

Manchester Metropolitan University Business School Working Paper Series

Tony Berry, Bob Sweeting
Manchester Metropolitan University
Jitsuo Goto,
Shiga University
Mary Taylor
University of Hertfordshire

Financial Management Practice Amongst SMEs

WP02/16

2002 Dec / Jan

The Business school of the Manchester Metropolitan University is one of the largest business schools in the UK comprising more than 150 academic staff organised into eleven thematic research groups. The Working paper series brings together research in progress from across the Business School for publication to a wider audience and to facilitate discussion. Working Papers are subject to peer review process.

The Graduate Business school of the Manchester Metropolitan University publishes management and business working papers. The graduate school is the centre for post-graduate research in all of the major areas of management and business. For further information contact: The Director, Graduate Business School, Manchester Metropolitan University, Aytoun Building, Aytoun Street, Manchester M1 3GH

Telephone No: 0161 247-6798. Fax No 0161 247 6854

Acknowledgements

The authors would like to thank the managers of the SMEs who took part in the research upon which this paper is based and the support of the staff at the Trafford Park Business Forum, Manchester, UK, who helped to co-ordinate the research. The usual caveats apply. The authors are also grateful to the European Social Fund (ESF) for the provision of financial support to undertake the research.

E-mail:R.Sweeting@mmu.ac.uk

Abstract

While deficiencies in financial management have been repeatedly cited as a root cause of business failure (Najak and Greenfield 1994) two arguments are advanced for such deficiencies in SMEs; that new accounting is not relevant and that SME managers are unable to make use of accounting. Here it is argued that accounting ideas are relevant to SMEs but that a process of innovation combining both knowledge to overcome a barrier of belief and an external shock are necessary in order for innovation to take place.

These ideas were explored through a survey of SMEs from both service and manufacturing business in the Greater Manchester region. It was observed that the use of accounting techniques is negatively related to growth in turnover. However the use of accounting techniques that were related to product market was found to be positively related to growth in turnover and that owner/managers belief in the importance of accounting in business decisions was strongly related to growth in turnover. These results were the more interesting when it was observed that growth was negatively related to size.

A second theme of the research was the significance of the role of external advisors. Prima facie it was suggested that external advisors may be key agents of change, but the study found that their (accountants, academics and consultants) perceived value was relatively low.

The findings of this survey suggest that when accounting is perceived to be relevant then its use does support business growth but innovation in accounting in SME requires further research.

I Introduction

Understanding factors that affect the growth and survivability of Small and Medium Sized Enterprises (SMEs) has been the core of an extensive literature for many years (e.g. Keasey and Watson, 1993; Hall, 1995). From a review of the literature, Hall deduced that:

“ The probability of a firm failing falls as it increases in size and as it increases in age. This is one of the most striking features of the statistics of corporate death. There is unlikely to be a single overriding explanation for such a strong relationship.”
(Hall p.17)

Central to the needs of the owner manager in the Jovanovic (1982) model used by Hall in his analysis, is learning about organisational efficiency, and, in particular, the nature and behaviour of organisational costs. Commenting from the work of Jovanovic, Hall points out:

“Older firms would have more time to learn about their costs, and so will have more accurate estimates of their costs. Again, unpleasant surprises in their costs, and concomitant future output levels, will prove less likely as the firm gains in age.”
(Hall p.10)

The influences on the development and use by their owner- managers of financial management practices and techniques in SMEs is the central theme of this paper. In particular, we examine the relationship of these practices to the growth of these firms. There are many reasons why businesses may not be growing, including conscious decisions by owner- managers to stabilise in size and become so-called “lifestyle businesses” that can deliver reasonable returns to the owners for minimal management input; while other businesses may be receiving considerable inputs from the owner-managers with little growth occurring due to constraints of market conditions.

II Frameworks for analysis

There are two main explanations of accounting use in SMEs.

1. The relevance arguments; that much accounting practice is based upon the needs of larger businesses and that SMEs can get along with or need simpler practices.

2.The owner/manager capability arguments;

that the nature of the SME owner/ manager may be characterised by

- (a) the lack of any understanding that could make use of accounting
- (b) the competent owner/manager who does make some use of accounting
- (c) the sophisticated use of ideas in decision and action by owner managers.

These two arguments are complemented by a third, which is that the adoption of any accounting practices may be viewed as an innovation in an organisation and that where the accounting is relevant and where managers are open to change the process of innovation may be accomplished.

2.1 Relevance.

Anthony (1965), worked from ideas of relevance more closely suited for *larger* businesses with well- defined “top management” and “middle management” cohorts. Empirical work by Goold and Quinn (1990) has demonstrated that there was little emphasis by top managers on strategic control, that is, progressing achievement of strategic goals against plans, as compared with monitoring short-term targets by middle managers through budgetary planning and control systems. From a normative standpoint it is asserted that Cost information, prima facie, plays an important role together with non-financial information in a wide range of business issues (Otley,1999) and related business processes. These processes include determining long term plans, short term plans, monitoring and assessing performance of both business units and managers. In recent years, processes aimed at cost reduction in order to increase competitiveness have gained in importance and visibility (Bright et al, 1992).

