

## Multiple Disciplinarity in Business Administration

Uolevi Lehtinen\*

*The purpose is to examine the possibilities, problems and challenges of multiple disciplinarity in business administration, especially marketing. Multiple disciplinarity and modeling are first depicted. In the illustrative studies today's most noteworthy models in marketing are combined. The empirical results drawing on seven studies show that there are gaps between practice and current models, much parallel use of both models, some utilization of the combined models and a need to discover how to combine properly. This can be interpreted as a clear evidence in favor of multiple disciplinarity. Finally, a discussion about multiple disciplinarity, some generalizations and challenges are presented.*

**Keywords:** Multiple disciplinarity, multiple modeling, utilizing multiple disciplinarity and modeling, generalizations of multiple disciplinarity

### 1. Introduction

Scientific knowledge is organized in disciplines. As to the boundaries of disciplines, this organizing is sometimes fairly natural and easy. Sometimes it is rather arbitrary and violent. But generally the boundaries of disciplines are more or less artificial and arbitrary. To a great extent for the artificiality and arbitrariness of the boundaries, the possibilities, problems and challenges of multidisciplinarity, interdisciplinarity and transdisciplinarity have during the last few years developed at the boundaries of different disciplines quite rapidly.

Actually, the concepts of multiple disciplinarity already are powerful slogans in scientific discussion. They are strongly emphasized in many areas of research and practice. They are largely accepted by scientists, educators, managers, those who admit grants etc. But many users of these concepts and even some researchers that utilize this phenomenon in their studies seem to understand the phenomenon quite superficially. Actually, this phenomenon is rather complex. For example, it has many levels.

We illustrate theoretically and empirically multiple disciplinarity in business, especially in marketing. Marketing is an very important subdiscipline of business administration. The targets of our empirical research are the marketing mix and relationship marketing approaches (models). They are at the very center of theoretical and practical marketing. They have really been the major approaches during last twenty five years (about the origins of these approaches, see McCarthy 1960, Borden 1964, Berry 1983 and Jackson 1985).

The purpose of this article is to examine the possibilities, problems and challenges of multiple disciplinarity and modeling in business administration, especially in marketing research, teaching and practice. The nature of this article is partly exploratory and partly evidential for the nature of this purpose and the vague state of multiple disciplinarity and modeling in marketing.

---

\*Emeritusprofessor and –president, University of Tampere, FINLAND. [Uolevi.Lehtinen@uta.fi](mailto:Uolevi.Lehtinen@uta.fi)

In the next section we utilize literature review and conceptual analysis to clarify multiple disciplinarity and its levels as well as to introduce a concept multiple modeling. Then we illustrate our issue empirically mainly by marketing studies. Finally we discuss about the nature and importance of multiple disciplinarity and address some generalizations and challenges.

## 2. Multiple Disciplinarity and Multiple Modeling

Multidisciplinarity, interdisciplinarity and transdisciplinarity are associated with more than one academic discipline. Multidisciplinarity draws on knowledge from different disciplines but stays within their boundaries. Interdisciplinarity is usually considered as the knowledge extensions that exist between or beyond academic disciplines. It analyses and synthesizes links between disciplines into a coordinated and harmonized whole. Transdisciplinarity is more holistic and relates disciplines into a coherent whole. It transcends the disciplinary boundaries to examine the dynamics of whole phenomenon in a holistic fashion. This represents meta-theoretical perspectives like structuralism and ecological economics. By nature multidisciplinary can be considered additive, interdisciplinarity interactive and transdisciplinarity holistic. (cf. Besselaar and Heimeriks 2001, Lattuca 2001, NSERC 2004, Choi and Pak 2006 and Lehtinen 2013 and 2014).

The concepts multiple disciplinarity can be used to mean multidisciplinary, interdisciplinarity and transdisciplinarity, when the level and nature of the involvement of multiple disciplines is unspecified (cf. Choi and Pak 2006). Consequently, multiple disciplinarity can be considered a kind of cover concept for multidisciplinary, interdisciplinarity and transdisciplinarity, which refers to the different levels of involvement on the multiple disciplinarity continuum. Actually, multiple disciplinarity means the utilization of more than one visual angle in the scrutiny of one scientific problem.

These concepts are somewhat immature, closely connected and sometimes used variably. Some former definitions are practically interchangeable. Thus e.g. interdisciplinarity and multidisciplinary are occasionally used as synonyms. Sometimes even multiple disciplinarity and interdisciplinarity are used as synonyms.

