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Towards explaining stability in and around management accounting systems

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The aim of this longitudinal case study is to examine the reasons behind the often observed fact that accounting systems are difficult to change, despite the influence of significant market changes and other changes which put tremendous pressure on accounting to change. Unlike the bulk of studies on management accounting change, this study focuses on stability (continuity) and on the reasons for its existence or even necessity. The study aims to reveal how human, institutional, and economic factors become intertwined in MAS change projects, and especially in the cumulative process of change or its denial. The origins of stability and, therein, resistance in accounting systems are discussed using institutional theory and Giddens' theory of structuration.

Key words: MAS development; stability; resistance to change; structuration theory; institutional theory.

1. Introduction

> … it is probably reasonable to say that accounting practices are generally rather slow to change. An interesting question is: why? (Scapens, 1994, p. 317)

This longitudinal in-depth case study will concern itself with development attempts focused in particular on improving product costing practices. The analysis pays special attention to the counterpart of change, stability. The study will shed light on the reasons behind the often observed fact that accounting systems are difficult and slow to change, despite the influence of significant changes in the operating environment putting tremendous pressure on accounting to change (e.g. Hedberg and Jönsson, 1978; Johnson and Kaplan, 1987; Argyris and Kaplan, 1994; Bromwich and Bhimani, 1994; cf. Foster and Ward, 1994). The point in this

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discussion is not that, when confronted with changes in the operating environment, all companies should necessarily change their accounting systems. The central phenomenon to be examined in this study concerns the needs for accounting system change acknowledged by certain organizational stakeholders, the establishment of development projects, and the collective denial of the (need for) changes in the accounting system. This begs the question as to why, despite good intentions, the system did not change?

An important part of the analysis of change and stability will be the examination of visible resistance to accounting system change. Such resistance is almost without exception mentioned as a factor affecting the success of accounting system change in earlier studies (see Anderson and Young, 1999). The existence of resistance is widely known, but poorly understood (Newman and Rosenberg, 1985). Only very few attempts have been made to analyse this particular issue further. This study attempts to offer a social theory-based explanation for both the stability of management accounting systems (MAS) and resistance to accounting system change: a potentially different explanation from what has been presented in earlier studies (see Scapens and Roberts, 1993; Argyris and Kaplan, 1994; Malmi, 1997). The explicit examination of MAS stability will ultimately facilitate understanding of MAS change (Burns and Scapens, 2000).

This study does not merely aim at presenting a list of factors affecting management accounting change projects and processes, although such efforts are acknowledged as being valuable (for an excellent review, see Anderson and Young, 1999). A novel analysis (a classification) of the factors affecting development projects will be carried out, facilitated by a framework based mainly on institutional theory (Powell and DiMaggio, 1991). This classification is presented to promote future research into the factors involved with management accounting change and stability.

In addition, an in-depth analysis will be made in order to go beyond the institutional framework, to reveal how organizational power and legitimation games impinge on the development attempts which are described. The focus will not be so much on the technical details considered by the system developers as on the organizational issues that emanate from the production and reproduction of organizational reality—of the deeply rooted institutionalized principles of behaviour (Giddens, 1984). In this regard, the approach of this study resembles Scapens and Roberts' (1993) account of their objectives (cf. Hopwood, 1987). While referring to Giddens (1981) for the historical and contingent nature of all social reproduction, Scapens and Roberts (1993, p. 2) stated that '[I]t is not our objective to simplify these influences by extracting a set of generalisable factors, rather it is to amplify and to explain some of the social processes which were at work'.

To sum up, this paper aims to:

- analyse the stability of MAS, and thereby gain new insights into the knowledge of MAS change;
- develop a framework for analysing the different factors that explain the observed change and stability in the case firm, with a view to enhancing future research on MAS change; and
- thereafter extend the analysis to more in-depth examinations of the nature and origins of MAS stability facilitated by structuration and institutional theory, thereby contributing to our knowledge of MAS change *in toto*.

The concept of stability

Hopwood's (1987) study of the challenge of accounting change illustrated the variety and complexity of accounting change. The counterpart of change, stability, is seldom given equal emphasis in accounting studies. Moreover, some of the attempts to analyse this issue seem to involve explorations of resistance, implying highly negative connotations: people resisting change are irrational and ignorant of the need for change, and thus delay necessary progress. This study argues for a wider conceptualization of stability, wherein resistance to change plays one part, and is not to be viewed as being synonymous with irrationality.

At a general level, stability is the opposite of change but in an ambiguous way. Giddens (1979, 1984) outlined the relationship between continuity, change and stability in a way which gives us an extended basis to proceed within this complexity. For Giddens (1979, pp. 198–233) the interconnectedness of change, stability and continuity is natural: '… stability means continuity over time' (p. 199). Stability ensures the connection between past, present and future. Still, the possibility of change is, according to Giddens, inherent in every circumstance of social reproduction because of individuals' intentionality and purposiveness. Therefore, 'every analysis of (social) stability must also *ipso facto* be an account of change' (p. 210).

Giddens' (1979; 1984) ideas, as well as institutional theory (Powell and DiMaggio, 1991), will be applied in an attempt to offer an explanation for the stability of the MAS and the (origins of) resistance to management accounting change in the case firm.[1] The explanations will, however, be based on the case (cf. Scapens and Roberts, 1993; Humphrey and Scapens, 1996). It would be too ambitious to aim at a generalizable theory of 'stable management accounting' based on a single case research project. Rather, an attempt has been made to describe and explain the origins of stability of MAS; how the 'tacit' stability and the openly observed resistance can be explained.[2]

The case study

The case firm, Foodco (name disguised), is a large Finnish food manufacturing enterprise (turnover around EUR 500 million). The methods of this case study include analysis of written documents, theme and open interviews, and participant observation. The study is part of a wider research project that includes 38 open and theme interviews and some 20 other, more informal, conversations with Foodco personnel. As will be seen, extraordinarily delicate material is presented in this study, even if compared to many earlier case studies. The intensive observation period covers a 'gross period' of 1993–1996, but conversations with Foodco personnel still continued during 1997–1999.

The case company was selected on the basis of rumours that it was carrying out a cost accounting development project and had faced many kinds of difficulties in

[1]Cf. Burns and Scapens (2000) framework which combined structuration theory and old institutional economics. The study at hand could, to some extent, be seen to present an empirical extension of Burns and Scapens (2000). See also Granlund (1998), who combined structuration theory and (new) institutional theory into a theoretical framework used in the analysis of the challenge of management accounting change.

[2]For practitioners, stability in organizational life is expected to be largely tacit knowledge (cf. Giddens, 1979): something which is there, but is difficult or impossible to explicate and put into words.

this process. Although a single firm case study is limited with respect to statistical generalizability, it offers opportunities for in-depth observation and analysis of a complicated research phenomenon in a way that permits contextual generalizability (Lukka and Kasanen, 1995).

A considerable number of studies of management accounting change today seem to concentrate on analysing the implementation success and the overall impacts of activity-based costing (ABC). Indeed, there are several examples of limited or otherwise unsuccessful applications of ABC systems (e.g. Friedman and Lyne, 1997; Malmi, 1997).[3] Although this paper begins with the idea of a more open approach (see e.g. Bruns, 1987), i.e. without any commitment to a specific technique, such as ABC, it soon becomes evident that it turns into an examination of an ABC project.

2. Are management accounting systems difficult to change?

Kaplan (1985) claimed that there is a simple cause–effect relationship between accounting change and its environment, implying the idea that signals from the environment have to, and will, change accounting. There are also other corresponding arguments that not only accept that accounting systems could change, but that they must change in order to keep pace with other trends in development, or simply in order to maintain their reliability (e.g. Kirkegaard, 1997). However, it is often argued or observed that management accounting change is difficult to implement (Kaplan, 1985; Bruns, 1987; Johnson and Kaplan, 1987; Bromwich and Bhimani, 1994; Foster and Ward, 1994; Shields, 1995; Gosselin, 1997). Why is this?

A further question asks whether accounting systems are more difficult to change than other administrative information systems within organizations. A good example of the relative stability of MAS is the diffusion of ABC. ABC has truly made a breakthrough where discussions of management accounting practice are concerned. But why is its general entry into companies taking place so slowly (see e.g. Gosselin, 1997), considering the claimed theoretical excellence of the foundations of ABC?[4] Is it too complex a system? Or is it too difficult to integrate ABC into the existing information systems? The reasons are obviously many, varying from the lack of management support to problems in identifying cost drivers (see Drury *et al.*, 1993; Shields, 1995; Malmi, 1996; Gosselin, 1997).