While much of the research on accounting practice has largely been set in the context of larger businesses, SMEs have been the subject of increasing interest to researchers. It may be expected that a certain amount of modification to ideas transferred from larger businesses occur, before they become relevant, workable and useful in SMEs. In other words they have to “fit”. These ideas are similar to the familiar arguments spawned by Kaplan that much “traditional or inward oriented” accounting may not be helpful to business decisions.

2. The Nature of The SME Owner/Manager

(a) The lack of understanding of the owner/managers.

The gap, reported to exist, between accounting theory and practice Scapens (1985) is based upon evidence that managers spurn sophisticated accounting techniques and practices, despite their theoretical advantages over more mundane approaches. On a broader basis, Littler and Sweeting (1983) have identified managerial lapses in significant areas of the new business development process, including the stages when financial analysis would be logical and appropriate. Again there is evidence to show managers can be influenced by fashion into toying with rather than usefully using new accounting techniques and practices, for example Activity Based Costing (Bright et al, 1992).

One of the key contingent factors in an SME adopting new accounting procedures may be expected to be the background and attitude of the owner manager(s). Owner-managers may be expected to be fully aware about the product/service markets that their businesses may be based. They may not, however, be trained or proficient in business management skills, especially when starting up the business. . Unsurprisingly, the financial management in use may be expected to be simple and largely cash flow based. The preoccupation with *running* the business may leave little time for the owner-manager to hear, learn about and be convinced on the worth-whileness of using any more than the most rudimentary business management tools.

The funding for start-up businesses typically comes from the entrepreneurs themselves, with any bank finance being secured on personal assets, with few other sources of funding at the early stages of business growth (Keasey and Watson, 1993). Hence there is no external pressure to explicate the rationale for their businesses in a business plan that would link both strategic and operational issues.

It is likely that at the early stage in starting a new business, with probably the first product/service, that owner-managers are least aware of the importance of careful cost management assessments. As they become aware over time, it is probably too late to rectify matters. The business is probably very vulnerable to total failure at this stage because it has not had time to diversify through developing a portfolio of products

(b) The competent manager

As businesses survive and develop, the range and sophistication of different managerial techniques and practices that they deploy tends to increase (Miller and Friesen, 1984). The points in time at which different types of practices are deployed tends to be mapped against the business life cycle: growth, maturity and decline

The transition from unaware to competent may be quite problematic.

What needs to be explored and better understood is the way owner/managers take hold of new ideas, understand them and apply and use them in the way they were designed, rather than taking only elements of them in eclectic and isolated ways.

(c) The sophisticated owner/manager

In this view the owner/manger is perceptive about business and how accounting ideas can assist in the processes of decision and action. Such a manager gives little credence to the actual flow of historical accounting data, but will be influenced in thinking by it.

What needs to be examined is how and what influences the changes in sophistication of managers beyond awareness and understanding and competence.

3 Change and Innovation.

Change and innovation may be the outcome of reasoned discourse or cognitive processes by owner-managers who hear about new ideas and want to attempt to adopt these in their own businesses, having to rely on their own narrower managerial and financial base or turn to outside assistance. While lack of change may be the product of a managerial “barrier of belief” as to the relevance of new accounting practices change may also be the outcome of a newly perceived need, with perceptions sharpened by the stimulus of a “shock” to the business or to the understanding of the owner manager.

Change may be pressed upon SMEs;

(a) by the perception of need arising from problems or external “news” or “shocks”.

(b) by supply chain partners (larger businesses) in order to adopt and interface with the systems, techniques and practices used by the larger, more dominant businesses. If owner-managers do not agree to conform and integrate, they may be excluded from doing business. Such SMEs may benefit from managerial and financial assistance provided by the larger businesses to successfully implement the new ideas.

(c) by Business advisers who now abound, and often have vested interests, either for commercial or government initiative reasons, to “sell” new ideas to owner-managers to use

in their businesses. External advisers, especially its bankers and external accountants, who have a relationship with the business, may have a key role to play in mentoring the owner-managers in general management, planning and control issues, including cost management.

It would be helpful to know whether owner/managers make use of value and value external advisers.

However, owner-managers and businesses need to be able to champion and sustain the new ideas for themselves if the changes are to be durable and worthwhile – this is consistent with general innovation theory (see, for example, Rothwell, 1992). The key must be with the owner-managers themselves being prepared to understand the different techniques and then using them to help to guide their decision making. Merely having knowledge or a ‘passing acquaintance’ with new accounting ideas and procedures may not be enough to engender change. Some external stimulus or shock may also be necessary.

