counted. A major part of the present entrepreneurship and small community studies have been done either in the USA or Europe but relatively scantily in Southeast Asia. Therefore, the results of this study can have an additional contribution to the research community.

The topic is relatively new. Therefore, the multiple case study method was preferred to a survey. According to Gummesson (1993), case studies can be used to explore an area that is hardly known. A problem associated with both case studies and multiple case studies relates to the limitations of a generalization of the results, due to the limited number of samples. However, a multiple case study method is considered normally to be more robust than a single case study method. This author believes that the interviews of the representatives in the community, industrial district and actor level increased the reliability and internal validity of the results, because each level brought their own perspective on the topic.

The future studies to understand this phenomenon further is proposed. This study paves the way to a survey on the topic by bringing the topic on the stage with the help of this multiple embedded case study. Actually, this study opens avenues for a set of further studies to understand community roles in purchasing and in supporting the marketing of start-up companies.

The observations of this study are likely to be country-specific to an extent, but nevertheless it is believed that they are also valid in other regions. National cultural issues can hinder generalization, but it is not believed that the particular focus topics of this study and the findings are strongly affected by national cultures. Future research can now be conducted in different cultural contexts, different industries and larger sample sizes.

## **Managerial Implication**

Based on the two embedded case studies, this present author would propose that depending on the taxonomy presented earlier the market entry strategy for a new actor should formulate differently depending on the level of vertical and horizontal integration of the industrial district. For example, if the vertical and horizontal integration is weak then the new actor's role is to construct such integration that it would ease the market entry into the community. In some cases, the entrepreneurs of start-up technology companies reported that they had needed to do "foot" marketing. It means that they need to put time and effort in explaining the use of the technology for the potential customers in a community. This prework is needed in order to ensure that the technology to be used can be accepted by the customers. Following example demonstrates this selected strategy: A mobilephone company in UK was interviewed in early 1990 after it was acquired. The head of the research and development explained that a Japanese filter manufacturer visited them and proposed to them and to various mobilephone manufacturers to standardize the filters in order to gain savings in manufacturing costs and to reduce prices.

The tourism industry ensured that the capital needed for buying the start-up software technology company's products existed. That is important because the venture capital concept is not largely applied in Phuket software industry. The other aspect which was important was that the social capital in this small community inside tourism industry seemed to support the development of new companies. The community had also strong industrial association related to tourism industry. The social network in Phuket extensively shared information concerning new suppliers. This is well in line with what Anderson et al. (2007) write about the small geographical size of the city and the social interactions there. However, this study proved that the content for the cooperation was needed to be established for example by using shared technologies.

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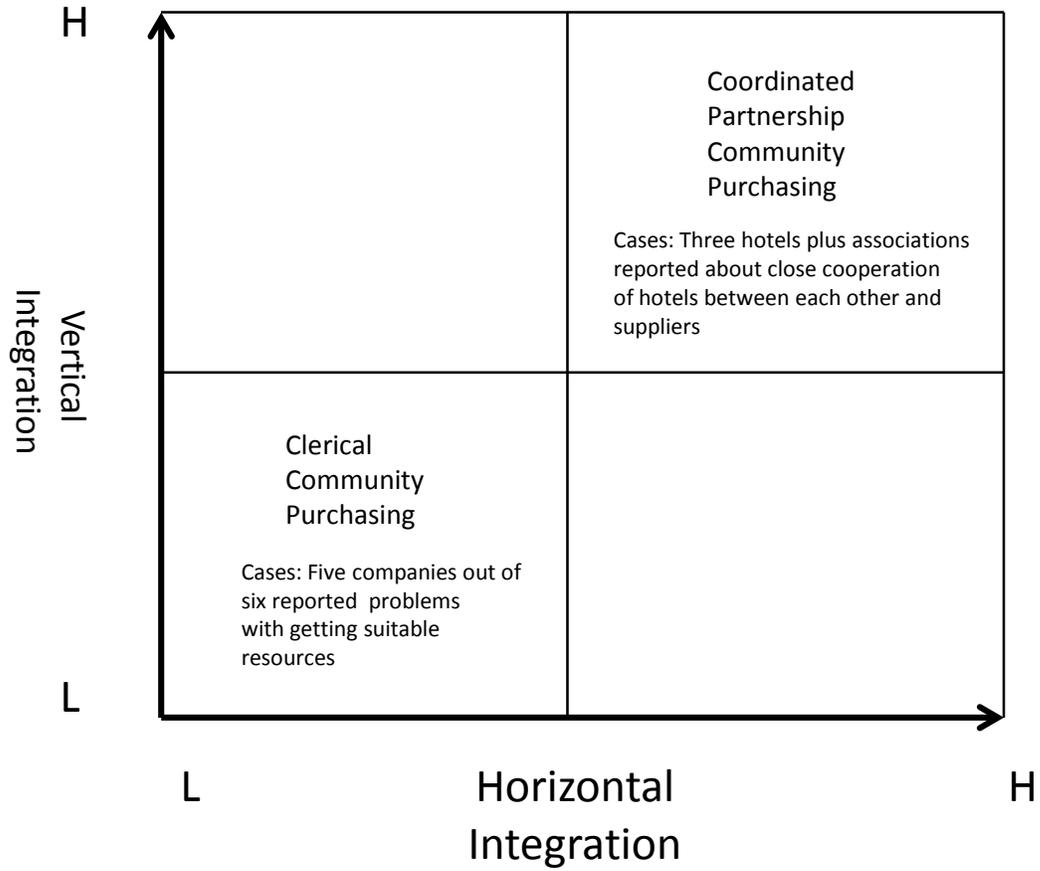
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**Figure 1:** Quadrant analysis of the community purchasing in Phuket

