## Chapter 3 - Research Methodology

This chapter consists of four sections to give a clear view about the methodology to the reader. Firstly, the sections on arguments for triangulation method. This research study employs quantitative and qualitative approaches for the research. Secondly, the research design section presents the procedure to conduct the qualitative research, starting from selecting respondents to doing interviews, and the questions asked to get opinions and information from the respondents. Thirdly, the design for quantitative analysis which contains target population and unit of analysis, methods of data collection and analysis, proposed method for testing clusters performance and its competitiveness. Lastly, a summary of the chapter is presented.

## 3.1 Arguments for Triangulation

There are two types of methods of research which are mostly used in the collection of data, quantitative and qualitative methods (Ghauri, 1995). The quantitative method consists of the systematic empirical studies which involves quantifying through the assistance of mathematics and statistics (Bryam and Bell, 2007). Whereas qualitative method is studying things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (Denzin 1994).Qualitative research encompasses a range of philosophies, research designs and specific techniques including in-depth interviews; participant and non-participant observation; focus groups; document analyses; and a number of other methods of data collection (Pope 2006).Qualitative researchers are interested in understanding what those interpretations are at a particular point in time and in particular context (Sharan

2002). Qualitative research encompasses a range of philosophies, research designs and specific techniques including in-depth interviews; participant and non-participant observation; focus groups; document analyses; and a number of other methods of data collection (Pope 2006).King, Keohane and Verba (1994) wrote that quantitative and qualitative research has the same fundamentals but different styles. One of their finding was most research does not fit clearly into one category or the other. The best research combines the best feature of each, quantitative and qualitative. In the same project, some data may be collected that is amenable to statistical analysis, while other equally significant information is not. If we are to understand the rapidly changing social world, we will need to include information that cannot be easily quantified (King, Keohane and Verba, 1994, p. 5).

Lampang ceramic industry is comprised of numerous SME's, hence quantitative or qualitative analysis alone will not give a clear view and proper understanding of the data and come to a proper conclusion. In order to understand the cluster cooperation and its effects to competitiveness of a region, this research employed a combined method, which includes both quantitative and qualitative, which is also known as Triangulation method. Silverman (2006) explained, there are three main ways to combine quantitative and qualitative research:

1. Using qualitative research to explore a particular topic in order to set up a quantitative study. For example, designing a questionnaire on racial prejudice, it may be useful to begin by holding semi-structured interviews with community leaders and police officers together with focus groups composed of members of different ethnic communities.

2. Beginning with a quantitative study in order to establish a sample of respondents and to establish the broad contours of the field. Then using qualitative research to look in depth at a key issue using some of the earlier sample.

3. Engaging in a qualitative study which uses quantitative data to locate the results in a broader context.

Researcher uses the first method, whereby researcher interviews the respondent to find out the problem in the cluster and then use quantitative methods to analyze the problem. Cooper and Schindler (2008:185) described Triangulation as combination of several qualitative methods or combining qualitative with quantitative methods. Cooper and Schindler (2008:186) went on to explain that qualitative research compensates for the weaknesses of the quantitative research. Triangulation is a powerful technique that facilitates validation of data through cross verification from more than two sources. In particular, it refers to the application and combination of several research methodologies in the study of the same phenomenon.

For this research the purpose of the qualitative analysis is to understand tge current scenario of the Lampang SMEs, to get a hands on understanding of the problems faced by SMEs while exporting. On the other hand quantitative method which is more of statistical and mathematical analysis is used to confirm the finding of the qualitative method, showing the competitiveness of the cluster and the firms have decreased or increased during the aforesaid period. The results of the quantitative analysis can be clarified by the qualitative approach to understand and get a clear conclusion from the data. Denzin explained that no single method ever adequately solves the problems of rival casual factors because each factor shows different aspects of empirical reality, multiple methods must be employed (Denzin 1970; 1978, p. 20; 1979).

#### 3.1.1 Limitations of the method

A major concern of using a triangulation strategy is that it uses theories and methods with different philosophies that can lead to theoretical and methodological opportunism and incoherence. Collecting more data requires greater planning and organization—resources that are not always available to lead researchers (Thurmond, 2001). Thurmond (2001: 256) pointed out that the method may include include the "possible disharmony based on investigator biases, conflicts because of theoretical frameworks, and lack of understanding about why triangulation strategies were used" (Thurmond, 2001, p. 256). Each method has some limitations and disadvantages; hence there is always scope for improvement.

## 3.2 Population and study sample

There are around 240 Ceramic firms in the Ceramic Industry in Lampang, being comprised of Medium, small and very small enterprises. Tableware firms are the most in number around 104 of them, and are immensely engaged in export industry (Source: Lampang Ceramic Association, 2013). Researcher concentrates on the tableware firms in the ceramic industry, so as the data collection will be easier and viable.