Accounting ‘shock’ and durable change

That concept of “shock” arose in work on innovation by Schroeder *et al* (1986) who observed:

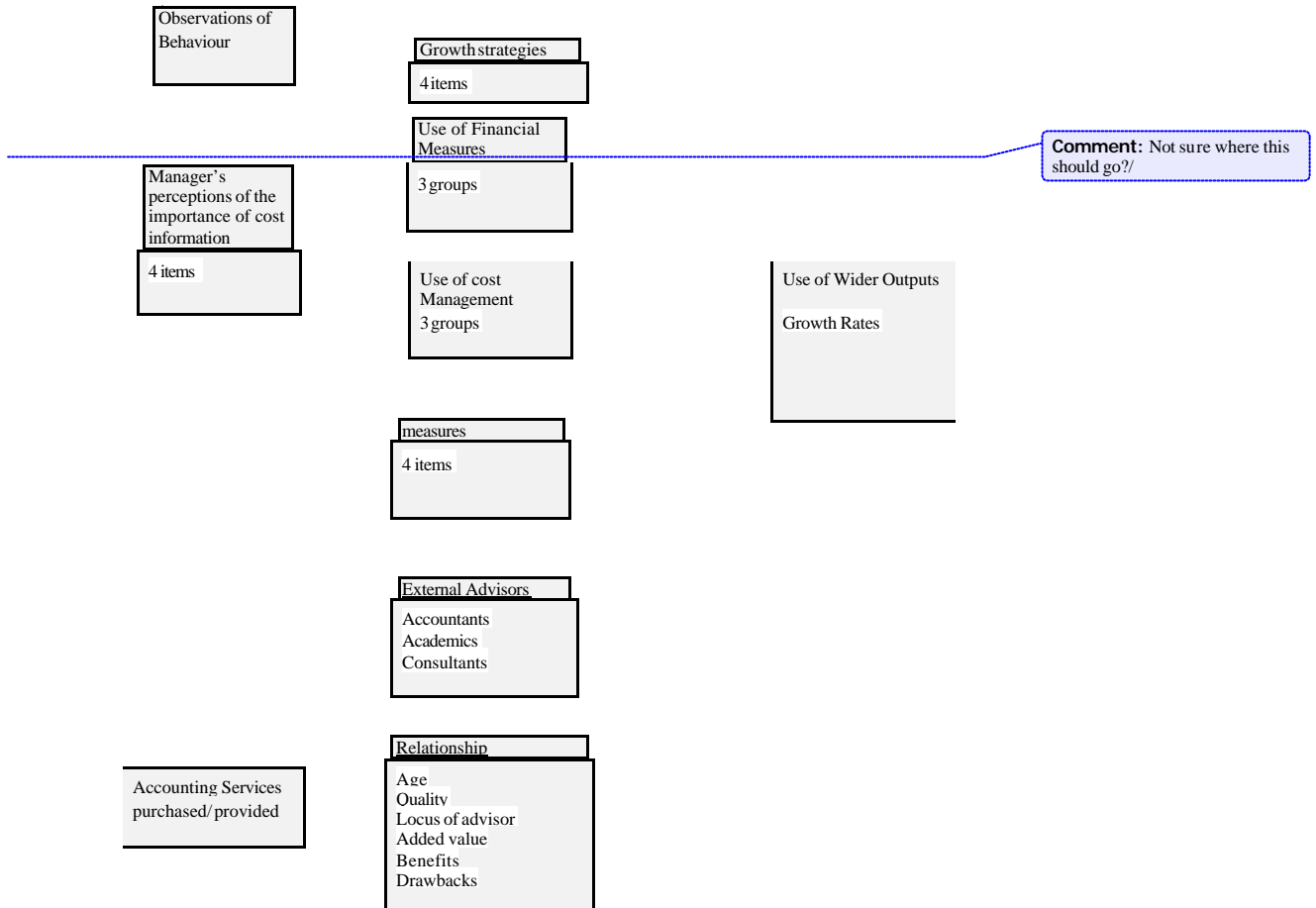
“Innovation was more prevalent when some major change occurred in the organisation or its environment. Ideas were often generated but not acted upon in an organisation until some form of shock occurred. Shocks included such things as new leadership, product failure, and a budget crisis...”