At least combining, borrowing and blending can be possible methods in building multiple disciplinary theories, models, frameworks and approaches. Also other terms like joining, uniting, integrating, pertaining and involving are used in this connection.

In this article, combining is mainly utilized as an empirical method towards multiple disciplinarity. Combining means putting different parts together. The parts can be disciplines, subdisciplines of disciplines or branches of one or more subdiscipline. When we speak about combining two major model of marketing management in next section, we speak about combining two same level branches of one subdiscipline i.e. marketing. Often but not always the constructs of the same level are combined.

Borrowing and blending are related to combining and can be utilized also in connection with combining (see e.g. Oswick, Fleming and Hanlon 2011 and Whetten, Felin and King 2009). In context with multiple disciplinarity, these terms have to a great extent the same meaning as in everyday parlance. Borrowing means adopting an idea, a framework, a model or a theory from another discipline with or without changes. Blending means the mingling or mixing of two or more ideas, frameworks, models or theories from different disciplines. In any case, the utilization of combining, borrowing and blending presupposes the careful consideration of the

## Lehtinen

nature of these concepts and the characteristics of the theory building or practice planning in question (cf. Corley and Gioia 2011).

Often a phenomenon of some discipline or subdiscipline or branch of subdiscipline is described by two or more models. Sometimes these models can be complementary and at least fairly compatible so that the phenomenon can be better described by a model which is a combination of the original models. This kind of combining can be called multiple modeling.

Multiple modeling may even be interpreted as subspecies of multiple disciplinarity. In any case, multiple modeling can be carried out in different levels. These could be analogous with the different levels of multiple disciplinarity. Maybe it is possible to use at least the terms "multiple modeling", "multimodeling" and "intermodeling".

In fact, multiple disciplinarity exists fairly seldom in a form that two separate disciplines are combined. Often combining appears so that two models of one discipline or two disciplines are somehow put together. Consequently, multiple disciplinarity is often in fact multimodeling. The fulfillment of borrowing and blending is usually analogous.

Today's and future methods of multiple disciplinarity probably are analogously suitable for multiple modeling analyses. The required applications must be solved case by case, as also in multiple disciplinary analyses generally.

Multiple modeling and multiple disciplinarity can often become close to each other, if the original, combined models in multiple modeling have different scientific backgrounds. This situation is in question when combining marketing mix and relationship marketing approaches as described in the next section. By nature, this kind of combining is a multimodeling task which leads to the combined marketing models of different levels that are more or less intermodeling for the different scientific background of the original models.

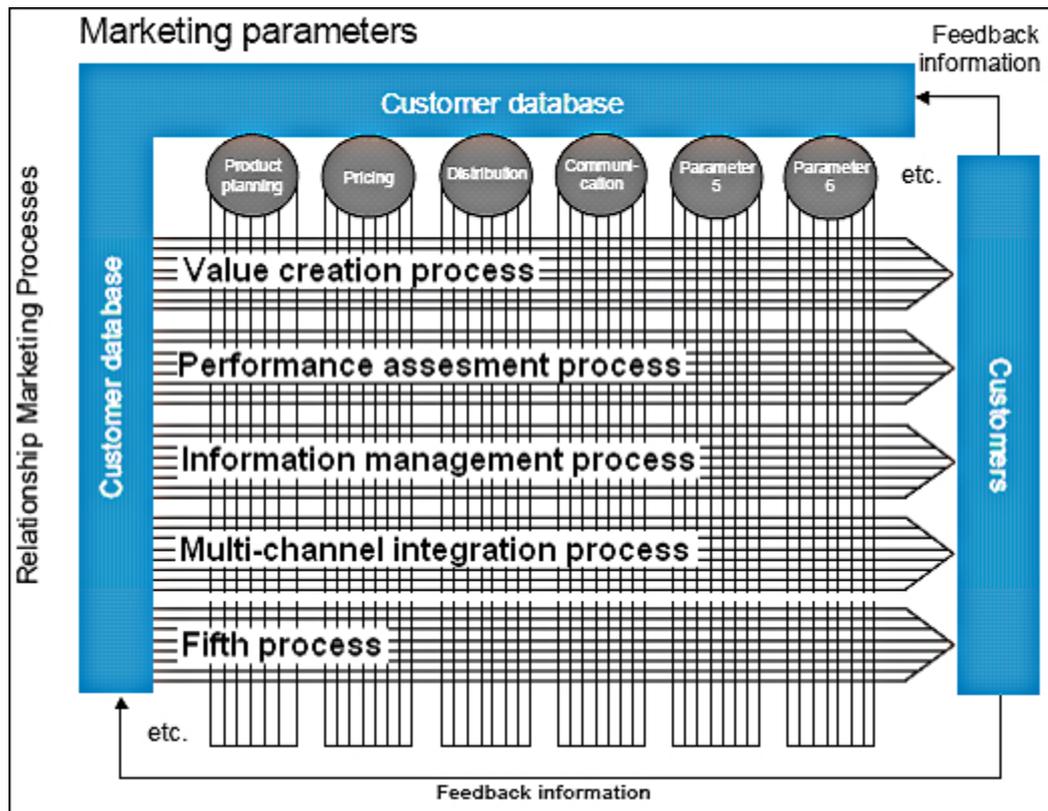
### **3. Illustrative Studies Concerning the Utilization of Multiple Disciplinarity in Business Administration, Especially Marketing**

