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INTERVENTIONIST MANAGEMENT ACCOUNTING RESEARCH: LESSONS LEARNED

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summaries

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1. Overview of project

Introduction

Interventionist research has been suggested as one possible way to produce practically relevant management accounting research. Professors Jönsson and Lukka have been important spokesmen for interventionist research and, lately, many other management accounting (MA) scholars have also started to see it as an interesting opportunity to provide theoretical contribution in the management accounting field. In interventionist research, researchers not only act as outside observers but, on the contrary, become actively involved (i.e. intervene) in various development efforts taking place within the organisations. In other words, researchers become resources for the organisation under observation which motivates the participating organisations to enable researchers deep access to their organisation.

In many countries, management accounting researchers are not necessarily considered as interesting partners in developing accounting practices or business practices in organisations. This makes it difficult for researchers to access real life companies and engage in participative studies. However, interventionist research, at best, can provide organisations access to motivated and knowledgeable resources (researchers) and, at the same time, provide these researchers very deep access to the issues relevant for practitioners and business community. In interventionist research, researchers are engaged in development of business practices in collaboration with business partners resulting in novel ideas both in terms of practice and research.

Cost Management Center (CMC) is a research team at Tampere University of Technology (Finland) focusing on cost

management and management accounting research. During the past ten years, CMC has completed over 30 long-term research projects with clear interventionist elements in them. All these research projects have been conducted with industrial partners, and researchers have been actively involved in the development of cost management and/or management reporting practices. The deep involvement in the development processes has provided a 'box seat' to observe these processes and contribute to the scientific community. This CIMA funded research project has provided a possibility to analyse some of these interventionist research projects or streams in retrospect. The projects analysed in this study are shown in Figure 1.

The retrospective study is based on analysing documentation related to each project as well as on collecting the opinions and perspectives of individual researchers and practitioners involved in the analysed projects. The nature and quality of the documentation varies across the projects but a wide range of different sources has been utilised, including minutes of meetings, research diaries, project reports, working papers based on the projects, and various internal and external presentations.

Based on the experience gained during the past ten years, active research collaboration with researchers and practitioners has resulted in both good pragmatic outcomes and interesting theoretical contribution. Throughout the existence of CMC, it has actively attempted to introduce the research approaches used in various engineering sciences (where industry-university collaboration, at least in some countries, is nearly taken for granted) to the management accounting research.