The concept also embraces the notion that once introduced the ‘new idea’ may only be transitory unless positive action is taken to sustain and grow the change(s). Van de Ven (1986) noted that ‘*managing good ideas into good currency*’ was the key to successful durability of a new idea. To make the idea ‘*well-embedded in organisations*’, *i.e.* durable, relevant and worthwhile, required accounting staff from an established finance function to go out of the function and work closely with non-accountants, Sweeting and Davies (1995). Additionally, these authors observed that re-orientation and adaptation of accounting techniques (that were ‘new’ to a particular organisation) would probably need to take place in order to make the ‘fit’, and therefore be useful and worthy of widespread adoption within the particular entity. Such user involvement enabled the “barrier of belief” or to be managed to enable accounting changes to be credible with managers. In this model of change the role of outside advisers, for example external accountants, can be crucial for them, with more broadly - based experience of different kinds of SMEs and owner- manager managerial styles, are well- placed to design, introduce and organise training for the new

financial management systems. It is therefore intended to study the extent to which owner/managers use external advisors of various kinds and how useful owner/managers find the contribution of their external advisors.

This process of user-development was observed by Bright *et al* (1992) in the case of accounting innovation where users initially adopting basic Activity Based Costing (ABC) and translated and developed the idea into Business Process Redesign (BPR) methodologies. In some senses, this development was a response to the competitive shock felt by businesses and the urgent need many had to significantly change their *modus operandi* and 'redesign' their businesses and the need for relevant and workable tools.

This phenomenon of adaptive innovation is also held true in wider observation of the innovation process. Indeed, some organisations have made a conscious practice of observing customer practices with given technologies with a specific aim of understanding how customers have taken those innovations and further moulded and modified them in practice (Von Hippel, 1977).



III The research project.

The study reported on in this paper, was designed to examine the way that financial management techniques and practices have been deployed and were used SMEs and how the owner-managers view the role of external advisers in this process.

Sample

The data collected was related to a larger study of businesses of all sizes and kinds carried out in the Trafford Park industrial area, Manchester, UK. The larger study was designed as a company census which, inter- alia, sought to find out what skills and competencies were needed by these businesses to help them to grow and develop. Profiles of these businesses were obtained through completion of face-to-face questionnaires and 1011 businesses were included in this study. Data collected included: products and services, employment characteristics, business development

Approaches and people development. In turn we selected a representative sample (2000) of all the businesses meeting the European Union (EU) definition of being SME and approached these with a request to be included in our financial management study. A confidentiality undertaking was given to participants not to identify individual people or businesses. Of these, 140 businesses agreed to face-to-face interviews being carried out to obtain data on their financial management techniques and practices.

Questionnaire

A questionnaire was designed to collect data relating to a number of facets;

- (a) Demographic data including recent major management changes already experienced and expected,
- (b) Growth strategies employed (4 Items)
- (c) Perceptions of managers of the importance of cost information (4 items)
- (d) Use of Cost Management practices (3 Groups)
- (e) Use of Financial measures (3 Groups)

- (f) Use of Wider, Non financial measures (4 items)
- (g) Relationships with external accountants and advisors
- (h) Growth rates of turnover

The draft of the questionnaire was pilot tested with two owner-managers and its structure and content was refined. The refined questionnaire was then used for data collection in the remaining 138 SMEs in Spring 2000. Preliminary analysis was fed back to two participant workshops in Autumn 2000 for their observations and comments.

SPSS computer software was used and coded both the original Trafford Park survey data and the data from our financial management survey was coded in a mutually consistent way. Thus we were able to analyse an extended range of parameters and leverage the value of the first study.

In general, questionnaire studies suffer from a number of limitations, not least of which is that they are self selective and therefore exclude other, prima facie, similar businesses which introduces some bias. However the number of businesses that did not participate in our study from the population selected was very small. In our case, the decision to participate or not was taken by the key player, the owner manager, the person who in many SMEs encapsulates the “top” and “middle” management of the larger businesses. In some cases participation may reflect an owner manager believing significant developments have been made and wanting to talk about them, in others not really knowing very much and interested in feedback to find out more and so on. The participation of the owner-manager allowed an important dimension to be explored: the dynamics of networking as a learning and understanding exchange mechanism through the use of feedback workshops based on our preliminary findings.

IV Findings

Features of the sample in general (N=140)

The sample consisted of 42 manufacturing and 98 service businesses. The size profile in terms of Turnover is in Figure 1, Employees in Figure 2 and Age in Figure 3. From this data it can be seen that the sample of manufacturing businesses tend to be older, more established businesses whereas newer, start-up businesses tend to be service based. In the

sample, there are more service-based businesses clustered in the smaller (by number of employees) businesses, compared with the manufacturers, who have a more even size distribution.

Use of advanced manufacturing Techniques

Typically fewer than 20% of manufacturers in the sample used so-called Advanced Manufacturing Techniques (AMT – Howell et al, 1987) as shown in Figure 4. In terms of turnover growth profiles, from Figure 5 it can be seen that, over the last three years, there is reasonable consistency between the profiles of both manufacturing and service- based businesses in the sample.

Growth Strategies

The sample businesses planned to grow in the future using a range of strategies that included: acquisition, developing new markets and customers, improving their competitiveness and developing new products (see Figure 6). In general the most popular approach planned is through developing new markets and customers with relatively few planning acquisitions, presumably because of the difficulties with this approach not only in execution but post-integration.