In marketing literature multiple disciplinarity and modeling has attracted very little explicit attention. During the last few years the natural and promising idea of combining the marketing mix and relationship approaches (models) has, however, received direct attention in marketing research (e.g. Lehtinen 2007 and 2009). Generally, there are many reasons to explore the combining of these approaches (see Lehtinen 2011).

The former marketing studies by Lehtinen are used here to illustrate combining as a method towards multiple disciplinarity and modeling in marketing research and practice. In these marketing studies some combination frameworks of marketing mix and relationship marketing approaches were developed. Also a fairly advanced combination framework (model) was built. It is illustrated in Figure 1.

This combination framework can be called the "RELMIX framework" (RELationship-MIX framework). The framework is a matrix. It has the essential elements (parameters) of mix marketing on the horizontal level and the essential elements (processes) of relationship marketing (Payne and Frow 2005, Payne 2006) on the vertical level.

**Figure 1: RELMIX framework for combining marketing parameters and relational processes**



In the data collection three own surveys, three secondary surveys and one follow-up case analysis were applied. The most part of the results could be observed about the distributions and tabulations but some statistical tests were also utilized in the confirmation of the results. Some additional information about combining and empirical studies is presented in the Appendix (see also Lehtinen 2011).

The results of the author's empirical surveys tell, that both approaches were quite simultaneously and parallely used in almost all the companies where the respondents of the surveys worked (see Lehtinen 2011). Some combinations of both approaches were fairly often used. The results also indicated that a clear majority of the respondents supported further combining of the approaches in their companies, and even generally as well. The results of the case study (Lehtinen 2011) also clearly coincided with the opinions presented in the surveys.

All the respondents had an opportunity to comment on marketing issues freely, without any leading remarks after completing the questionnaires. In all the discussions many of the managers expressed their surprise that the researchers were still debating the superiority of one major approach over the other. They clearly considered that the researchers should concentrate on analyses of combining the most commonly used approaches, which they considered to be marketing mix and relationship marketing. Most of the managers hoped for the development of proper methods or models of combining the approaches. The managers told that most companies were already applying both approaches at least in parallel. Many of the managers stated that their companies had used some kind of a combination approach.

Several managers emphasized that the combining of approaches would match current practice or at least the combining aims of companies. Therefore, combining could fill the gaps between

## Lehtinen

the present theoretical approaches and practice. The managers also believed that the developed combining models would allow greater marketing efficiency and better results.

Three extensive studies (Brodie et al. 1997, Pels et al. 2000 and Coviello et al. 2002) were utilized secondarily to check the former results. The main results and conclusions concerning the coexistence of different approaches were largely compatible with the results of Lehtinen's studies described before.

Summarizing, the results based on all the seven studies seemed to prove that there were evident gaps between the marketing practice (manifested by empirical results) and the current major models (manifested by separate models of mix marketing and relationship marketing). At the same time, the results of these studies also confirmed the large parallel use of both approaches and often some kind of the use of the combinations of the approaches. The combinations found varied from parallel coexistence to advanced combinations, which were reminiscent of the RELMIX framework. Taken together all seven studies showed that some kind of proper combining was sought after by most of the companies that participated.