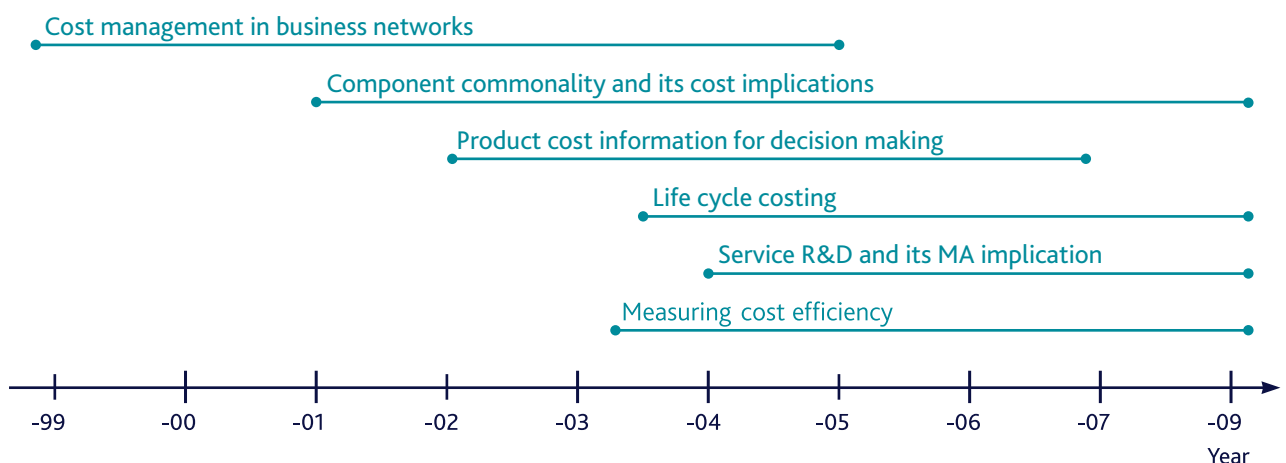


Figure 1. Research streams analysed in this research project

Research funding in Finland

The principles of research funding in Finland constitute an interesting contextual variable in relation to interventionist research approach. Overall, Finland is a very research-intensive country, with research expenditures of approximately 3.5% of GDP. During the last ten years, Finland has been among the most active OECD countries with respect to research and development. There is a number of governmentally funded national organisations, which provide support for universities and other research institutes. These include Tekes (the Finnish Funding Agency for Technology and Innovation), the Academy of Finland, and Sitra (the Finnish Innovation Fund). All of them not only provide funding for basic research and technology development but also support more business oriented research activities. During the recent years, all the three organisations have also funded research projects that touch the applications of management accounting.

Tampere University of Technology (TUT) - the host organisation of Cost Management Center - is a well known university in Finland for its close relations with industry. As a reflection of this, a major part of TUT funding comes from other sources than direct governmental budgetary support. In fact, approximately 40% of annual expenses (totaling 152 M€) came from external sources. In this, the funding from the national funding organisations (such as Tekes) plays a significant role. It also means that each individual planned research project has to compete against other projects in getting the sufficient funding. Furthermore, according to the policy of Tekes: 'The key to success is a long-term commitment and co-operation between companies, researchers and funding organisations such as Tekes.' (Tekes 2009, www.tekes.fi). In operational terms this means that Tekes requires company participation in its funded research projects.

Companies that participate in research activities funded by Tekes do not only invest their time in the project but also cover a part of expenses caused by the research resources. Companies thus experience direct and negative cash flows due to research projects they engage in. As a result, they also typically expect a fair pay back of their investment. Research has to be translated into something that is seen as valuable. While some companies might value collaboration with universities as such, it is also possible that some of the expectations attached to joint research ventures are more direct and measurable by their nature. In our experience, it is far

more feasible to attract companies into the research participation when they can recognise, in addition to the public utility of investing in research, a more short-term utility connected with the research project. This is especially the case with small and medium sized companies with limited investment capacity.

In all, this means that the Finnish innovation funding structure is, in our view, well in line with the idea of interventionist research. Companies are typically expecting active interventions by the researchers, but on the other hand, also willing to make a serious commitment to the aims of the research. Quite naturally, it is the crucial responsibility of the researchers to select and co-ordinate the participating companies in a manner that secures the scientific aims of the inquiries.

Categorising the research streams

Despite the scarcity of empirical examples, it has been argued that interventionist studies may be divided to a number variants that differ from each other – for example – in terms of researcher's role or the strength of intervention. As a classification criterion, Jönsson and Lukka (2007) distinguish between studies that work through strong and modest interventions. Strong interventions aim at changing the processes of host organisation by re-engineering the control system related to these processes or by suggesting alternative designs for the processes themselves. On the contrary, modest interventions are less intrusive and active – they primarily serve as facilitators or catalysts for change.

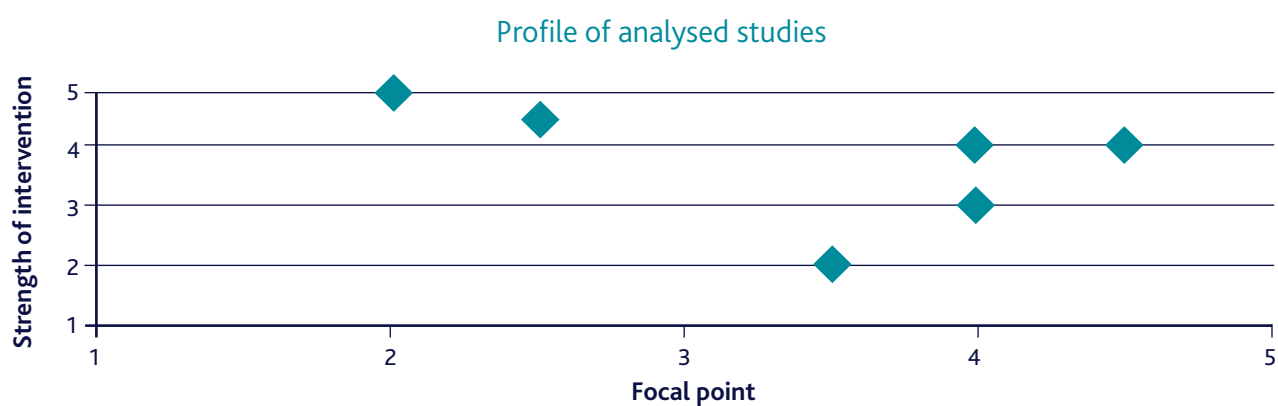
For the purpose of our ex-post analysis, we develop a more refined measure of intervention strength, which builds on the idea of modest and strong interventions. We use a scale from one to five for describing the strength of intervention: level one corresponds to modest intervention, where the mere presence of the researcher(s) facilitates the change or novel thinking. Active participation is very limited, and researchers may be seen as external resources or capacity with a symbolic value. As an example, the presence of a well-known cost accounting expert in a product development project meeting would serve as a symbolic (interventionist) act that would likely highlight the importance of cost consideration in the development project. In the other end, level five refers to – perhaps extremely rare – studies that make strong interventions on the basis of active input by researchers and typically are associated with a long-term (for example three to six years)