On the assumption that all businesses should use all four of these approaches a growth strategy complexity index was calculated; the number of growth approaches reported by the companies divided by the theoretical number possible; this had a value of 0.577, which indicated a considerable penetration of these techniques in the sample companies.

Cost management techniques.

Figure 7 presents the findings of the use of cost management techniques. Again from the assumption that all firms should or could use all of the techniques a penetration of Cost Management techniques indicator was calculated; it had a value of 0.13, which indicated a very low penetration of cost management techniques in the sample firms.

“New” cost management techniques employed

Figure 7 presents different cost management techniques that can facilitate long and medium term planning in businesses against the total number of users in our sample. It also includes the number of these businesses that have grown turnover in the last three years.

There was variable use penetration of the so-called “new” techniques: Cost of Quality, (0.16) Activity Based Costing (0.26); Management (ABC/M)(0.13), Cost Modelling,(0.04) Strategic Management Accounting(0.10), Life Cycle Costing(0.05) and Target Cost Planning,(0.20). The usage of these techniques was very limited. However the use of Strategic Management Accounting at 10% and Life Cycle Costing at 5% were surprising, given the relatively slow diffusion rates in larger businesses with these different techniques (see, for example, Ask and Ax, 1992, Drury and Taylor, 1995).

There were also apparent inconsistencies amongst our data. It was noted, for example, that 5 manufacturers stated they were using Total Quality Management, but nearly twice as many (9) stated that they were using Cost of Quality-these two techniques being, conceptually, mutually supportive. It may be that owner-managers are unaware of this or positively choose to be eclectic in their adoption of new ideas or in their use of descriptors. This finding is consistent with similar studies (Bright et al, 1992).

It was interesting to note that 20% of businesses were moving to check their position with existing externalities by using Target Costing, or an approach to understanding cost in relation to market prices that they identified as target costing.

“Old” cost management techniques employed

A large proportion the sample (39%) used Break Even Analysis.

In the capital investment process, Payback Period at a usage rate of 11% was the most popular method, if such a small percentage could be described as popular. Those methods involving using the time value of money, Net Present Value (NPV) and Internal Rate of Return (IRR) were lower at 7% and 4% respectively. This finding reflects other research findings where it was found that managers reject sophisticated and more theoretically correct solutions in favour of more basic methods (for example, Pike 1983)

It was surprising that so few managers in the SMEs in our sample use investment appraisal methods in any way in their investment decision processes. Further observation of investment justification techniques using cost information is shown in Figure 8 where 0.39 of sample firms reported that investment justification was important to them. This compares to a total of at most 0.25 of the sample using any of the four techniques.

Of the 64% of businesses (N= 90) that planned to grow by introducing new products/services, only 16% (N=14) used the most popular technique, Payback Period. However, these 14 businesses were amongst those who believed that cost information was important in the investment justification process.

The importance of Cost information and key business processes

The reported importance of a range of types of cost information is presented in figure 8. Again calculating a complexity of perceived importance index produces a value of 0.455 which suggests that these managers give a high importance to cost information, and this contrasts with the low penetration of usage index (0.13) of a range of cost management techniques. (See above)

In Figure 8, collected around generic headings are the data from our SME sample: *Longer term* (Figure 8a): Business strategy, New products and services, Investment justification: with a penetration index of 0.37 suggesting a focus upon future outcomes.

Short term (Figure 8b): Budgetary planning and control, Pricing, Procurement: with a penetration index of 0.65 suggesting that short term data is substantially important and much more important than the actual reported use.

Performance measurement (Figure 8c): Management performance, penetration index of 0.30; Business performance, with a penetration index of 0.57: which reflects the importance given to business rather than management.

Cost reduction(Figure 8d). A penetration index of 0.57, which again is higher than the reported use of cost management techniques.

Whatever the background of owner-managers may be, the average number of employees was in excess of 20 in SMEs where a range of different, “old” and “new” cost management techniques and practices were used. The average number of employees was also 20 in SMEs where owner-managers indicated that cost information played an important part in a range of key business processes ranging through: business strategy, new products and services development, budgetary planning and control and managerial – business performance.

It may be inferred that these managers work with accounting ideas in the mind rather than accounting data in the books; as though the records are of limited interest but that the ideas are used in the processes of business understanding and decision making.