The findings of these studies can be at least in modified form used largely in marketing management practice including teaching in marketing management. The applications naturally require a lot of time, attention and business ability of any company that wants to consider utilizing these new opportunities. If we outline the required and actually very variable tasks rather generally, the company should first determine its attitude in regard to combining. If and only if its management is considered that combining is of practical importance, a plan of operations with specified objectives and a time-table should be made. Then the systematic combining work in several phases should be started and properly completed.

A remarkable problem of combining is the compatibility of the elements of the theories and/or models that are combined. The other problem is the manner of combination itself. Consequently, more research in these issues are needed.

Borrowing and blending are sometimes used methods or procedures towards multiple disciplinarity and modeling in marketing theory and empirical research of marketing. For example, many sociopsychological, mathematically formulated models have been utilized in consumer behavior research, which is a quite independent area within marketing research. In fact, there was even a period of several years when these multidimensional choice models were in the central focus of marketing (see Lehtinen 1973 and 1974 and Journal of Marketing Research 1974-1980).

These kinds of borrowings in marketing have often been rather fruitful. Sometimes borrowing and blending (only one or both) can be integrated with the utilization of combining. In any case, this proves the need of multiple disciplinarity and modeling in marketing research.

There are also studies utilizing multiple disciplinarity and modeling also in the other areas of business administration. For example, Gabrielsson, Eronen and Pietala (2007) combined theory of international business especially marketing and economic geography when they studied internationalization and globalization of companies as a spatial process.

## 4. Discussion, Conclusions and Challenges

Our illustrative subdiscipline i.e. marketing is a rather multiple disciplinary subdiscipline of business administration. Therefore, multiple disciplinarity and modeling and their methods can

## Lehtinen

provide very important possibilities and challenges throughout research, teaching and practice in marketing. So far multiple disciplinarity and modeling are insufficiently utilized in marketing -- and supposedly in any science. Therefore, these possibilities are still to a large extent unutilized in marketing.

In addition to research-based contributions, multiple disciplinarity and modeling also have large practical and social implications, because marketing is comprehensively linked with the most sides of human life. The very good possibilities probably are in practical marketing management and in building marketing plans. Promising research areas also are consumer issues for example consumer protection with its all different features.

This article likely is the first general and comprehensive analysis of the possibilities, problems and challenges of multiple disciplinarity and modeling in marketing research, teaching and practice. The explicit and large examination and illustration of multiple disciplinarity and multiple modeling are new in marketing – and generally in whole business administration. In our illustrative marketing studies there are many new results like the explication of the ideas and rationales for combining, the proving the existence of some gaps between marketing practice and current major models, multiple modeling in business administration, different levels of combining, different combination frameworks, empirical analysis concerning the new ideas and frameworks and empirical examination of managers' real behavioral efforts, purposes and hopes. Taken together all the seven studies showed also that some kind of proper combining was sought after by most of the companies that participated. In fact, there was a rather strong need to find out how to combine major marketing approaches properly.

The empirical results of our marketing studies including the comments of discussions strongly emphasized the utilization of at least two different approaches concerning marketing management. Essentially, this can be interpreted as a clear evidence in favor of multiple modelling and disciplinarity. At least great possibilities can be seen in the gaps between practice and current separate models. The combined models serve also as an opportunity to utilize simultaneously two or more models so that the weaknesses of one model can be compensated by the strengths of the other(s). The combined models naturally also entail a more comprehensive view of marketing than when the models are considered separately. All of these findings can be considered some kind of contributions.

In general, these marketing studies introduce a new way in the long run to develop new comprehensive models for marketing. The results even suggest that a paradigm shift in marketing might occur from the present major approaches to some combination(s) of these approaches. Therefore, this article directly and indirectly challenges contemporary practical marketing as well as marketing research and teaching in many respects.

In fact, combining the mix marketing and relationship marketing approaches may be the greatest possibility for multiple modeling and combining in marketing because of the importance, comprehensiveness and compatibility of the original approaches i.e. marketing mix and relationship marketing. However, it is impossible to see exactly all possibilities at this moment. Therefore, more theoretical and especially empirical research is needed and also deserved in scrutinizing these promising considerations.

Many general reasons of striving for multiple disciplinarity and modeling (see Lehtinen 2015) also concern to a great extent marketing as a target area of research and practical actions. Consumers', retailers', wholesalers' and producers' behavior at their markets is a relevant part of general human behavior. Consequently, it can be partly explained with the help of

## Lehtinen

behavioral theories and models of psychology, sociopsychology and sociology. This in turn means that marketing is a highly multiple disciplinary subdiscipline of business administration even in this respect and the utilization possibilities of the methods of multiple disciplinarity and modeling are very good.