How has the stability in and around MAS been studied previously? In general, two approaches have been used. Underlying the first is the aim of producing statistically testable theories of the success of ABC implementations. For example, the 'theory' of ABC implementation by Shields and Young (1989; 1994; see also Shields, 1995) is to a large degree a simplified list of factors involved in attempts to implement ABC.[5] Studies applying this approach are useful, but the inherent

[3]For a discussion on when an ABC system is to be considered unsuccessful or having failed, see, e.g. Foster and Swenson (1997).

[4]At least on the conceptual level, ABC may be said to have diffused into many companies relatively quickly. The last 10 years form only a brief era in the history of management accounting. However, considering the multitude of writings and discussions about ABC, it is also justifiable to wonder why the number of true adoptions of ABC is still relatively small (see Malmi, 1999).

[5]Cf. the behavioural model of ABC implementation presented by Argyris and Kaplan (1994). Although

target, to identify statistically testable factors, tends to undermine these efforts to some extent. Although each claims to avoid doing a 'factors study' (e.g. Anderson, 1995; cf. Malmi, 1997), that is exactly what they seem to end up doing. While large sample studies facilitating survey methods and statistical generalization are needed to see the 'big picture', much more far-reaching, interpretative work remains to be done.

One problem with the 'factors approach' is that it sometimes does not produce much that is new considering what has been reported in a number of studies dealing with factors influencing information system implementation. By the 1970s the use of external consultants and top management support, for instance, were identified as factors effecting IT implementation (e.g. Ginzberg, 1978). Another problem relates to the possibility that the number of factors affecting the implementation of, say, ABC, is in principle unlimited. However, the relative importance of certain factors can probably be established (see Anderson and Young, 1999). Still, such explanations fail to capture the interrelationships between the factors and the inherent complexity originating in the different incentives and aspirations of the people involved with accounting practice (Bhimani and Pigott, 1992; Scapens and Roberts, 1993). Moreover, the stability related to accounting systems remains basically unaddressed in these settings.

As comes to the second, alternative approach, stability, mainly in terms of resistance, in and around MAS has also been analysed from a more hermeneutic perspective. Whereas Markus (1983) and Argyris and Kaplan (1994) brought in the power and politics around MAS, an even broader scope has been introduced by, for instance, Scapens and Roberts (1993) and Malmi (1997). Scapens and Roberts (1993) described resistance to accounting change as the consequence of a failure to secure the legitimacy of a new system, coupled with problems in finding a workable relationship between production and accounting languages. Malmi (1997) examined the limited use of ABC, and concluded with the proposition that ABC generated new visibilities and thereby represented a threat to the organizational slack of sub-units.

By accepting the fact that continuity, and resistance 'therein', is natural—not necessarily irrational in a wider sense of the concept (Whittington, 1992)—these studies have introduced a 'new reality' into MAS. Of course, the nature of the results of these studies differs from the 'factors approach'. They are often less easily explicable, or more difficult to present, as a taxonomy aiming at predictability and statistical generalizability. But, they open totally new perspectives on the reality of organizational operations, where people seldom behave in predictable ways.

The brief description above suggests that the consideration of management accounting stability is still in its early stages. Only very few attempts have been made to reveal, for instance, the origins of resistance to accounting system change. In the following, both the technical and the social dimensions of cost management development in the case firm are addressed. The factors involved in such work, which have been identified in earlier studies, will be discussed, and an attempt will be made to give further consideration to their validity in light of this case study.

Argyris and Kaplan (1994) applied a 'power and politics' perspective, their ultimate aim still tended to be a statistically testable theory consisting of factors to be considered in ABC implementation projects.

3. Attempts to change the costing system in the case firm

In the following, descriptions of the case firm's attempts to change its costing system are provided. The focus is on the rise and fall of a project that was launched in 1992, but more recent development attempts will also be described. Common to the description of the events and processes is stability: the continuity of practices over time.

'Project team 92'

> … the operation of the Cost Accounting Development Team got [censored] … we have now adopted the method of using common sense in order to get something done here. (Group Controller)

The case description could begin by recognizing the fact that Foodco was in severe financial trouble during the whole first half of the 1990s. Though financial problems emphasized the importance of accounting, especially cost accounting, they had a minor impact on the technical dimension of the cost accounting system. The traditional cost accounting procedures are still going strong. The financial crisis launched discussions about the need to develop the accounting system, but did not lead to any practical implementations. Indeed, almost every interviewee indicated that cost accounting, budgeting, and capital investment procedures should be developed to meet the changes in the operating environment and the consequently changed needs for a new kind of information.

In June 1992 the top management at Foodco established a cost accounting development team (CADT or simply the Team) that was broken up a year later. The establishment of the Team stemmed from the financial problems, and the general ambiguities in management reporting. The objective was simply to develop cost allocation procedures so that the 'true' costs of products could be revealed. Such new information, it was said, would benefit the company regarding pricing, product mix, and production decisions in the new operating environment, which was characterized by more intense competition and diminishing subsidies from government authorities. However, the main factor affecting the change seemed to be the severe financial situation. There was a need for quick fixes.

The work began with a group of consultants, but quite soon after the start, the Team had only one consultant who had been hired as its leader. He was offered a temporary managerial accounting job in the company. But when the Team was disbanded about a year later, two of its three members were fired, including the Team leader. Views on the work of the Team and its members varied considerably among the other interviewees. According to some the leader had done plenty of good work, whereas other argued that the lay-off was the only right thing to do since he was unable to implement anything during the year. But the people supporting the Team to the end said that certain people made the work of the Team unnecessarily complex.

The reasons for the failure identified by the Management Accountant, Simo Lappi[6] (the Team member who remained at Foodco), included the following: 'We tried to do something we considered to be the 'absolute' truth, and did not discuss it enough with other people; We did not sell the project to the whole organization; We did not

[6]Fictitious names are used in the following to capture the significance of individuals and their perceptions in the process of the development work.

take the needs, knowledge and skills of the users sufficiently into consideration'.

Beyond these issues, what Lappi claimed to be important was the 'wrong' attitude of the leader of the Team (i.e. the consultant) towards the development work; an attitude that generated some conflict inside the Team. By this Lappi was referring to the Team leader's initial aim to pursue a pure form of ABC without considering the earlier system and the particularities of the business sector, of which the Team leader had no prior experience. The two other Team members did not share this aim. Discussions with Simo Lappi in 1993, regarding the technical basis of the development work, illustrate the setting:

> The allocations of overheads that we can analyse with work-studies are not a problem. Everybody can rely on them. But when we discuss other common costs, everybody seems to have a differing opinion. New costing methods have still not been discussed properly, even though the aim of the Team leader was the application of ABC. Now this is no longer discussed. At the moment we are not even trying to allocate [as compared to dividing of costs by volume] e.g. sales costs to products more rigorously.

A Production Director presented his view about the team as follows:

> ... we had an extraordinary situation in 1992 ... we had a consultant working with accounting issues. Then he was appointed Financial Manager for a stated period which was one year. In my opinion it was a big mistake. It is always the case in these development projects that in one year's time you can start several projects, but you have no time to implement any of them. And this was just the case: the Team ran out of time. The whole thing ended up back at the starting point ... a lot of money was wasted ...

Many of the interviewees shared this view. However, the Production Director in question—like most of the interviewees—had not attended the regular meetings where the development work was handled. People who were closely involved gave quite different explanations. These explanations indicated that the development work represented a threat; a threat of large changes in the daily accounting operations. Lappi noted this as follows:

> One of the Financial Managers [Kalle Jyry in the following] opposed every single proposition we made, starting from the beginning of our work. In the meetings where we presented our thoughts, he always opposed and made stupid jokes about our work. He did not even want to listen to our reports, but interrupted us with unnecessary comments. He had built his own reporting system which was based on old-fashioned software that nobody else was using. He did not want to change it, but did everything to be able to carry on his work as he had done for the last fifteen years, regardless of the pressures to change.[7]

About the support of the top management, he concluded:

> The top management had obviously realised that the development of cost accounting was a necessary part of the total development procedures. For four months everything went fine, but then the whole thing fell flat. The top management did not take enough interest in our work, and they almost forgot the whole thing and did not support us any longer.

Why did the support from the top management vanish just like that? When the issue was discussed with the executives it became evident. First of all, that there were other, more important tasks to do (mainly 'the ordinary rush'). Secondly, the costs and the benefits of the project were more carefully deliberated by the management later on.

[7]Kalle Jyry had built a rather extensive calculation model to support his work with IFPS programme/language. He described the system as being very good and felt it a pity that nobody else used it or had realized its usefulness. On the other hand, he made no attempt to promote the procedure.

The unavoidable conclusion was that the project did not produce results quickly enough. Foodco management had evidently not realized what kind of project they had launched. Furthermore, they had no idea of the kind of individual and social consequences launching such a project could cause. The lack of top management support at this point did not, however, result in termination of the project. The Team was still allowed to continue its work.