One of the more sobering observations from the data in Figure 8 is the large number of owner-managers in SMEs who do *not* regard cost information as important in *key* business processes. This holds across the whole range of processes we have categorised above ranging from long term to cost reduction processes, with this observation holding true amongst both manufacturing and service businesses. Cost information may be difficult for the owner-managers to obtain. This may be particularly the case with that related to longer-term investment and business strategy. However, it should not be the case, in principle, with that needed in the budgetary planning and control process, managerial and business performance and cost reduction. It may be the case that, in practice, the information cannot easily and cheaply be obtained and this may be because the systems to collect, let alone analyse the cost information, is not in place. If reliance for expertise is placed on outside accountants, the focus may only be on preparing cash flows, preparing external financial reporting statements and tax computations. (See, for example, Kirby and King, 1997).

The justification, in part for SMEs to make the effort in breaking through the “barrier of belief” in introducing and using relevant financial management techniques and practices begins to emerge from statistical analysis of the data. We carried out inferential statistical analysis on the data to investigate the relationship between those businesses that regarded cost information as important in different business processes and had grown in the *three past years at more than 10%* in turnover terms. At the 99% significance level we found that regarding cost information as important can be associated with growth when, in particular, it is associated with business strategy, investment justification, budgetary planning and control, business and management performance and cost reduction.

Agents of change

The penetration of the use of external agents was indicated by index; they were

0.07(includes always and usually) for Academic advice and support agency

0.56(includes always and usually) for external Accountants and network contacts

0.10(includes always and usually) for Consultant

Which suggests that these SME managers are a rather independent bunch of business people, but have their primary external advice from accountants and network contacts.

Figure 9 presents data for a range of sources of business support. External network contacts and external accountants are the most usual sources with academic institutions trailing in bottom place, with only 4% of 93 respondents seeking business support from that source.

External accountants, particularly the Institute of Chartered Accountants in England and Wales (ICAEW), has in recent years been heavily promoting their members services for business support, rather than the traditional conformance, financial reporting and taxation services. At the same time, it has been exhorting its members to promote these services amongst their clients. Other research has appeared to demonstrate that ICAEW accountants have not been especially successful in this endeavour (Kirby, Najak and Greene, 1998). With 84% of the 116 SMEs in this study responding to this question being either *always*, *usually* or *sometimes* prepared to turn to external accountants, this represents a major opportunity for accountants to develop their work portfolio in this client sector. Nonetheless, Figure 10 suggests the role of the external accountant is still narrowly defined for many SME owner-managers, with 70% of respondents using their external accountants for statutory advice and less than half this percentage, 33%, seeing the role as one of business management advice. A similar percentage, 31%, engages their external accountant in financial management support work. A much smaller percentage, 4%, actually regards their external accountant as an active management team player.

The growth of network opportunities for owner-managers promoted by government support agencies, employer organisations and so on seem to be well received by our sample owner-managers as a source of business advice and assistance with 79% of 113 respondents *always* or *usually* or *sometimes* using this source. This source far exceeded the use of more targeted and specific help from support agencies. Given that these support agencies include the government funded Business Link (soon to be subsumed into the Small Business Service), then this is a point for concern. Significant resources are consumed by these agencies and this may reflect a “technology push” of ideas rather than “market pull”. As with other idea innovations, it may be that increased efforts are required to increase user (that is, owner- manager) awareness and education of the benefits and value to be achieved from improved financial management.

With considerable efforts being put into promoting Higher Education Institutions (HEIs) in the UK as sources of business support and assistance, especially for SMEs (for example, Science Challenge initiatives), then our findings are sobering. There is a considerable barrier that needs to be overcome for HEIs to 'make ground' on the low showing (72% respondents *never* use academics) in our survey. With the rise in the numbers of Business Schools in HEIs and the growth of relevant studies amongst SMEs, then the problem is probably focused on technology and knowledge transfer than the development of relevant materials and delivery mechanisms for SMEs.

V Observations about the relationship of financial management and business growth.

We were concerned to examine the proposition that accounting and financial management was not relevant to SMEs via the idea that Accounting and financial Management was unrelated to growth.

We make the following observations;

Growth and Business type, size and age(See figure 11)

- i. Private limited companies grow faster than other types.
- ii. Companies younger than 5 years grow faster than older companies
- iii. Companies with 5-10 employees grow faster than smaller or larger companies.
- iv. Companies with turnover between 250k-1m grow faster than smaller or larger companies

Growth and the use of accounting techniques(See figure 12)

- i. The use of cost management techniques are negatively related to growth
- ii. The use of financial measures are negatively related to growth
- iii. The use of cost information is positively related to growth
- iv. The use of growth strategies are positively related to growth.

Use of techniques and business type, sizes and age(See figure 13)

- i. Cost management users are older and/or have more employees
- ii. Financial measure users are older/or have more employees
- iii. Cost information users are older/or having more employees
- iv. External accountant users are younger/or have less employees

NB. Younger and smaller firms need accountant help

- v. Growth strategy users are older and/or have more employees.

The characteristics of growing firms.