commitment that allows a researcher’s true immigration into the focal organisation. In other words, the researcher becomes ‘one of us’ for the most of the people in the organisation – having rights and responsibilities resembling that of an employee.

In addition to intervention strength, we also adopted a classification based on the focal point of the intervention. By this, we refer to the extent to which researcher is directly intervening in management accounting practices or tools within this discipline and to what extent the focus of intervention touches other disciplines – such as engineering or marketing. This kind of classification has not been explicitly present in the extant literature but we nevertheless perceive it important and interesting given the applied nature of management accounting as a discipline. Management accounting mirrors or translates the activities in real processes of organisations meaning that whatever happens in an organisation, there will be – or there could be – a management accounting perspective on that. This perspective can take the form of a single calculus, a set of financial scenarios, conceptual framework or a number of other representations generally aiming at better control over events. As (Malmi and Granlund 2009) aptly point out, the MA theory should be a set of propositions of how to organise accounting and control practices under given circumstances. To us this implies

that interventions aiming at MA contribution must not only focus on accounting itself but that it is possible also to set out interventions aiming at creating certain circumstances, which are seen as interesting in relation to management accounting controls.

Again, a scale from one to five is employed in positioning the studies with respect to MA focus. Level five refers to studies focusing on management accounting constructs and practices as focal points of intervention. As an example, Tuomela (2005) aimed at introducing a new kind of performance measurement application – so called Customer Scorecard – into an organisation. Level four studies would also focus on MA constructs but at a same time they would be interested in making a difference within other disciplines supporting the ideas bubbling in MA domain. As an example, a researcher wishing to introduce new means for cost control in sourcing could be interested also in making an intervention on the processes of sourcing management in order to secure a better correspondence between the intended controls and the context of control. Levels three and two represent the next steps in this continuum, reflecting different emphasis between MA and other disciplines. Finally, given the seemingly rebellious flavour of the level one, it deserves a short elaboration. What do we mean by saying that the focus ‘is solely in other disciplines’ than MA? It goes



Key	Focal point (of access)	Strength
5	Intervention solely on MA practices/tools	Strong collaboration, native role ‘one of us’
4	Intervention mainly on MA and partly other	Active and versatile participation, ‘almost family’
3	Equal focus on MA and other	Rich participation within limited domain
2	Main focus on other disciplines, also MA	External expert, limited participation
1	Focus solely on other disciplines	Intervention through presence, very limited participation in processes

Figure 2. Positioning the analysed projects

without saying that research aiming at contributing to management accounting has to have a connection with MA; however, we suggest, that it is possible to enter into an organisation without an intention to intervene in management accounting and still make a MA contribution. However, this necessitates observation (or data collection more generally) and reflection, which will focus on issues relevant with respect to MA. In other words, the question is about the focal point of intervention not the focal point of the study as a whole.

Using these dimensions, the analysed interventionist studies are plotted in the scatter chart shown in figure 2 (page 4). Based on subjective judgment by the authors, the positioning conveys a message that the selected studies or research streams have different character measured by these two variables. Although the selection does not fully satisfy the requirements of theoretical sampling (cf. Yin 1994), this portfolio of interventionist studies nevertheless gives a fair foundation for discussing the potential variant of the research approach.