The person who started to oppose the work of CADT most intensively, Kalle Jyry, the Financial Manager of one of the production units, commented on the work of the CADT by arguing that

> It was a big mistake to hire these guys ... I don't want to say who hired them, but it's not difficult for you to figure it out. They got nothing done ... a few million Marks were spent but nothing was implemented. It's typical that when the financial situation becomes worse, cost accounting is given increased attention. First the ones to blame are the ones who do the accounting, that is, the accountants. Then they [top management] start to wonder what to do. Then they hire consultants, which is typical here. Consultants sell their own services eagerly, and claim that everything is fucked up here, and that we don't do anything in the accounting department. This was the case then too.

While some other accountants started to share the view of Jyry, mainly because they were afraid it would increase their workload, there seemed to be no resistance concerning cost accounting developments on the production side. On the contrary, production personnel were actually requiring developments. Furthermore, the production personnel who were interviewed argued that they have 'nothing to hide', that they were not concerned with whether new, more accurate methods and controls were established. It may be said, though, that it was a mistake by CADT not to include production and sales people in their Team in the first place. The discussions with the production people in particular were thus burdened with the assumption that 'it is likely that whatever we suggest, those accounting guys will not act upon these suggestions anyway'.

It appears interesting that Kalle Jyry was in the end the person who was very keen on hearing what the production personnel in particular thought about the usability of the existing management accounting information, so that improvements could be made. Other accounting persons were more or less self-assured, or wanted to present the image that their accounting methods needed no revision or even critical evaluation. It seems that Kalle Jyry was ready for changes as long as they were carried out on his terms. Or could he have been pretending to be interested in the change pressures? This tended not to be the case with regard to his other comments which were cross-checked several times. In addition, he confessed that he had opposed the work of the Team. His justifications of his behaviour in the meetings handling the work of CADT tend to illustrate a professional concern for accounting issues, with the aim even of 'saving' Foodco from 'bad influences'. Of course, Jyry did not describe the way he presented his arguments, which, according to other people, were characterized by very unpleasant features. He claimed that:

> During those days development was, like now, clearly needed. But the way it was intended to be carried out did not please me. It all started from a proposal that recipes should be ignored and cost-drivers defined ... I put a stop to that ... I said that we won't do it like that, since if we want to apply the principles of ABM, we may start with quite a rough model at first, and then observe what a sensible level of detail would be, and implement it accordingly ... not so that we invest enormous amounts in fancy systems and split pennies that have no relevance with regard to decision making.

The development Team had read books on ABC and they had followed lectures given by consultants, who had been very domineering when it came to pushing through their ideas. But regardless of the original aim of developing a pure form ABC system, the pressure of tradition was later felt to be too intense for such a change to take place. Furthermore, since the Team also recognized that the prevailing system included much that was good, they eventually decided to make minor adjustments to the old system. In fact, the Team was aware that there is little evidence, apart from a limited number of anecdotes, which relates the use of ABC to improved financial performance. They were also conscious of the fact that ABC does not contain many new technical ideas. Kalle Jyry had at least made this clear: 'I told them that ABC is not a new idea ... I once took a course on ABC ... it's only new terminology. I don't know whether they knew this already'.

To sum it up, the case of CADT illustrates how a seemingly relevant idea—originally supported by top management—may result in near chaos in certain social systems. This also illustrates the meaning of unintended consequences in organizational arrangements. Neither the top management nor the Team members were able to anticipate the outcome of the project. The issues involved in such projects are difficult to anticipate and manage. However, this is not to suggest that the lack of planning prior to the project did not have a major influence on the outcome. These issues could have been better anticipated and managed than is evident in the preceding story.

Attempts to change the accounting system after the CADT

Since the CADT experience, a new Group Controller (GC), Matti Nuorela, has acted as the main agent of accounting system change. He has presented several ideas, but they have, however, resulted in little enthusiasm among top managers.

There was an intention to start an extensive cost accounting development programme at Foodco in early 1994. The main incentive was that the management did not trust the current overhead allocations, and thus the product costs, and there emerged a need to reduce the number of active products from an initial 2500 to below 500. In addition, there was the prospect of Finland's forthcoming EU membership and the subsequent increasingly tough competition. Nevertheless, this accounting development project remained unrealized. Some work was carried out alongside other activities, but no large-scale development took place.

The main limitation of the existing system, as explicated by Nuorela, was the fact that overhead percentages included in the product 'cost recipe' did not react to variations in production volume. Nuorela accepted the principles of ABC, but did not necessarily consider them appropriate for Foodco in a theoretically pure form. On the other hand, he was keen on emphasizing the benefits already gained from activity analyses.[8] However, ABC would require a different kind of data gathering and updating system than was currently available at Foodco. Nuorela explained the problems with further cost accounting development:

> ... financial troubles have meant a trend towards allocation of all costs to products. It is, however, a wide and difficult question, since we are talking here about 2500 active products. Depending on the corporate structure etc., ABC and ABM would be our objective. However, our technical facilities give us no chance to adopt them, at least not yet. [...]

[8]Some earlier studies have, indeed, pointed out that ABC can have various forms in practice (e.g. Malmi, 1996; Gosselin, 1997).

Since Foodco, or food manufacturers in general, operate today in very competitive environments that require almost daily updates of information, a system based on monthly *ex post* updating is not adequate. The changes in the market place, such as a downturn in demand due to poor weather, require such flexibility that a company with hundreds of active products is likely to find it impossible to construct a theoretically 'correct and accurate' ABC system.

As had happened previously, the development ideas encountered resistance. This time, a new Production Director expressed strong opposition to ABC, when the Group Controller introduced the idea in top management meetings. The Production Director argued his view on the basis that ABC is too difficult to use considering the large amount of joint costs (cf. Bromwich, 1997), which is a characteristic of the business. He illustrated the particularities of the business by comparing the process of constructing a car out of components to a process of bringing in raw material, breaking it up into 500 different parts, and then putting some of them together again, but sending most of the parts to a number of different departments for further processing, or selling some of the parts straight to customers. The major question, then, is how to calculate the cost of the raw material pieces and work out their transfer prices. This question, which is fundamental in this context, still remains to be addressed. Consequently, even the idea of carrying out activity analysis for process improvement purposes has encountered strong resistance at Foodco, from both accountants and other professional groups.

Despite the resistance described above, there have been some changes which might have been expected to promote the development of the accounting system, such as the separation in August 1996 of a controllership function from other management accounting activities. It is widely recognized that management accountants are primarily concerned with monthly reporting routines (e.g. Drury *et al.*, 1993; Bromwich and Bhimani, 1994; Drury and Tayles, 1995). But the new Group Controller in Foodco, the head of the new controllership function, is expected to concentrate on analysis rather than reporting, on explicitly supporting top management decision making, and on developing accounting procedures.

A great amount of *ad hoc* reporting and analysis has always been carried out by Foodco accountants. It was stated on several occasions by upper level managers that these special reports filled the gaps in the standard reporting so efficiently that the system as a whole was regarded as relatively good. Pressures to change the system were thus rather low on the management side. But the accountants did not agree, since it increased their workload. Standard reporting procedures usually take most of the accountants' time, and involve generating reports that seldom receive much attention in executive meetings. Thus, it is not surprising that they have little time for developing systems, or even for thinking critically about accounting issues. Even in the new situation, only the GC has time to think about developments in accounting procedures. The other management accountants are even more heavily burdened now, since the *ad hoc* queries made earlier to the GC have to be answered by the management accounting function, not the controller function. The management accountants tend to resist changes to the accounting system because they are now afraid that any single change would significantly affect their workload.

Have the people at Foodco, then, learned anything from their earlier experiences? Probably something, but possibly not much, especially as there has been significant management turnover in recent years. For example in early 1994, 10 of the 15 top

executives were dismissed or replaced. The Group Controller remains, but he has seemingly forgotten the earlier experiences. Largely initiated by him, an accounting development group was established in 1996, but despite the difficulties with the CADT, this new group consists only of accountants: the CFO, the Group Controller, the head bookkeeper, a unit controller, and the two external auditors of Foodco.

The future: SAP R/3

There are three major challenges facing Foodco's accounting in the near future, as identified by the Group Controller, Nuorela: (i) the allocation of overheads to activities, products and customers in an ABC-like manner; (ii) the development of the system technology and coherence, with the aim of one integrated system; and (iii) the re-engineering of the internal processes of management accounting. The last refers, according to Nuorela, to a need for business process re-engineering of the whole management accounting function within the Foodco Group. According to him this is going to take place soon, and would be preceded by an activity analysis and an activity-based cost analysis of the management accounting department. At the same time, this will serve as an ABC pilot study, for a possible implementation of ABC in the whole of the Foodco Group later on. By having his own responsibility area as a pilot site, he wants to set other departments an example and thereby try to overcome the resistance that will emerge.