The comments concerning the artificiality and arbitrariness of the boundaries of marketing can be with fairly good reason generalized to all other subdisciplines of business administration. It is understandable that the basic ideas, rationales and methods of multiple disciplinarity and modeling are probably also quite valid and adaptable in other sub-disciplines of business administration. For example, in accounting, in finance as well as in management and organization both rationalistic and normative research as well as behavioral research are practiced. Thus some combinations of approaches in these main areas of business administration can sometimes be possible and reasonable. On the other hand, organizational research, for instance, has largely borrowed concepts, constructs and even researchers from neighboring behavioral disciplines such as psychology and sociology. Oswick, Fleming and Hanlon (2011) listed fourteen remarkable contributions of organization and management theory and only one of the proponents of these contributions was primarily a researcher of business administration.

In fact, the boundaries of all subdisciplines of business administration are somehow rather artificial and arbitrary. This is strengthening the challenges of multiple disciplinarity and modeling in any subdiscipline of business administration.

There are especially logical reasons to believe that multiple disciplinarity and modeling as well as their methods could and should be also generalized to and utilized in very many disciplines in addition to business administration. It is easy to understand that they could be extended to neighboring sciences such as economics, social sciences and political sciences (Lehtinen 2011).

We can also generalize this challenge even in the following form: the scientists of the most disciplines should experience multiple disciplinarity and modeling as a fundamental challenge and possibility when developing their research, teaching and practice. If we accept this generalization we probably are in the right but this challenge in turn leads to two significant issue: Have we correspondingly helped the progress of multiple disciplinarity in scientific policy and in individual projects? On the other hand, have we understood clearly that we do not need to involve several disciplines or models and/or a multiple disciplinary team for every problem or project in any areas of study?

## References

- Berry, LL1983, 'Relationship Marketing', in LL Berry et al. (eds.), *Emerging Perspectives of Services Marketing*, Chicago, Ill.: American Marketing Association.
- Besselaar, P van den & Heimeriks, G 2001, 'Disciplinarity, Multidisciplinary, Interdisciplinary - Concepts and Indicators', paper presented at the 8th Conference on Scientometrics and Informetrics, Sydney.
- Borden, NH 1964, 'The Concept of the Marketing Mix', *Journal of Advertising Research*, June.
- Brodie, RJ, Coviello, NE, Brookes, RW & Little, V 1997, 'Towards a Paradigm Shift in Marketing? An Examination of Current Marketing Practices', *Journal of Marketing Management*, 13:5.