2. Objectives

The objective set for this study was to contribute to the discussion on the potential of interventionist research when trying to produce a scientific contribution having both theoretical and pragmatic relevancy. This study seeks to conceptualise the interventionist research processes in order to show some of the benefits as well as to point out some disadvantages encountered in different kinds of interventionist research projects.

By engaging in an ex-post analysis of interventionist research projects conducted by CMC, the study illustrates the potential variety of research interventions in management accounting research, and addresses related advantages/disadvantages. In addition to the ex-post analysis of conducted research projects, this research report also provides empirical evidence on managers' perspectives on interventionist research and its potential in ensuring pragmatic relevancy of the research results.

3. Implications of the findings for practical application

Towards a shared goal

Many practitioners and scholars have been concerned about the relevance of management accounting research. However, there are at least two approaches to this problem. On one hand it may be that the

academic community has not been active enough in seeking opportunities to engage in collaboration with practitioners in order to find areas of research with shared interested. On the other hand, it is equally justified to argue that the industry has not been especially active in seeking ways to collaborate with academic community either. Nevertheless, interventionist research has been pointed out as one way to bring practitioners and researchers closer to each other and, hence, increase the pragmatic relevancy of management accounting research. By engaging in interventionist research projects, companies will have access to knowledgeable resources while the researchers will gain access to interesting real life settings which they can use to produce interesting academic contributions. In such arrangements, however, it is important to define the collaboration in a way that provides interesting results for both parties. If only practical results are highlighted, researchers might feel that they have not been able achieve their ambitions. However, if the projects only provide interesting academic results, the managers might feel that they have been taken advantage of. Hence, it is important to ensure that the interventionist research projects facilitate the objectives of both participating parties.

The reported research project provides examples of what kind of research interventions the researchers of CMC have done in order to familiarise themselves with the case contexts and the practical phenomenon that they are studying – while still providing valuable contributions both to the case companies and extant literature. Sometimes research interventions have been rather narrow and focused on a pre-defined area within the case company. However, usually the research interventions have lasted several years and resulted in very close collaboration between the researchers and the participating managers. As the research collaboration advances and the level of trust among the participants increases, researchers can actually become very important partners for managers and they start to talk about problems they might not wish to talk about even internally not to speak of with outsiders. Such relationships eventually tend to open up very interesting areas for research. In such projects, based on our experience, both managers and researchers are deeply committed to our mutual goals and this sort of collaboration can result in very interesting results for both parties, hence, bringing practitioners and researchers closer to each other.

A real life example: Cost management in business networks¹

This interventionist research stream is based on two large research projects focusing on the cost management practices within the supply networks of two machine construction companies (OEMs) selling their products globally. The focal company of the first project was a manufacturer of mining equipment and the project also involved eight of its strategic suppliers. The second project focused on a manufacturer of excavators and involved five of its key suppliers. With both OEMs, these research projects were preceded with several years of research collaboration in other cost management related areas so the researchers and the managers of both OEMs were familiar with each other and interventionist research.

Joint cost management in a supply network generally requires that each company is aware of its own costs. Only after that it is possible to share cost information with other companies and collaboratively seek for new solutions. Thus, it was very natural for the cost management researchers to become engaged in the development of cost management practices among the suppliers (i.e. develop ABC models) in order to, first, increase their cost awareness and, second, then facilitate the implementation of inter-organisational cost management practices. The main outcome in both research projects was that some of the suppliers agreed to open their books for their key customers (the OEMs) and the researchers were, first, helping the suppliers in providing the needed cost information and, second, facilitating the actual open book negotiations. In other words, the researchers were actually chairing the discussions when the books were opened and, in a sense, were seen as a third neutral party ensuring that all the participants understand the cost analyses and do not make too hasty conclusions.

In the first research project everything went smoothly – it was a schoolbook example of open book accounting (OBA). Three suppliers opened their books and the OEM was very satisfied with their commitment to the mutual development efforts. The second research project was motivated by the excellent results of the first one but the result turned out to be something totally different.