In 1995 an information system development team was established with the aim of gradually extending information system technology at Foodco. The leader of the team—which included 10 people from Foodco and six consultants—came this time from the IT department. An Enterprise Resource Planning system (ERPS) was proposed as a potential solution to the future challenges regarding information technology (see Davenport, 1998; Scapens *et al.*, 1998). The German SAP R/3 was already considered a promising solution for Foodco, but the project was initially frozen for two reasons. First, it was considered too expensive, and second, too large and the change process too long. Nevertheless, the team began work in late 1996, with the intention of deciding during 1997 between three possible systems: SAP R/3, Baan and BPCS. The Group Controller, Nuorela, described his attitude towards the systems as indifference. He did not mind which system was implemented as long as it was, first of all, an integrated system, so that there would no longer be separate systems for production management, logistics management, and financial management. His second requirement was that the system had ABC in-built.

In addition, the technical framework underlying Foodco's accounting systems needs further consideration. The current technology is multidimensional, equipped with a dozen system or sub-system connections. In addition to the many elements of data gathering and processing, there is also a number of different software and hardware solutions embedded in the framework, both in geographic terms (i.e. different systems in different plants) and even in departmental terms (i.e. variety in the systems even within the same factory). So, it has not been clear how the system technology could or should be developed.

Discussions in 1998–1999 reveal that an SAP R/3 implementation is ongoing, but in terms of management accounting, nothing has yet been implemented. The Group Controller stated that the implementation of basic financial accounting in the new system encountered such strong resistance that even change consultants (psychologists) had to be employed. In his view, this resistance could be explained

purely by adherence to earlier procedures, i.e. routines. Partly tired of the constant fight against change resistance at Foodco, Nuorela left the firm in spring 1999 to become an ERPS consultant.

4. Discussion

Explaining the case: inertial forces versus change forces

While constructing a structural model that combines previous research with process models of ABC implementation, Anderson and Young (1999) provided an excellent review and summary of the factors that have been identified as affecting ABC implementation in earlier studies. The factor list includes some 30 items, including issues ranging from individual production process knowledge to corporate level environmental uncertainty. Noteworthy in light of this study is the observation that, regarding human factors, the list is very simplistic and limited in scope. Neither does the list give much detail about the relative importance of the different variable categories, nor the complex interrelationships existing between the different variables. Moreover, Anderson and Young (1999) are forced to conclude that in some settings ABC is simply unlikely to thrive regardless of how skilfully the implementation is managed (see also Malmi, 1997). Thus, there is always something unpredictable underlying accounting system change; in this study this unpredictability largely involves the human factors, which are very seldom examined any further. Nevertheless, it is not argued here that the role of the human factors would necessarily be decisive.

In an attempt to theorize on this issue, an institutional and structuration theoretic analysis is carried out below. The inclusion of the human factor category extends the analysis beyond the economic and institutional macro-level, and the macro-level is extended to cover organizational and professional cultures (micro-level institutional analysis; cf. Burns and Scapens, 2000). The human factors do not fit the institutional framework as such, but are assumed here to underlie all organizational arrangements.

Table 1 comprises an analysis of the factors affecting the development attempts at Foodco. The analysis is partly based on a framework presented by Granlund and Lukka (1998*a*; see also Granlund *et al.*, 1998) which draws on new institutional theory, especially the model of institutional isomorphism (DiMaggio and Powell, 1983). The framework is completed here by the addition of the human factors. Whereas some of the factors are economic/functional, some are institutional, and some related to actions or characteristics of individual human beings. In practice, it may sometimes be very difficult to separate these from each other. However, at the analytical level, we may use this taxonomy rather unambiguously.

The financial crisis first triggered concerns the quality of product cost information at Foodco. Later on, however, the financial crisis actually hindered the development work.[9] The severe financial situation was without doubt one of the most important factors affecting the developments at Foodco. Due to the market reforms and consequently increased competition, significant pressures for management accounting change were created: there were serious doubts about the reliability of the informa-

[9] About the unpredictable or unlinear relationship between economic crisis and (the directions) of accounting change, see Ezzamel and Bourn (1990) and Abernethy and Chua (1996).

Table 1
Forces affecting the accounting system development (or intentions) at Foodco

	Change	Stability
Economic (functional)	• Managerial needs for better cost information (based on deregulation of markets, increased competition and, in the first place, the acutely severe financial situation) • Distrust of current overhead allocation procedures (related to technical complexities of manufacturing processes) • Advanced information technology available on the market	• Scarce financial and human resources (cost versus benefit) • Low relative proportion of overheads (+ their joint cost nature) • Complex existing system technology • The fact that there were so many strategic and operational changes taking place simultaneously created a need for a baseline, the accounting system, that could not be changed at the same time
Institutional	• Imitation of other companies' practices (ABC; mimetic process) • Consultancy (mimetic process) • Business orientation (at least willingness) of management accountants (normative pressure)	• Organizational inertia/routinization • Conservative organization culture (normative pressure) • Accounting ownership of the project (normative pressure; related to 'bean-counting' orientation, i.e. operation solely within the accounting function; partly overlapping with the human factor) • Failure to secure legitimacy for the changes in the general turmoil of transformations
Individual	• The personal will of the Team leader and later of the Group Controller to accomplish developments • ABC expertise of the Group Controller	• The background and attitude of the consultant member of the Team • Kalle Jyry's fear of losing the self-developed system • Fear of increasing workload among accountants (related to an economic explanation in terms of 'time is money', but also to an institutional explanation in terms of routinization) • Limited management support (here largely individual relationships in focus; could also be classified as an institutional, professional issue)

tion provided by the prevailing system. Similar change pressures, but of a different nature, emerged due to competitor imitation and the use of consultants marketing global solutions for managerial problems (mimetic processes; DiMaggio and Powell, 1983; Granlund and Lukka, 1998*a*). Moreover, the professionalization of business-oriented management accounting personnel (possibly with up-to-date university education) creates the potential for the modernization of the MAS with enhanced relevance and strategic management support. In the category of human factors, two factors to support changes in the costing system are identified, but they cannot be considered as forceful.

The other side of the coin reveals counter-forces to these change pressures. Scarce financial resources were an obstacle to management accounting reform. With regard to the technical complexity of the earlier system, this finding resembles Malmi (1994) results. In his study of ABC construction and implementation in the axle factory of a truck manufacturer, Malmi found that one extremely significant factor, which affected the design of an ABC system, was the composition of the existing system. Moreover, for Foodco accountants, changing parts of the old costing system was an unpleasant issue even to talk about. Hints of developments seemed to evoke immediate resistance, leading to more or less tacit cost/benefit analyses. There were ABC software packages on the market that could have been bought. However, the question was not that simple, since there was a multitude of system connections to be considered.

Then, regarding demographic issues, it is difficult to conclude whether ABC would have been the right system for Foodco. One of the biggest problems within this business sector is the handling of joint costs. However, it has been argued that ABC is not capable of dealing with joint costs, at least not successfully (Bromwich, 1997). Basically, the cost structure at Foodco is quite simple: materials 80%, direct labour 10%, other variable production costs 4%, and fixed costs 6%. However, depending on the product, manufacturing costs may be proportionally less and the fixed costs could amount to 30%. In addition, there are considerable differences between the complexity of the products manufactured, as well as between the related production processes. This analysis ultimately leads to a conclusion that ABC would not have been an illogical solution for Foodco's purposes (cf. Clarke and Mia, 1993; Shields, 1995).[10] On the other hand, it should neither be concluded that Foodco ought to have changed its system because other food manufacturers were possibly doing so. Rather, it was a fact that several inaccuracies and ambiguities were identified concerning the existing costing system.

A more general explanatory factor regarding system stability can be formulated so that MAS provide an organizational baseline against which to measure alterations (cf. Hedberg and Jönsson, 1978). It also appears that this baseline cannot be easily changed in the midst of other organizational changes. Some continuity may be necessary to enable change (cf. Burns and Scapens, 2000), and the MAS may provide an element which supports this continuity. It may be that it is only as a result of very

[10]E.g. Clarke and Mia (1993) found that the ABC adoption rate in the Australian food industry was the highest among all the industrial sectors. Also Groot and van Gool (1996) suggested several points that should put the food sector among the most eager ABC adopters. These include, among others, new market circumstances and the properties of food production systems. In addition, the fact that most food manufacturers, including Foodco, provide a wide product range makes product costing increasingly demanding.

significant problems, or even some sort of crises, that accounting change actually takes place.