I. Users of cost information and strategy

ii. Do not use cost management and financial measures

Ii. Smaller firms in both growing and less growing groups need more help form external accountant

Iii. Change their accountants often and understand the benefit of external view and the drawbacks from using external accountant

V. Overall growing firms consistently have an “outside” orientation and the less growing and declining firms have an “inside” orientation.

VI Issues and implications

We were interested in three themes;

- ? Relevance
- ? Owner /manager competence
- ? Accounting Change and innovation

6.1 Relevance

The relevance of New Accounting was not perceived by the respondents, the owner/managers of the SMEs.

Owner-managers of the SMEs in our sample typically avoided newer and more sophisticated management techniques and practices related to financial management, for example, Activity Based Costing, Strategic Management Accounting, Target Costing and Cost of Quality. At the same time, they avoided more longer-standing and more theoretically correct approaches to investment justification. In all this, they were not substantially different from managers observed in businesses over many years (see, for example, Pike 1983; Kennedy and Sugden, 1986; Bright et al 1992).

6.2 Owner manager competence

Owner managers did not report much competence in accounting but, where SME owner-managers did employ a wider set of more sophisticated cost management techniques and practices, then we found a statistically significant correlation that they were in growth businesses.

6.3 Accounting Change and Innovation

It could be argued that deployment and use of wider sets of financial techniques and practices is indicative of a management style that is more analytical and broadly-based. This itself may be an outcome of growth rather than a precondition of it. As companies become larger and more complex their needs for information become greater and the processes of formalisation become necessary in order to manage.

This suggestion is grounded on the fact that in many owner-managed businesses, the original expertise of the managers is based on close knowledge about their product/service markets and product/service technologies rather than financial management. Growth requires a widening of managerial and organisational capabilities.

In the Otley (1999) framework for performance management, there is, presumably largely grounded in the context of larger businesses, a set of discrete issues: many separate sets of processes with probably large numbers of people with varied skills and competencies involved and different responsibility centre managers. In the context of SMEs, many of the process areas probably merge, and the owner-manager is then the chief actor. Thus objectives, strategies and plans, targets and feedback may all fall within the close long-term, day-to-day work and the personal interest of the owner manager. This *modus operandi* is probably manageable for business averaging 20 employees.

Thus, we see a picture emerging of owner-managers growing with their businesses, becoming more aware and knowledgeable about the potential benefits that more detailed and sophisticated (yet not over- complicated) financial management techniques and practices can offer. As the business grows, then the separation of the key issues and areas occurs in reality as well as in principle. They move from being internalised, understood and handled by the owner- manager alone, to being shared and understood amongst the employees, more as a whole, which adopt accountable and responsible attitudes towards them.

This profile of development has been observed more generally in the work of Miller and Friesen, 1984. What we have observed in this study is the genesis of the process: the development that takes place once the “barrier of belief” has been passed through by the owner manager. Without this transition process, then the development of relevant financial management – and probably other – techniques and processes will be delayed and may not take place. This development model echoes other innovation and change models where progress is predicated on the active championing and involvement of the owner manager (Rothwell, 1992).

Barriers to adoption of more developed financial management techniques, practices and systems have been examined in a broad sense by McChlery and Meechan (2000) who noted from the literature that ‘ quality of management accounting information utilised within the SME sector has a positive correlation with an entity’s performance’. This statement begs the question about what ‘quality’ means in this context and how ‘performance’ is defined and the direction of any causal process.

Indeed, it could be argued that performance creates the very shocks we have referred to in our conceptualisation of accounting innovation and change. For example, growth in sales, which we have used as one dimension of performance, could induce major over-trading shocks that could have very serious implications for the viability of the business through insolvency, induced by lack of working capital – cash in particular – to pay the bills. This shock could induce the owner-manager to get to grips with the key issues driving the financial system dynamics, including deal making and investment in new facilities, products and services. *This analysis points to the need to carefully examine the key business processes and empower these with the relevant financial management accessories*

that are understood, and are likely to be used on a regular basis in decision making by the owner/manager.

Again, the external accountant will probably have a key role in this process. In McChlery and Meechan's (2000) study, it was observed, in the conclusions, that there were concerns about the low added value of (external) accountants, who were principally focused on basic attestation and reporting work for their SME clients. Our findings were not so depressing, and indicated a significant effort by many of the external accountants, as perceived by owner-managers in our sample, to shift into the value-adding areas we have outlined. What is more likely to generate real and sustainable advances are the "shocks" identified by Van de Ven (1986) as key triggers to innovative ideas that produce durable and worthwhile changes. It remains to be seen how effective these shock points are as compared with representations about "better practice" as recommended by outside agents of change, be they external accountants or whoever. The strongest combination to result in successful adoption may be a "shock", with the subsequent advice from an external agent on the most relevant and appropriate financial management solution that "fits" particular business and owner manager needs. It is possible that other owner managers are a more likely source of external advice (Tell 2000).