Sample size for the qualitative research interviews were chosen by snowball technique in total 12 interviews were conducted to find variable framework with

different groups of interviewees ranging from firms, related industries and government bodies.

Sample sizes for the quantitative analysis were all the 101 table ware firms given by the Lampang Ceramic Association and confirmed with Department of Industrial Promotion, Thailand.

#### 3.3 Research Design

Researcher uses the triangulation method to shed lights on the barriers faced by the SMEs while exporting to an International Market. Two types of data have been used in the assessment:

- a. Interviews with players selected from all sectors of the cluster. (Companies, Education, Government as well as NGO's)
- b. Questionnaire distributed to the member companies in the cluster.
  Data collection has been done on the basis of Socio-economics factors which can play a major part in hindering the prospect of SMEs going international.

## 3.3.1 Qualitative Method

Qualitative analysis claims that a better understanding of casual processes can be obtained from intimate acquaintance with people and their problems resulting from qualitative observations (Guba and Lincoln, 1981: 145: Patton, 1984: 109). Hence, researcher uses this method to get various opinions of the respondents. In order to acquire information and opinions from major players in Cluster and their ideas regarding the barriers to export and the strategies adopted by the players, the qualitative method according to Rossi and Freeman (2003), has an important role to play.

#### 3.3.1.2 Sampling and Data Collection

To gather data for analysis, data collection will be done done through open ended semi structured in depth interviews. The researcher will first start the qualitative research by getting a purposive sampling and used snowball technique to interview 12 respondents within the Ceramic Industry in Lampang. The interviews to be conducted in English, and the researcher will be accompanied by a local Thai citizen with proficiency in Thai and English Language. One of the main reason to do this research is to get into the core of the problem, hence researcher wants the interviewee to be in ease to speak their mind out rather than being stereotype. Two-way communication processes between the interviewer and interviewees will be conducted, to get the true reasons. The purpose of gathering data is to get individual opinions and described the details facets and problems of the cluster of the ceramic industry and moreover any recommendation which they thought will enhance the competitiveness. The whole idea was to look at the problems and understanding then further writing of the thesis. The samples were arbitrarily selected as the interviewer wanted the respondent who are directly involved in the cluster and the firms involved in it.

Face to face interviews were used, and the time spend on each interview was forty-five minutes to one hour. The interviews were done in confidence and confidentially hence encouraging the respondents to give their correct views and ideas as well as warm cooperation which is very essential during interviews. All respondents were high-level officials, professors, entrepreneurs and government officials therefore knowing the real strategies and situations of their organization and the cluster.

Table 3.1 Summary of respondents in interviews

Groups	Occupation	Number
(A) Related Industries	High ranking officials	2
(B) Cluster firms	Entrepreneur and senior officials	8
(C) Education Institutes	Presidents and Deans	2

#### 3.3.2 Quantitative Method

Data found from the in-depth interviews needs to be confirmed and cross checked; hence quantitative methods will be used. Quantitative methods are employed to understand the phenomenon in the cluster and how different variables recognized through qualitative research are affecting the competitiveness of the firms and cluster.

#### 3.3.2.1 Target Population and units of analysis

There are more than 240 firms in the ceramic industry in Lampang. Researcher focuses on the tableware industry. To conduct the research, the researcher got the list of Tableware firms in the ceramic industry in Lampang from Lampang Ceramic Association as well Department of Industrial Promotion in Lampang. There are total 104 tableware firms in the Lampang Ceramic industry (Source: Lampang Ceramic Association, 2013) comprised of medium and small SME. The advantages to the researcher of using the table ware industry are to reduce the cost of data collection as well as reduction in the time spent on data collection. The sample population was asked to answer a survey with questions pertaining to this research topic.

3.3.2.2 Method of Data collection



#### Figure 3.2: Quantitative Analysis Process Design

All the questionnaires were inspected for their correctness and that all categories were answered, and the Thai translated questionnaires were aligned with the English questionnaires.

All the received data were input into statistical analysis software, along with the variables. Followings are the statistical tools utilized in analyzing and interpreting the data collected:

## a. Percentage

Percentage is the ratio of a part of the whole multiplied by a hundred. The respondents' answers were analyzed and interpreted using percentage. It gives a clear view as how much percentage of respondents agreed or disagreed on a questionnaire.

### **b.** Frequency Distribution

Frequency distribution is the arrangement of data that shows the frequency of occurrence of different values of variables. Frequency shows the amount of respondents' who agreed or disagreed to ta given variables, it shows the quantity part which gives a view about the respondents behavior.

c. **One Simple T-test**: To test whether the proposed variables (Language barriers, difference in social approaches, insufficient R&D investments, legal procedural complexity in the home country, lack of express service within the home economy, corruption in the home economy) would work as barriers for Lampang SMEs while going for International Market.