In the category of institutional factors, those relating to the old corporate culture (institutionalized practice; a normative pressure in the model of institutional isomorphism; see Granlund and Lukka, 1998*a*) and general routinization of organizational practices (Giddens, 1979; Powell and DiMaggio, 1991; Burns and Scapens, 2000) can be identified. Also, the earlier 'bean-counting orientation' (professionalization as a normative pressure; see DiMaggio and Powell, 1983) of the management accountants created inertia in the system as a whole. Finally, the change initiators were not able to gain true legitimacy for the reforms (cf. Scapens and Roberts, 1993). Altogether, these factors made the system 'shake', but not really change.[11]

The other relevant factors relate to the category of human factors. They are of particular importance as we try to understand what happened at Foodco. The relative importance of the human factor can be seen in the ultimate reasons for project termination. However, no one single factor caused project termination. The causes of the termination are to be found in the 'delaying game' played by Kalle Jyry, which ultimately led to a situation in which it was impossible to implement anything. And, when nothing was implemented by the deadline, it was actually an easy decision for the top management to abandon the project. In general terms, we can conclude from the above analysis that the economic, institutional, and human factors are tightly inter-linked in a unity where the social and technical dimensions of accounting systems get blurred.

Some of the single factors identified above, particularly some of those categorized as economic or institutional factors, can also be found in earlier studies. However, the models generated earlier often represent simplified manifestations of the complexities that underlie quantifiable variables. The contingencies and conflicts of interest, with which the Team members had to deal, are difficult to articulate. Also, much knowledge of such complexities remains tacit. Many of the issues affecting system stability at Foodco, however, relate to the poorly understood human factor. Earlier studies have mentioned certain factors, classified here as belonging to the category of human factors: individual expertise regarding a technology (e.g. ABC), limited managerial support, and expectations of an increasing workload.[12] However, illustrations of *how* these factors—not to mention the remaining human factors' category—are manifested in practice are extremely limited.

This paper analysed the inherent stability of MAS. Whereas Libby and Waterhouse (1996) recently argued against the proposed stability argument, this study presents different evidence, which is admittedly based on a single case study. However, although Libby and Waterhouse (1996) indicated many changes in MAS, the conceptual apparatus used in their examination is not beyond criticism. There are not only problems in their circular definition of accounting change (change is defined by the number of changes), but also in the ways change is measured and results

[11] Note that institutional pressures for change seem to be easier to oppose than economic ones (Aerts, 1994; Granlund *et al.*, 1998). For example, the notion of a financial crisis is a very powerful argument that does not leave much open to question, whereas pressures attached to, e.g. imitation of other companies' practices, are much easier to object to.

[12] Also the connection to personal reward systems would be included here (cf. Anderson, 1995; Shields, 1995; Foster and Swenson, 1997; McGowan and Klammer, 1997).

are interpreted. For example, following the suggestion by Cohn and Levinthal (1990), Libby and Waterhouse (1996) argued for a positive relationship between management accounting change and prior knowledge in an area of development. This proposition appears problematic because prior knowledge of ABC, for instance, may just as well act as a base for resistance as it does as a base for its promotion. This is a relevant concern in light of this study, since accounting experts have in certain cases been identified as being among the most eager defenders of existing systems and ways of operation in comparison to other organizational professionals (e.g. Sangster, 1996).

This phenomenon was observable also in the description of CADT's work, or more precisely in the actions of Kalle Jyry. Unfortunately, little empirical work has been done on the issue: it is too early to conclude that accountants are generally more resistant to system changes than other professional groups. We could speculate that accounting education and the professional norms for prudence in financial accounting create reserved attitudes regarding change among accounting practitioners. Actually, Sangster (1996) results seem to suggest that the traditional role model of accountants does not support a proactive orientation with regard to system changes. He proposed that the promotion of more modern role models (cf. e.g. Cooper, 1996*a*,*b*; Granlund and Lukka, 1998*b*) could be a potentially effective means of overcoming resistance to change among accountants. This is definitely an important field for future research.

Interesting exceptions in the field of management accounting research that truly provide comparative bases for the purposes of this study are Scapens and Roberts (1993) and Malmi (1997). They both analysed more or less explicitly the stability of MAS, and also take into consideration the social nature of creating organizational reality (Hines, 1988). A comparison between their results and the ones presented in this study provides a concluding analysis to this discussion. Scapens and Roberts (1993) provided valuable evidence on how resistance is expressed in practice through the use of organizational power. In the analysis of resistance they point out the failure to secure the legitimacy of the newly introduced system. In addition to this, they emphasize the differing views of certain professional groups with regard to organizational activities, resulting in a situation where no common language could be found. In this case the competing professional groups were operating managers and accountants.

Malmi (1997) reported on an ABC project that resulted in a working solution, but was afterwards abandoned after the new reports were analysed for the first time. From an operative point of view the project was interpreted as being unsuccessful, since the new ABC product costs simply confirmed the assumptions of the production managers. Thus, production management did not see it as reasonable to maintain the system because it did not provide them with new valuable information that would facilitate operative decision making. However, from a strategic point of view the project was deemed successful, as it provided confirmation of the product costs: information that was needed for strategic decision making. Malmi (1997) interpreted the production management's perception originating also in a threat—regarding the sub-units—of unveiling organizational slack through new visibilities engendered by the ABC system. Malmi also emphasized the fact that too little attention is currently paid to the various aspirations and behaviour patterns of different organizational stakeholders.

The examination of the work of CADT seems to offer different results from the ones briefly described above. The work of CADT neither impinges on responsibility and accountability patterns, nor does it compete for control across functions (e.g. 'accounting control over production control'). Whereas the social process of organizational reproduction is evident also in this case, similar underlying patterns of explanation did not exist. The management wanted to improve the quality of product cost calculations and the production people did not actually have anything against that.

Two results require further analysis. First, competition for power emerged in this case from another direction, which was closer than might be expected. The opposition emerged from the accounting function, from a single person and resulted in a contest for control between the accounting staff. Further analysis of this topic is needed in order to penetrate beneath the surface of visible action. Second, little has been so far said about the connections between the factors classified above. Further analysis is needed in order to understand their relation to an accumulative development of inertial forces. These results are analysed further below.

Towards explaining the origins and accumulation of inertia

> The real problem is not technical change but the human changes that often accompany technical innovation. [...] People do not resist technical change, rather they resist social change—the change in their human relationships that generally accompanies technical change. Resistance is usually created because of certain blind spots and attitudes which [...] specialists have as a result of their preoccupation with the technical aspects of new ideas. (Lawrence, 1954)

Inertia in terms of resistance in organizational processes (see Jermier *et al.*, 1994; Strebel, 1996), as well as resistance to new information systems (Lawrence, 1954; Argyris, 1971; Markus, 1983), has already been known for a long time. Many perspectives have been applied to such examinations, from Marxist critical theory to the work of Foucault. The authors of earlier studies seem to be unanimous in saying that resistance in general, or as an organizational phenomenon, is still poorly understood (see Newman and Rosenberg, 1985; Scapens and Roberts, 1993).

While, for instance, Markus (1983) has suggested that resistance could be understood by examining organizational power and politics, Scapens and Roberts (1993) have argued for a wider framework, i.e. Giddens' structuration theory. Their point is that it is not sufficient to study organizational resistance only in terms of power usage, but that it should be coherently linked to structures of signification and legitimation as well (Giddens, 1979). This study has analysed the meaning of management accounting development in the case firm, the pursuit of power in and around the development work, as well as the legitimate attempts made to justify the actions taken. Giddens' (1979; 1984) theory of structuration implies a grand explanation model of all social behaviour. It also describes the ways in which certain modes of behaviour become institutionalized and reproduced in daily practice. Underlying this behaviour we can, according to Giddens' theory, always find contradictions, which every now and then take visible form in open conflicts. These manifestations are only the surface of the contradictions smouldering beneath the surface.

It may be argued that management accounting development projects ultimately involve management of contradiction. There will always be competing values and norms underlying daily operations. Managers face the problem of managing and balancing the outcomes of the diversity of frames of meaning (Giddens, 1979,

1984), implying also a diversity of values, norms and resources. As in any other organizational development, the differences in frames of meaning have to be balanced in management accounting developments as well (see Mouritsen, 1990). As O'Connor (1995) emphasized, one of the great management paradoxes involves the fact that while managers should be able to allow flexibility and change, their fundamental interest or task is simultaneously to generate and maintain control, predictability, and economic results: a balance between change and stability has to be found (see also March, 1994). This may require changes in some 'locations' of the meaning frames of the involved parties. Change will cause more pain if we try to change the deep, underlying structures and not just the interpretive schemes that are used in communicating the underlying values, norms and beliefs.