## Lehtinen

- Choi, C & Pak, W 2006, 'Multidisciplinarity and transdisciplinarity in health research, services, education and policy. Definitions, objectives and evidence of effectiveness', *Clin Invest Med*. Vol. 29, No. 6.
- Corley, K & Gioia, D 2011, 'Building Theory about Theory Building: What Constitutes a Theoretical Contribution?', *Academy of Management Review*, Vol 36, No. 1.
- Coviello, N, Brodie, R, Danaher, P & Johnston, W 2002, 'How Firms Relate to Their Markets. An Empirical Examination of Contemporary Marketing Practices', *Journal of Marketing*, Vol. 66 (July).
- Gabrielson, M, Eronen, J & Pietala, J 2007, 'Internationalization and Globalization as a Spatial Process', *CIPR Working Papers* 7-17.
- Hunt, S 1983, *Marketing Theory: The Philosophy of Marketing Science*, Homewood, Illinois.
- Jackson, BB 1985, 'Build Customer Relationships That Last', *Harvard Business Review*, November-December.
- Lattuca, L 2001, '*Creating Interdisciplinarity*', Vanderbilt University Press, Nashville.
- Lehtinen, U1974, 'A Brand Choice Model: Theoretical Framework and Empirical Results', *European Research: Marketing, Opinion, Advertising*, March. First published in *Developments in Consumer Research*, ESOMAR, ed. Maidenhead, UK 1973.
- 2007, 'Combining Parameter and Relationship Marketing Approaches', working paper, Taloussuunnittelu Oy.
- 2009, 'Parameter Marketing and its Development Possibilities', in Veloutsou, C (ed.), *Marketing Management: From Theory to Implications*, Athens, ATINER.
- 2011, 'Combining Mix and Relationship Marketing', *The Marketing Review*, Vol. 11, No.2.
- 2013, 'Multiple Disciplinarity in Theory Building', *Proceedings of the 1st Annual Interdisciplinarity Conference*, Azores, Portugal.
- 2013, 'Combining in Theory Building', *International Journal Business and Social Research*, Volyme-3, Number-5, May 2013.
- 2014, 'Combining as a Procedure Towards Multiple Disciplinarity in Business Administration', paper presented at the International Business Research , Capetown, South Africa.
- McCarthy, E 1960, *Basic Marketing*, Homewood, Ill.:Irvin.
- Natural Sciences and Engineering Research Council of Canada (NSERC) 2004, *Guidelines for the Preparation and Review of Applications in Interdisciplinary Research*, Ottawa, NSERC.
- Oswick, C, Fleming, P & Hanlon, G 2011, 'From Borrowing to Blending: Rethinking the Processes of Organizational Theory Building', *Academy of Management Review*, Vol. 36, No. 2.
- Payne, A 2006, *Handbook of CRM: Achieving Excellence in Customer Management*, Amsterdam etc.: Elsevier.
- & Frow, P 2005, 'A Strategic Framework for Customer Relationship Management', *Journal of Marketing*, 69 (October)
- Pels, J, Coviello, N & Brodie, R 2000, 'Integrating Transactional and Relational Marketing Exchange: Pluralistic Perspective', *Journal of Marketing*, 8 (Summer, 3).
- Sheth, J, Gardener, D & Carret, D 1988, *Marketing Theory: Evolution and Evalution*, New York etc: John Wiley & Sons.
- Whetten, D, Felin, T & King, B 2009, 'The Practice of Theory Borrowing in Organizational Studies: Current Issues and Future Directions', *Journal of Management*, Vol. 35, No. 3.
- Wikipedia, *Discipline (spelialism)*, <http://wikipedia.org/wiki/Multidisciplinarity>.

### Appendix: Information about Combining and Empirical Studies

The RELMIX type of framework (see the Figure 1) and its applications can be included in the advanced part of combining. It can be considered interdisciplinary by nature for the different scientific background of original models. The marketing mix approach is quite rationalistic and normative whereas the relationship marketing approach is based on a strongly behavioral and positive vision.

The continuum of combining can be divided into two parts: the first and second principal phases of combining. Fairly unconscious and unsystematic combining, often appearing as a parallel and even independent use of the approaches, can be considered the first principal phase (preliminary phase) in combining approaches. It is a common start towards multiple disciplinarity in education and especially in companies. This phase actually is multidisciplinary. To achieve sustainable competitive advantages companies should benefit from all the essential elements of the approaches. This can best be done by combining the approaches systematically and consciously into a single and comprehensive model or framework. This could be called the second principal phase of combining.

As to the marketing mix approach, choosing the essential and suitable elements for combining is fairly straightforward. The parameters of mix form the core of the approach. The choice of the elements of relationship marketing leaves more room for interpretations. The number, nature and content of the parameters and processes used in different models may vary at least between researchers, companies, products, lines of business and situations.

Lehtinen (2011) has conducted four empirical studies (three surveys and one case study) concerning the combinations of major marketing approaches during 2007-2011. All the 49 participants in the three surveys filled in a self-administered questionnaire, which consisted of questions concerning the use and combinations of different marketing approaches. After the respondents had completed the questionnaires all respondents got an opportunity to comment freely on marketing issues without any leading remarks. The respondents were marketing managers or marketing staff and CEOs in Finland.

The researcher also conducted a case study of a research and consultant company. The case study was a follow-up study with the results reported twice during a three-year period. The empirical results of Brodie et al. (1997), Pels et al. (2000) and Coviello et al. (2002) were utilized as secondary information when evaluating the results of the surveys.

Attention was given to maintaining the quality of the empirical studies throughout the research process. In all the three surveys the same main questions formed the basis of the questionnaire. The questions were pretested before the surveys were administered. Answering the main questions was fairly easy and as business experts the respondents could understand the terminology involved. The completed questionnaires and additional discussions were dealt with immediately and carefully by two persons to increase reliability. The differences between the interpretations of these two persons were small, which indicates that the interpretations were likely to have been performed correctly. Because the main results were almost identical in all the surveys and also in the secondary data and in the case study, the results seemed to be quite valid and trustworthy.