## 3.4 Translation / Back Translation

Language barrier is one of the initial problem in conducting the study as Lampang is located in North of Thailand, and the population use northern to communicate only a portion of the population is well versed in English Language. Though, most of the Entrepreneurs of the large ceramic firms were well versed, but the main problem will be getting data from the smaller firms. This is where the researchers used translation and back translation. Researcher sought the help of Director of English Department at Kokha Community College to translate the questionnaire into Thai Language. Again, the questionnaire in Thai Language was translated back into English at Lampang Inter-Tech College (International Center) in Assistance with senior lecturers and Dean of Business faculty.

Interviews were conducted in English as all the interviewees being Entrepreneurs and officials holding high position in Government bodies and educational institutes.

# Extra

Hypothesis: Many firms establish their first business contacts by reacting to an initiative, or establishing contacts in trade fairs for example. By acting rapidly, i.e. following a proactive home country motivator, they can realize new opportunities that open with changes in the network, initiatives by existing partners or new entrants to the network. Capabilities must be built with a longterm perspective, particularly if we take into account SMEs' size disadvantage in terms of survival rates (Agarwal & Audretsch, 2001), and include countryspecific expertise as well as the establishing and maintenance of networks and routines (Eisenhardt & Martin, 2000).

Obstacles can be overcome if detected in time and if the SME can understand which motivators affect its export process enabling the SME to design a better strategy to overcome the perils of international markets and foreign exposure, particularly outside of the EU common market (Baird et al., 1994; Namiki, 1988). The paper aims to test whether host country motivators reactively are less powerful in promoting risk-loving behaviour and influence the firm in its initial decision as opposed to home motivators such as strengths and internal factors, such as experience, which influence the subsequent choice

## References

Abrams, M. "Emerging Clusters in Regional Economies." Paper presented at the Technopolis '97 conference, Ottawa, Canada, September 1997

Adrian T. H. Kuah, "Cluster Theory and Practice: Advantages for the Small Business Locating in a Vibrant Cluster", 2002.

APO (2007), Survey on Entrepreneur Development for Competitive SMEs.

Arslan, A., Tarba, S. Y. and Larimo, J. (2015), "FDI entry strategies and the impacts of economic freedom distance: Evidence from Nordic FDIs in transitional periphery of CIS and SEE", International Business Review. DOI: http://dx.doi.org/10.1016/j.ibusrev.2015.03.004.

Anderson, E. and Gatington, H. (1986), "Modes of foreign entry: A transaction cost analysis and proposition", Journal of International Business Studies, Vol. 17 No. 1, pp. 1-26.

Beck, Thorsten, AsliDemirgüç-Kunt, and Vojislav Maksimovic. 2005. "Financial and Legal Constraints to Firm Growth: Does Size Matter?"

Borras, Susana, Dimitrios Tsagdis. 2008. Cluster Policies in Europe: Firms, Brouthers, K. D., and Hennart, J. F. (2007), "Boundaries of the firm: Insights from international entry mode research", Journal of Management, Vol. 33 No. 3, 395-425.

Bruton, G.D., Ahlstrom, D. and Obloj (2008), "Entrepreneurship in emerging economies: Where are we today and where should the research go in the future", Entrepreneurship Theory and Practice, Vol. 32 No. 1, pp. 114.

Bryman, A. and Bell, E. 2007. Business research methods. 2nd ed..

Cooper, C. R., & Schindler, P. S. (2008). Business research methods (10 ed.). Boston: McGraw-Hill.

D'Angelo, A., Majocchi, A., Zucchella, A. and Buck, T. (2013), "Geographical pathways for SME internationalisation: Insights from an Italian Sample", International Marketing Review, Vol. 30 No. 2, pp. 80-105

Dalum, B., Pedersen, C.Ø.R., Villumsen, G., 2005. Technological life cycles. European Urban and Regional Studies 12, 229-246

Fabio Russo (UNIDO-2005), A tool to increase SME exports.

Denzin, N., & Lincoln, Y. (Eds.). (2005). Handbook of qualitative research (3rd ed.). Thousand Oaks, CA: Sage.

Denzin, N., & Lincoln, Y. (Eds.). (2011). Handbook of qualitative research (4th ed.). Thousand Oaks, CA: Sage.

Enright, M. 1998. Regional Clusters and Firm Strategy. In Chandler, A. D., (Jr), P. Hagström & Ö. Sölvell, editors, The Dynamic Firm - The Role of Technology, Strategy, Organizations, and Regions. Oxford: Oxford University Press.

Fischer, E. & A.R. Reuber (2003), Support for Rapid-Growth Firms.

Fischer, E., and Reuber, R. (2003). Industrial clusters and business development services for small and medium-sized enterprises.

Gatington, H. and Anderson, E. (1988), "The multinational corporation degree of control over subsidiaries: An empirical text of a transaction cost explanation", Journal of Law, Economics and Organisation, Vol. 4 No. 2, pp. 305-336.