Changes in accounting systems are basically changes in one of the interpretive schemes (or modalities *in toto*) mediating between structure and action (Giddens, 1979; Macintosh and Scapens, 1990; cf. Boland, 1993, 1996; Scapens and Macintosh, 1996). While changing accounting systems does not touch the very core of action, we may still talk about major change, because one of the important ways in which the structural properties (institutional principles) underlying action are translated into action and made visible through action is modified (cf. Hopwood, 1987; Mouritsen, 1990; Bhimani and Pigott, 1992; Argyris and Kaplan, 1994; Malmi, 1997). Such an interpretation of management accounting change derived from Giddens' theory highlights the general difficulty in changing interpretive schemes, and ultimately the institutionalized structural properties that are communicated through these schemes (cf. Burns and Scapens, 2000). The explanation for resistance in this model comes from many directions. People, depending on their individual characteristics, may resist change if disruptions appear in the routine-like reproduction of institutionalized values and norms. In practice, changes in interpretive schemes (e.g. accounting and management system) often also involve changes in the structural properties (e.g. total quality and process-orientation principles) that are communicated and reproduced via the former. Such (typically top-down) changes are always likely to provoke resistance of some sort in organizations.

However, the question remains why management accounting change seems to be more difficult than changing other organizational interpretive schemes. One potential explanation for this could be the fact that economic arguments—originating in the creation of visibility and accountability in financial terms—are among the most powerful arguments used in the legitimation of managerial and organizational action (cf. Aerts, 1994; Granlund *et al.*, 1998).

This study has attempted to illustrate that management accounting practices may become institutionalized, and thus become embedded in the deeper structural arrangements of organizational life (Scapens, 1994; Burns and Scapens, 2000). Both (new) institutional theory (Powell and DiMaggio, 1991) and structuration theory support such a view, as both are also concerned with institutions and the institutionalization of practices over time-space locations. As practices become institutionalized, they engender routinization. Giddens (1979) defined routine as a basic element of daily social activity; as something that is done habitually across time-space locations. Institutionalization and/or routinization of practices are the natural stabilizers of organizational life. They practically create negative connotations with regard to change, since disruption of routines creates feelings of uncertainty. This points to the human core of organizational arrangements (Boland, 1993; Pihlanto,

1994*a*,*b*).[13] The case description in this paper illuminates the actions taken in organizations in order to manifest opinions, or rather frames of meaning, i.e. people are ready to act in untypical ways in order to protect their routine-like procedures (see also Hirschhorn, 1997).

In accordance with Scapens and Roberts' (1993) arguments, it would be unjustified to accuse Kalle Jyry of illogical, emotional, or irrational behaviour because of his opposition to the work of CADT. While his concerns and even possible fears about building a pure form ABC at Foodco were probably based both on selfish and functional reasons, he was not only concerned about losing his IFPS model, but also about the practical suitability of ABC for Foodco. His interpretations of ABC revealed an advanced view, according to which there are not too many fundamental differences between the traditional job-order costing applied at Foodco and ABC. In some discussions he tended simply to want to make sure that the Team members had understood this. He was afraid that an overly complex system would later require great effort from him and from his colleagues to maintain, the ultimate result being the possible restoration of the old system.

Jyry also drew on a less straightforward basis of argumentation and action. He did not like losing the IFPS model, which he still applies to generate certain reports. He was also offended by not being invited to be a member of CADT. As a consequence, he began opposing all development work in the accounting domain. While this is perhaps not economically rational behaviour, it is rational on other bases of action, such as intellectual, ethnocentric, or micro-political (Whittington, 1992; see also Pihlanto, 1994*b*). What appears to be irrational to CADT or an external observer, may be seen to be perfectly rational when these observations are evaluated in the light of their context and process (Pettigrew, 1985, 1987).

It may be concluded that change, stability, and resistance are normal, regular (and mutually intertwined) features of organizational life. Budgeting, for instance, is a political activity in organizations. What gets accounted for influences organizational members' conception of reality (Burchell *et al.*, 1980). The normative power structure is in turn drawn upon to change the conditions of interaction (cf. Giddens, 1984; Macintosh and Scapens, 1990). This reflects the dialectic of control, a mutual relationship of exercising power (Giddens, 1979). The two-way pursuit of power is in this case manifested in several ways. It seems obvious that Kalle Jyry felt a decrease in his power to do things his own way (cf. Giddens, 1984; Scapens and Roberts, 1993). The work of CADT also represented a 'spectre' of new knowledge, in the production of which Jyry did not have access. Jyry again drew upon his capability to influence top management and on his experience in dealing with executives. He exercised his power over certain organizational fields (Giddens, 1984), and did it 'successfully'. He succeeded in his ultimate objective: the cancellation of the launched development process. Even though organizational action is essentially social action, some individuals are simply more influential in their activities than others, even if there is no formal hierarchical superiority.

The situation could possibly have been avoided by making Jyry a member of the Team. However, maybe the issue is (again) not that simple. Jyry's participation in the Team might have completely changed the course of development and engendered

[13] Note that although Giddens (1979, 1984) framework comprised a grand social theory, it also offers a comprehensive analysis of the individual actor, the knowledgeable agent, in the process of structuration.

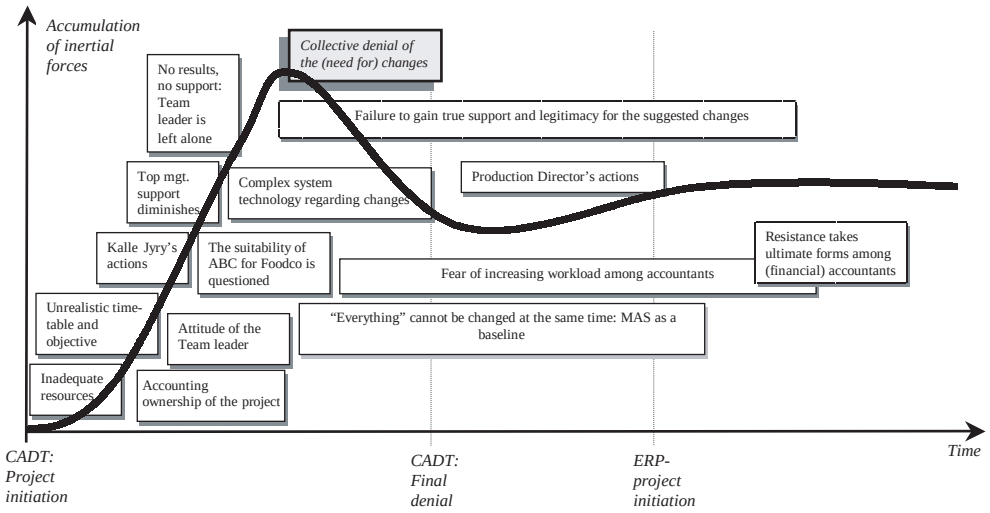

Figure 1. The accumulation of inertial forces leading to collective denial of the (need for) change of the MAS.

resistance in other locations of the organization: 'These are such complex settings which nobody can manage, explain, or predict' (A Production Manager).

The Giddensian interpretation given here is obviously not 'the one great' explanation of change and stability in and around accounting systems. It is one explanation among others to consider in the further pursuit of theories of management accounting change (e.g. Burns and Scapens, 2000; see also Argyris and Kaplan, 1994; Foster and Ward, 1994). Drawing on this multitude of theories and frameworks it can ultimately be suggested that people fundamentally resist change because they feel comfortable with routines, which in turn enhance the feeling of (ontological) security (Erikson, 1963; Giddens, 1979). The visible manifestations of this setting are spelled out in forms indicating resistance to an increase in workloads and the abandonment of an existing system (here IFPS), and amongst other things, the possible fear of competition endangering the established position within which is also secured a certain state of 'wealth' and positive visibility.

Finally, an attempt is made to summarize the issues involved in the stability of Foodco's MAS. Figure 1 presents an outline in attempt to illustrate the accumulation of inertial forces.

It can be argued that underlying the trajectory of the process that finally led to a collective denial of the ABC project was a resisting force that gained momentum over time (cumulative inertia). From the beginning, there was fertile ground for the emergence of resistance because the project was totally 'owned' by the accounting department, and, due to the financial problems, the project was allocated inadequate resources. These, together with an unrealistic timetable and the somewhat unfavourable characteristics of the Team leader, were unpromising, but there was already an atmosphere of suspicion. As Jyry took the initiative to oppose the project work visibly and question the suitability of ABC for Foodco's needs, the counter-arguments of the Team started to become less efficient in the eyes of top management as well. This move towards inertia was further promoted by the general

fear of an increasing workload, and the currently applied inflexible accounting system technology. Attachment to routines was manifest both at an individual and now also at a collective level. Support for this explanation can be derived from institutional theory and structuration theory, as well as from the psychoanalytic literature (e.g. Hirschhorn and Gilmore, 1989; Hirschhorn, 1997; see also Burns and Scapens, 2000). Finally, the developments reached a point at which true support for the development work no longer existed.

Later on, when the new Group Controller tried to launch changes, the earlier experiences were still remembered. This time it did not take so much effort at all to question the suggested developments: a certain 'basic level' of resistance to new changes already existed. Finally, the ERP project again brought out the fundamental appeal for routines, particularly by the accountants. In more general terms, already back in 1992 there were indications that the firm was facing a multitude of significant changes. For this reason the relative importance of accounting system development tended to decline (cf. Vaivio, 1999, about 'real' and other problems). This explanation, however, became more prominent later on when Finland joined the European Union and Foodco faced a totally new operating environment, implying, among other things, a product price crash.