Figure 3. A real life example of interventionist study

Variety of interventions and practitioners' perspective

Interventionist research is not a monolithic concept, but a number of variations for different purposes can be identified. Our analysis shows rather extreme variations of research interventions conducted in the projects of CMC (as shown in Figure 2). For practitioners, that might give examples of such industry-university collaboration that most managers have not ever considered. Furthermore, in addition to the description and analysis of the interventions, this study also included interviews of managers that had participated in research projects with CMC in order to provide the practitioner's perspective to interventionist research. The managers pointed out a few very interesting aspects that have not been explicitly discussed in the literature on interventionist management accounting research:

1. When considering the access to the case company, all the managers pointed out that research projects need to provide them concrete benefits, otherwise they have no reason to engage in such projects at such a deep level. This view favours interventionist

research, as it typically not only results in academic outputs but also has direct practical implications in participating organisations.

2. At the beginning of the research project, practitioners need to commit themselves to providing lots of information to the researchers and if they are not certain about the potential benefits, they simply cannot justify the allocation of needed resources. This poses a significant challenge to researchers whose traditional challenges might have been more connected to convincing research funders rather than managers.
3. All the interviewed managers pointed out that the projects should (in addition to scientific objectives) also clearly facilitate the development objectives of companies. This is not to say that the managers do not appreciate if good development projects also benefit the career of the researchers in the form of interesting publications. However, a good match between company's interests and researcher's interests is needed.

¹ For further real life examples, a number of detailed interventionist case studies are discussed in Suomala and Lyly-Yjänäinen (2009, forthcoming)

One of the reasons why managers, especially in the field of management accounting, are very selective in providing deep access to researchers is that they consider financial information as a very sensitive domain. However, as cynically pointed out by one of interviewees, in most companies, 'lots of data in ERP systems are useless anyway', supporting a more relaxed attitude towards discussions around recorded information. For example, even some product cost analyses might be next to useless and thus less sensitive unless the reader has an access to all the details of the costing model in order to form an understanding on how these analyses have been conducted. In all, it seems that managers with less experience in interventionist research or close research collaboration in general tend to overstate the risks in letting researchers become involved in management accounting and cost management projects with them.

Managers underlined that before entering into interventionist research collaboration, companies (and also researchers) should carefully examine their motives as it is crucially important for the success of both parties to identify individuals and companies that are truly willing to develop their competences and openly discussing their concerns – ideally, interventionist research largely resembles learning new things together. Another issue, which should be kept in mind when marketing interventionist research, is that especially in financial departments, there are typically no such development positions comparable to product and business development areas and, hence, management accounting researchers could actually provide valuable development resources for managers during the interventionist projects.

The interviewees also pointed out that interventionist research seems to need quite long research projects since it takes time to build trust and commitment among the participants. Managers admit that they tend to expect results often too quickly even if it is important in the beginning of the project to invest enough time for understanding the big picture and the context. Importantly, this process of collaboration between researchers and managers is to secure finding or refining the right problems for the study. The managers pointed out that this heavy investment during the early stages of collaboration is the main difference between interventionist research and consulting. However, the interviewees also pointed out that some preliminary

results are needed quickly in order to commit other managers and company employees to the project. Finally, when the results are presented, the credit of the results must be shared with the employees as well. When the employees and managers are given some credit of the results of the research projects, it will motivate them to engage in other interventionist research projects as well.

4. Conclusions, particularly lessons learned from the research

In all, the analysed studies demonstrate the versatility of interventionist research: in fact, not all of the conducted studies only contributed to management accounting but also to other domains such as engineering management, quality management or management in general. We have identified eight key lessons learned on the basis of our retrospective analysis. The following list includes those in short:

General issues:

1. An intervention can be used for building a research setting – not for building the research question per se.
2. Interventionist research has potential for providing a researcher with means to create a real and direct impact also outside the academic world (impact on society).
3. Interventionist research should not only be seen as an approach for collecting empirical data but also as a vehicle for creating sustainable relations between academia and different industries.

Research design issues:

4. The idea of intervening researcher can be utilised in getting a true (emic) access and acceptance within the host organisation.
5. Interventionist work may be one of rare available research weapons for studying issues 'bubbling under' or issues, which have not yet been extensively adopted by real life organisations.
6. Interventionist research can be regarded as a specific piece in a 'methodological toolbox' that should be fitted into a researcher's capabilities and into the possibilities occurring along a research topic's life cycle.