Glenn, M. 2009, 'Organisational agility: How business can survive and thrive in turbulent times', A report from the Economist Intelligence Unit, The Economist, March.

Harvie, C. (2010), 'SMEs and Regional Production Networks', in VO, T. T., D. Narjoko and S. Oum (eds.), Integrating Small and Medium Enterprises (SMEs) into the More Integrate East Asia.

Hennart, J-F. and Slangen, A. H L (2014), "Yes, we really do need more entry mode studies! A commentary on Shaver", Journal of International Business Studies, Vol. 46, pp. 114-122

Ketels, Christian, Lindqvist, Göran and Sölvell, Örjan. Clusters and Cluster Initiatives. Stockholm: Center for Strategy and Competitiveness; Stockholm School of Economics, 2008.

Kerstin, Press (2006) A Life Cycle for Clusters?

Khalique, M., Isa, A.H.B.M., Shaari, N. and Abdul, J. (2011), "Challenges for Pakistani SMEs in a Knowledge-Based Economy", Industry Journal of Management & Social Sciences, Vol. 5 No. 2, pp. 74-80.

King, Gary, Keohane, Robert O., & Verba, Sidney (1994). Designing Social Inquiry. Princeton, NJ: Princeton University Press.

Laufs, K. and Schwens, C. (2014), "Foreign market entry mode choice of small and mediumsized enterprises: A systematic review and future research agenda", International Business Review, Vol. 23 No. 6, pp. 1109-1126

Lu, J.W. and Beamish, P.W. (2001), "The internationalization and performance of SMEs", Strategic Management Journal, Vol. 22, pp. 565-586.

Leonidou, L.C., Katsikeas, C.S. and Coudounaris, D.N. (2010), "Five decades of business research in exporting: A bibliographic analysis", Journal of International Management, Vol. 16 No. 1, pp. 78-91

Johannisson, B. (1987). Toward a theory of local entrepreneurship. In R. G. Wyckman, L. N. Merredith, & G. R. Bush (Eds.). The spirit of entrepreneurship. Vancouver: Simon Fraser University

Mário Franco (2010), The role of tourism public-private partnerships in regional development

Morgan, K. (1997): The learning region: Institutions, innovation and regional renewal. Regional Studies 31 (5), 491-503.

Mills, K., Reynolds, E., & Reamer, A. (2008). Clusters and Competitiveness: A New Federal Role for Stimulating Regional Economies. Metropolitan Policy Program, Washington, DC: Brookings

Newlands, D. (2003). Competition and cooperation in industrial clusters: the implications for public policy. European Planning Studies, 11(5), 521-532.

Peng, M. W., Wang, D. Y. and Jiang, Y. (2008), "An institution-based view of international business strategy: A focus on emerging economies", Journal of International Business Studies, Vol. 39, No. 5, pp. 920-936.

Pope C, Mays N (2006), Qualitative Research in Health Care (3rd edition)

Porter, M.E. (1998b), Location, clusters and the 'new' microeconomics of competition, Business Economics, Vol. 33-1: 7-17.

Porter, M.E. (1998c), Clusters and the new economics of competition. Harvard Business Review, November-December: 77-90.

Porter, M.E. (2000), Location, competition and economic development: Local clusters in the global economy, Economic Development Quarterly, V.14-1: 15-31.

Porter, M.E. (2008) "The Five Competitive Forces That Shape Strategy", Harvard Business Review, January 2008, pp. 79–93.

Porter, M.E. & Kramer, M.R. (2011) Creating Shared Value, Harvard Business Review, Jan/Feb 2011, Vol. 89

Root, F.R. (1994), Entry Strategies in International Markets', Lexington Books, Washington.

Sharan B. Merriam (2002) Qualitative Research

Waxell A., & Malmberg A. (2007). What is Global and what is Local in Knowledgegenerating Interaction? The Case of the Biotech Cluster in Uppsala, Sweden. Entrepreneurship & Regional Development, 19(2), 137-159. Wilson, K. (2007), Encouraging the internationalisation of SMEs. Promoting Entrepreneurship in South East Europe: Policies and Tools. OECD Papers, 6 (12): 1–135.

World Bank (2003), Small and Medium Enterprises across the Globe: A New Database, World Bank Policy Research Working Paper 3127, August.

WorldBank(2013),DoingBusiness2013www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-<br/>Reports/English/DB13-full-report.pdf2013

World Economic Forum: The financial development report, 2009-10.

Wheeler, C., Ibeh, K. and Dimitratos, P. (2008), "UK export performance research: Review and implications", International Small Business Journal, Vol. 26, No. 2, pp. 207239.

Zeitlin, J. (2007). "Industrial Districts and regional Clusters." In G. Jones and J. Zeitlin (eds)