To summarize briefly, all the separate events described in this paper formed a process in which certain economic, institutional, and human factors together promoted continuity over factors driving change. Inside this totality, a cumulative process of inertia gained momentum and took visible forms every now and then, as it was boosted by the stabilizing factors identified in the above analysis.

5. Conclusion and issues for future research

This study has pointed to the need for more analyses of the change and stability in management accounting practices, so that these contrary forces and their interrelationship may be better understood. Contrary to the overwhelming majority of contemporary research on management accounting, this study concentrated on the continuity in management accounting practices. The study demonstrated that there is more to the continuity in management accounting practices than mere resistance to the intended changes. As the right-hand column of Table 1 suggests, continuity of accounting practices over time is a result of a large number of issues that take effect on various levels of organizational operation.

This study has not only added factors to the previous lists comprising forces affecting the events in management accounting change projects, it also offered a new classification of these factors. Furthermore, one of the important contributions of the study derives from its institutional and structuration theoretic analysis of the case material, resulting in explanations for the origins and nature of MAS stability. This study's contribution may be summarized in the following three points:

- The new classification of the factors involved in MAS change and stability will not only help future research to pay attention to the fundamental differences that characterize the different factors, but it will also potentially assist researchers in selecting different tools (theories) for the analysis and interpretation of the different factors.

- The economic, institutional, and human factors driving change and stability are tightly inter-linked in a unity in which the social and technical dimensions of accounting systems get blurred. As inertial forces start to dominate forces supporting change, at a certain stage their cumulative influence reaches a point that 'breaks the camel's back', putting an end to system development.
- The actions of a single controller opposed to change explain a great deal about the developments. Herein lies a major difference from the results of earlier studies. Beyond these actions we can find the difficulty of changing interpretative schemes that are used in the inherent reproduction of social/organizational routines, i.e. institutionalized norms and rules. Although a person may promote or oppose an idea, in order to have the desired effect s/he still has to operate within a certain social system that has common norms of action, communicated via established interpretative schemes.

In the end, it can be argued that the human factors were essential for the explanation of the observed phenomena. The same applies to some extent to the institutional factors that were at work. The natural interconnection of these two can be explained using structuration theory: the institutionalized principles of action are both the medium and the outcome of all human action, and thereby they set limits to change and also provide the medium for possible change. The identified economic factors that were at work, but which do not possess the characteristic of spreading over time-space locations as institutionalized values and norms do, should not be underestimated either. Actually, their role in explaining the big picture is important.

What can be concluded from the findings of this study regarding observable but seldom analysed human resistance? Should managers interpret the results to mean that opponents to change should be removed from the organization in order to establish accounting system change? No. The results rather suggest that the human factor should always be carefully considered in accounting system development projects. The case study showed that the relative importance of the human factors may clearly outweigh other factors involved, as we try to explain why accounting system changes do or do not take place. In order to secure meaningful and successful accounting system change it is not enough to concentrate on technical issues (e.g. problems in defining cost drivers), or even on general organizational ones (e.g. ascertaining managerial support). Competition for power and control may confuse well-motivated projects resulting in inertia regarding accounting systems. Such competition may take place at the very level of individual human beings. This indicates, among other things, that the utmost attention should be paid to the composition of development teams and their training. This not only refers to capabilities in substantial matters (such as accounting techniques), but also to other individual characteristics.

Indeed, the lists of factors influencing the implementation success of new accounting techniques (typically of ABC) composed in earlier studies offer helpful guidelines, but will not alone guarantee successful change. For instance, as was shown in this study, it may take only one person to maintain stability in accounting procedures. Pertinent analysis of that kind of situation quickly turns to issues such as the relations between the people involved and to those who have control over the resources. Such an analysis is necessarily highly contextual, and cannot unambiguously be evaluated against all the traditional criteria for scientific rigour

(cf. Lukka and Kasanen, 1995). The human factor and the various institutional forces will always maintain a certain unpredictability as regards the conclusions resulting from analyses of social processes, which is what all accounting development projects ultimately are: they involve contests for power, organizational politics, complex settings of interaction, and unintended consequences.

Based on the findings of this study, it is impossible to make any of the statistical generalizations called for by many earlier studies on management accounting change (e.g. Shields, 1995). It would be convenient to continue building complete and precise, statistically generalizable causal models of, for example, ABC implementations (cf. Shields, 1995).[14] However, the surveys conducted on these bases have not, for instance, revealed new factors promoting or hindering ABC implementations, different from those reported in field studies; rather the contrary is the case. There are pros and cons in all research methods.

Many issues observed in this study deserve further examination in the future. One of the most interesting issues to study is change in other administrative systems *vis-à-vis* accounting systems. Regarding the stability of MAS compared to other control and information systems, in Foodco's case the new production control system and the quality programme were not easily implemented, but they were in any case documented and put to work in a few months. Moreover, these new control 'technologies' did not seem to face much, if any, resistance. It is, therefore, a question of major interest as to whether there are differences in the origins and manifestations of stability between MAS and other information systems. Such a comparison would add to our knowledge about how to succeed in the development of MAS.

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References

Abernethy, M. A. and Chua, W. F., 1996. A field study of control system "redesign": The impact of institutional processes on strategic choice, *Contemporary Accounting Research*, **13**, 569–606.

Aerts, W., 1994. On the use of accounting logic as an explanatory category in narrative accounting disclosures, *Accounting, Organizations and Society*, **19**, 337–353.

Anderson, S. W., 1995. A framework for assessing cost management system changes: The case of activity based costing implementation at general motors, 1986-1993, *Journal of Management Accounting Research*, **7**, 1–51.

Anderson, S. W. and Young, S. M., 1999. The impact of contextual and process factors on the evaluation of activity-based costing systems, *Accounting, Organizations and Society*, **24**, 525–559.

[14]Indeed, a lack of proper theorizing prevails in this field. On the other hand, we face here the question of what proper theorizing is then; how important is the pre-condition of statistical generalizability, for example, to such theorizing (e.g. Lukka and Kasanen, 1995)?

Argyris, C., 1971. *Management and Organisational Development*, New York, McGraw-Hill.
Argyris, C. and Kaplan, R. S., 1994. Implementing new knowledge: The case of activity based costing, *Accounting Horizons*, **8**, 83–105.
Bhimani, A. and Pigott, D., 1992. Implementing ABC: A case study of organizational and behavioural consequences, *Management Accounting Research*, **3**, 119–132.
Boland, R. J. Jr, 1993. Accounting and the interpretive act, *Accounting, Organizations and Society*, **18**, 125–146.
Boland, R. J. Jr, 1996. Why shared meanings have no place in structuration theory: a reply to Scapens and Macintosh, *Accounting, Organizations and Society*, **21** (7/8), 691–697.
Bromwich, M., 1997. Accounting for overheads: Critique and reforms, *Acta Universitatis Upsaliensis*, Studia Oeconomiae Negotiorum, No. 41, Uppsala.
Bromwich, M. and Bhimani, A., 1994. *Management Accounting: Pathways to Progress*, London, CIMA.
Bruns, W. J. Jr, 1987. A Field Study of an Attempt to Change an Embedded Cost Accounting System, in W. J. Bruns Jr, R. S. Kaplan (eds), *Accounting & Management: Field Study Perspectives*, Boston, Harvard University Press, pp. 97–118.
Burchell, S., Clubb, C., Hopwood, A. G., Hughes, J. and Nahapiet, J., 1980. The roles of accounting in organizations and society, *Accounting, Organizations and Society*, **5**, 5–27.
Burns, J. and Scapens, R. W., 2000. Conceptualising management accounting change: An institutional framework, *Management Accounting Research*, **11**, 3–25.
Clarke, P. J. and Mia, L., 1993. *Activity-Based Costing systems: Use and application in Australia*, Working Paper.
Cohn, W. M. and Levinthal, D., 1990. Absorptive capacity: A new perspective on learning and innovation, *Administrative Science Quarterly*, **35**, 128–152.
Cooper, R., 1996*a*. Look out, management accountants (Part 1), *Management Accounting* (US), **78** (May), 20–26.
Cooper, R., 1996*b*. Look out, management accountants (Part 2), *Management Accounting* (US), **78** (June), 35–41.
Davenport, T. H., 1998. Putting the enterprise into the enterprise system, *Harvard Business Review*, **76**, 121–131.
DiMaggio, P. and Powell, W., 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields, *American Sociological Review*, **48**, 147–160.
Drury, C., Braund, S., Osborne, P. and Tayles, M., 1993. *A Survey of Management Accounting Practices in UK Manufacturing Companies*, London, CIMA.
Drury, C. and Tayles, M., 1995. Issues arising from surveys of management accounting practice, *Management Accounting Research*, **6** (6), 267–280.
Erikson, E. H., 1963. *Childhood and Society*, New York, Norton.
Ezzamel, M. and Bourn, M., 1990. The roles of accounting information systems in an organization experiencing financial crisis, *Accounting, Organizations and Society*, **15** (5), 399–424.
Foster, G. and Swenson, D., 1997. Measuring the success of activity-based cost management and its determinants, *Journal of Management Accounting Research*, **9**, 107–139.
Foster, G. and Ward, T., 1994. Theory of perpetual management accounting lag in hierarchical organizations, *Accounting, Organizations and Society*, **19**, 401–411.
Friedman, A. L. and Lyne, S. R., 1997. Activity-based techniques and the death of the beancounter, *The European Accounting Review*, **6** (1), 19–44.
Giddens, A., 1979. *Central Problems in Social Theory*, London, MacMillan.
Giddens, A., 1981. *A Contemporary Critique of Historical Materialism*, London, MacMillan.
Giddens, A., 1984. *The Constitution of Society*, Cambridge, Polity Press.
Ginzberg, M. J., 1978. Steps toward more efficient implementation of MS and MIS, *Interfaces*, **8**, 57–63.
Gosselin, M., 1997. The effect of strategy and organisational strucutre on the adoption and implementation of activity-based costing, *Accounting, Organizations and Society*, **22** (2),