**Table 1:** Quadrant for analyzing the purchasing mode of a community

<b>Vertical integration</b>		
Partnership mode	<i>3<sup>rd</sup> quarter</i>	<i>4<sup>th</sup> quarter</i>
Traditional mode	<i>1<sup>st</sup> quarter</i>	<i>2<sup>nd</sup> quarter</i>
<b>Horizontal integration</b>	Individual purchasing within community	Coordinated purchasing within community

**Table 2:** Embedded levels of this study

<b>Embedded level</b>	<b>Instant of the level</b>
Community	Phuket
Industrial district	Software industry, Tourism industry
Actors	Software companies, Hotels

**Table 3:** Figures of the software industry in Phuket

	<b>Established</b>	<b>Number of customers</b>	<b>Turnover</b>	<b>SW sector</b>
<b>Company1</b>	2001	800	200 kEuro	Accounting
<b>Company2</b>	2002	68	100 kEuro	Online-booking
<b>Company3</b>	2002	120	200 kEuro	Online-booking
<b>Company4</b>	1998	150	300 kEuro	Buildings
<b>Company5</b>	2001	70	60 kEuro	Online-booking
<b>Company6</b>	2002	381	50 kEuro	Directory service

**Table 4:** Interviews

<b>Company: role(s) of the person(s)</b>	<b>Day, duration and place</b>
Company 1, the two owners of the company	2.10.2006, 3 hours, premises of the company
Company 2, the owner of the company	3.10.2006, 3 hours, premises of the company
Company 3, the owner of the compan	4.10.2006, 3 hours, Premises of the company
Company 4, the other owner of the company	4.10.2006, 2 hours, Phuket Town
Company 5 solution, the owner of the company	5.10.2006, 3 hours, Phuket Town
Company 6, the other owner of the company	8.10.2006, 2 hours, premises of the company
Vice President of Phuket Tourism Business Association, Head of the hotel	5.1.2008, 2 hours, a hotel next to Patong peach
Assistant Director, Tourism Authority Thailand, Phuket	3.1.2008, 2 hours, Office Phuket, Phuket Town
Head of Phuket SW association	24.12.2007, 2 hours, Phuket Town
Hotel Manager of a large hotel in Phuket Town	1.1.2008, 1 hour, Premises of the Hotel
Owner of a small hotel in Phuket Town	2.1.2008, 1 hour, Premises of Hotel
President of Software Industry Promotion Agency (SIPA) of Phuket Associate Professor, Prince of Songkla University	About 10...15 times between in 2006,2007,2008, Premises of SIPA
Meeting with Phuket SW industry and SIPA representatives	10.1.2008, Premises of a large hotel in Patong Beach
Chief Accountant	16.10, 2006, 1 hour, premises of a customer