Data collection and processing related issues.

7. Interventionist research can be used as a mechanism for opening black-boxes of organisational activities and, when applied in sufficient rigour, for avoiding the problems connected with recollection and/or hiding undesired behaviour
8. The act of intervention can be used for validating the results immediately during the process of research. This is to support both the relevance and efficiency of theory production.

Interventionist research is a challenging domain and it not only contains a lot of potential but also a number of risks. The main risks or the possible disadvantages – as can be concluded on the basis of our experience – are the following:

- Extensive length of the research process without explicit academic outcome (publications). In our experience, a typical interventionist project may last for two to six years, and it is likely that the first publications will result only at the later phases of the venture.
- Unbalanced emphasis on practically relevant issues – at the cost of academically interesting results. Managers are sometimes very skilful in guiding the projects into directions that primarily drive their expected value. It is in the researcher's interest to keep the manager happy and make sure that some sort of theoretical contribution will also follow. This is not an easy task to do.
- Creation of highly idiosyncratic or even unrealistic settings ('synthetic anomalies') due to strong intervention. Although this might be rare, it could be possible that a strong researcher would be able to contribute to a state of affairs, which could be seen as unnatural otherwise in that particular setting: researcher is not facilitating a change but rather manipulating one. As a result, the suggested implications would only contain anecdotal value.

In summary, interventionist research provides interesting opportunities both for researchers and practitioners. In many cases, practitioners are interested in many new things but they have not the time to commit to implementing the most recent management accounting innovations. However, by engaging into interventionist research projects with universities, the researchers might provide at least some of the resources needed for the implementation process. At the same time, the researchers would have a chance to learn from those interesting new management accounting innovations and their functionality in real life settings. In a sense, instead of searching for a company that has already implemented these new tools or management concepts, researchers can actually choose another strategy by creating the setting in which to study that particular phenomenon. The participation in the implementation process also provides the researchers deep practical understanding of the phenomenon but requires a substantial investment in time. Thus, interventionist research, at best, provides a very interesting win-win situation for both practitioners and researchers.

5. References and further reading

Jönsson and Lukka (2007), *There and Back Again: Doing Interventionist Research in Management Accounting* in Handbook of Management Accounting Research, edited by Chapman, Hopwood and Shields 2007. Elsevier Great Britain.

Malmi, T. and M. Granlund (2009), *In Search of Management Accounting Theory*. European Accounting Review, Vol 18, Iss. 3.

Tuomela, T.-S. (2005), *The interplay of different levers of control: A case study of introducing a new performance measurement system*. Management Accounting Research 16(3): 293-320.

Yin (1994), *Case study research design and methods*, Sage, Thousand Oaks. 171 pages.

Additional outputs

This research project, thus far, has resulted in four conference articles and, in addition, a third paper is under construction:

- Suomala – Lyly-Yrjänäinen (2008), *Interventionist Management Accounting Research – The Scope and Intensity of Research Interventions*, New Directions in Management Accounting – Innovations in Research and Practice, Brussels, Belgium 2008.
- Suomala – Lyly-Yrjänäinen (2009), *Interventionist Management Accounting Research – The Scope and Intensity in Three*, Series of Interventionist Research, EAA Annual Conference, Tampere, Finland 2009.
- Suomala – Lyly-Yrjänäinen (2009), *Managerial Insights on Interventionist Management Accounting Research*, Manufacturing Accounting Research Conference, Munster, Germany 2009.
- Suomala, P. Lahikainen, T., Lly-Yrjänäinen, J., Paranko J. (forthcoming 2010) *Open Book Accounting in Practice - Exploring the Faces of Openness* Qualitative Research in Management Accounting and Management, Special Issue on Interventionist Research.

In addition to the three above mentioned conference papers, this research project has also provided both the motivation and the resources for two papers submitted/to be submitted for review process. Furthermore, the research project has provided an excellent opportunity to provide a manuscript for a book on practical implementations of interventionist research approach. The book attempts to show, with empirical evidence, how industry-university collaboration can, when properly done, benefit both the practitioners and researchers alike.

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