105–122.
Granlund, M., 1998. The challenge of management accounting change—A case study of the interplay between management accounting, change and stability, *Publications of the Turku School of Economics and Business Administration*, Series A-7.
Granlund, M. and Lukka, K., 1998*a*. It's a small world of management accounting practices, *Journal of Management Accounting Research*, **10**, 153–179.
Granlund, M. and Lukka, K., 1998*b*. Towards increasing business orientation: Finnish management accountants in a changing cultural context, *Management Accounting Research*, **9**, 185–211.
Granlund, M., Lukka, K. and Mouritsen, J., 1998. Institutional justifications of corporate action: Internationalisation and EU in corporate reports, *Scandinavian Journal of Management*, **14**, 433–458.
Groot, T. and Gool, H. van, May 1996. Activity-Based Costing in the food industry in the Netherlands and the United States, *The 19th Annual Congress of the EAA*, Norway, Bergen.
Hedberg, B. and Jönsson, S., 1978. Designing semi-confusing information systems for organizations in changing environments, *Accounting, Organizations and Society*, **3** (1), 47–64.
Hines, R., 1988. Financial accounting: In communicating reality, we construct reality, *Accounting, Organizations and Society*, **13**, 251–261.
Hirschhorn, L., 1997. *Reworking Authority: Leading and Following in the Post-Modern Organization*, Cambridge, MA, MIT Press.
Hirschhorn, L. and Gilmore, T. N., 1989. The psychodynamics of a cultural change: learnings from a factory, *Human Resource Management*, **28**, 211–233.
Hopwood, A. G., 1987. The archaelogy of accounting systems, *Accounting, Organizations and Society*, **11**, 207–234.
Humphrey, C. and Scapens, R., 1996. Theories and case studies of organizational accounting practices: Limitation or liberation? *Accounting, Auditing and Accountability Journal*, **9** (4), 86–106.
Jermier, J., Knights, D. and Nord, W. (eds), 1994. *Resistance and Power in Organisations*, London, Routledge.
Johnson, H. T. and Kaplan, R. S., 1987. *Relevance Lost: The Rise and Fall of Management Accounting*, Boston, Harvard Business School Press.
Kaplan, R. S., 1985. Accounting Lag: The Obsolescence of Cost Accounting Systems, in K. Clark, E. Lorenze (eds), *Technology and Productivity: The Uneasy Alliance*, Boston, Harvard Business School Press, pp. 195–226.
Kaplan, R. S., 1995. New roles for management accountants, *Journal of Cost Management* , Fall, 6–13.
Kirkegaard, H., 1997. *Improving Accounting Reliability—Solvency, Insolvency and Future Cash Flows*, Westport, Greenwood Publishing.
Lawrence, P. R., 1954. How to deal with resistance to change, *Harvard Business Review*, **32**, 49–66.
Libby, T. and Waterhouse, J. H., 1996. Predicting change in management accounting systems, *Journal of Management Accounting Research*, **8**, 137–150.
Lukka, K. and Kasanen, E., 1995. The problem of generalisability: anecdotes and evidence in accounting research, *Accounting, Auditing and Accountability Journal*, **8** (5), 71–90.
Macintosh, N. B. and Scapens, R., 1990. Structuration theory in management accounting, *Accounting, Organizations and Society*, **15** (5), 455–477.
Malmi, T., 1994. Exploring reasons for limited effect of activity-based costing systems: some case study evidence, *The 17th Annual Congress of the EAA*, Venice, Italy,6–8 April 1994.
Malmi, T., 1996. Activity-based costing in finnish metal and engineering industries, *The Finnish Journal of Business Economics*, **45**, 243–264.
Malmi, T., 1997. Towards explaining activity-based costing failure: Accounting and control in a decentralized organisation, *Management Accounting Research*, **8** (4), 459–480.

Malmi, T., 1999. Activity-based costing diffusion across organizations: An exploratory empirical analysis of finnish firms, *Accounting, Organizations and Society*, **24** (8), 649–667.
March, J. G., 1994. Three lectures on efficiency and adaptiveness in organizations, *Swedish School of Economics and Business Administration*, Research Reports 32, Helsinki.
Markus, M. L., 1983. Power, politics, and MIS implementation, *Communications of the ACM*, **26**, 430–444.
McGowan, A. S. and Klammer, T. P., 1997. Satisfaction with activity-based cost management implementation, *Journal of Management Accounting Research*, **9**, 217–237.
Mouritsen, J., 1990. *The Social Significance of Accounts: Accounting Practices in the Danish Subsidiary of an International, American Corporation*, Copenhagen, Samfundslitteratur.
Newman, M. and Rosenberg, D., 1985. Systems analysts and the politics of organizational control, *Omega*, **11** (5), 393–406.
O'Connor, E. S., 1995. Paradoxes of participation: textual analysis and organisational change, *Organisation Studies*, **16** (5), 769–803.
Pettigrew, A., 1985. *The Awakening Giant: Continuity and Change in Imperial Chemical Industries*, Oxford, Blackwell.
Pettigrew, A., 1987. Context and action in the transformation of the firm, *Journal of Management Studies*, **24** (6), 649–670.
Pihlanto, P., 1994*a*. The action-oriented approach and case study method in management studies, *Scandinavian Journal of Management*, **10** (4), 369–382.
Pihlanto, P., 1994*b*. Humanistisen laskentatoimen hahmottelua: tiedeideaali ja ihmiskäsitys. [English summary: Outlining humanistic accounting: The approach to science and assumption about human nature], *Publications of the Turku School of Economics and Business Administration*, Series A-4:1994.
Powell, W. W. and DiMaggio, P. J. (eds), 1991. *The New Institutionalism in Organisational Analysis*, Chicago, University of Chicago Press.
Sangster, A., 1996. Expert system diffusion among management accountants: A UK perspective, *Journal of Management Accounting Research*, **8**, 171–182.
Scapens, R. W., 1994. Never mind the gap: towards an institutional perspective on management accounting practice, *Management Accounting Research*, **5**, 301–321.
Scapens, R., Jazayeri, M. and Scapens, J., 1998. SAP: Integrated information systems and the implications for management accountants, *Management Accounting* (London), **74**, 46–48.
Scapens, R. W. and Macintosh, N. B., 1996. Structure and agency in management accounting research: A response to Boland's interpretive act, *Accounting, Organizations and Society*, **21** (7/8), 675–690.
Scapens, R. W. and Roberts, J., 1993. Accounting and control: A case study of resistance to accounting change, *Management Accounting Research*, **4** (4), 1–32.
Shields, M. D., 1995. An empirical analysis of firms' implementation experiences with activity-based costing, *Journal of Management Accounting Research*, **7**, 148–166.
Shields, M. D. and Young, S. M., 1989. A behavioral model for implementing cost management systems, *Journal of Cost Management*, **2**, 17–27.
Shields, M. D. and Young, S. M., 1994. Behavioral and Organizational Issues, in B. J. Brinker (ed.) *Handbook of Cost Management*, Boston, Warren, Gorham & Lamont.
Strebel, Paul, 1996. Why do employees resist change, *Harvard Business Review*, **74**, 86–92.
Vaivio, J., 1999. Examining 'The quantified customer', *Accounting, Organizations and Society*, **24** (8), 689–715.
Whittington, R., 1992. Putting giddens into action: social systems and managerial agency, *Journal of Management Studies*, **29** (6), 693–712.