VII Conclusions

1. This cross sectional study of financial management in a sample of SMEs in the UK, part of a wider study including other UK and Japanese companies, has provided some evidence to suggest that SMEs have not developed their financial management to any great extent.
2. The practices of accounting had a very limited penetration, supporting either the irrelevance hypothesis or the owner/manager limitation hypothesis.

For the overall sample the more accounting practices were used then the lower the growth rates; this apparent result was modified by the fact that the rate of growth of the sample firms declines with age, while the use of accounting practices increases with age and size. It may be suggested that accounting practices become necessary (but not very) as age and size increase but have no overall relation to growth rate. It is as though there was a threshold competence to be gained or barriers to belief to be overcome.. However the use of market related accounting practices was strongly related to company turnover growth,

suggesting that some owner/managers were able to use and see the relevance of newer accounting financial management.

3. Further the owner/managers were more likely to regard accounting ideas as having importance to business decisions even if they reported a very low usage of accounting practices. Hence the idea of the unaware owner manager was not sustained in this sample, nor overall could the competent manager idea be sustained. But there was evidence of decision sophistication among some of the sample and this group were growing faster than the overall sample

However it would be naive to argue that the sample were sophisticated in their understanding or use of accounting.

4. The evidence of innovation and change, that the larger and older firms have innovated in financial management, suggests that necessity or "shock" may be a more likely explanation than conviction by reason. This was supported by the evidence of low usage of external advice and it may be likely that external advice is sought in response to problems rather than as a balanced development of financial management capability. It may be the case that the only advice that owner/managers appreciate is that of other owner/managers in what have been termed action learning sets or learning networks,(Tell 2000).

5. This study may be influenced by a domain effect, because the location has been "worked over" by small business advice centres, professional advice, government and other initiatives, but it is debateable how effective these advisors have been.

6. Apart from the intended intra UK region comparisons and the UK to Japan comparisons two areas for research are suggested;

References

- Anthony, R.N., (1965), *Management Planning and Control Systems: A framework for Analysis*, Harvard Business School Press.
- Ask, U and. Ax, C. (1992) "Trends in the development of product costing practices and techniques – a survey of Swedish manufacturing industry" EAA Conference, Madrid.
- Bright, J., Davies, R., Downes, Sweeting, R. (1992) "The deployment of costing techniques and practices: a UK study": Management Accounting Research(3) pp201-211
- Drury, C. and Taylor, M (1995) "Issues arising from surveys of management accounting practice" *Management Accounting Research* 6 pp 267-280.
- Goold, M. and Quinn J.J (1990) "The paradox of strategic controls" Strategic Management Journal. II pp 43-57.
- Hall, G. (1995) "Surviving and prospering in the small firm sector" Routledge. London
- Howell, R, Brown, J, Soney, Seed, A(1987) "Management accounting in the new manufacturing environment", National Association of Accountants, Montralé, New Jersey
- Johnson,T and Kaplan, R.S. (1987) *Relevance Lost: The Rise and Fall of Management Accounting*, Harvard University Press.
- Keasey, K. and.Watson, R(1993) "Small firm management" Blackwell. Oxford.
- Kennedy, J.A and Sugden K.F (1986) Ritual and reality in capital budgeting; Management Accounting (February) pp34-37
- Kirby, D.A and King, S.H. (1997) Accountants and small firm development: filling the expectation gap. Service Industries Journal, 17.2, pp 294-304
- Kirby,D.,Najak,B.,Greene,F (1998)" Accounting for growth: Ways accountants can add value to Small businesses". Institute of Chartered Accountants in England and Wales, London
- Jovanovic,B.(1982)" Selection and the evaluation of industry". Econometrica 50.3 pp649-670

Littler D.A and.Sweeting R.C.(1983) “New business development in mature firms.”
Omega 11.6 pp 537-545

Littler D.A and.Sweeting R.C (1990)“The Management of new technology based business:
The Existentialist Firm” Omega 18.3 pp 231-240).

McChlery, S. and Meechan, L. (2000). Barriers and catalysts to financial management systems in small sized enterprises. Conference proceedings from 23rd ISBA National Small Firms Policy and research Conference, Aberdeen.

Miller,D and Friesen P.H. (1984) “ A lower individual study of the corporate life cycle”
Management Science 30.10 pp1161-1183

Najak,A. and Greenfield, S (1994).The use of management accounting information for managing micro businesses. In Hughes,A.and Storey,D (eds), Finance and the Small Firm. Routledge, London

Otley,D. (1999). Performance management: a framework for management control systems research. Management Accounting Research.10, pp363-382

Pike, R.H. (1983)“A review of recent trends in formal capital budgeting processes”.
Accounting and Business Research. Summer.pp201-208

Rothwell, R (1992). Successful industrial innovation: critical factors for the 1990s.R&D Management 22(3) pp221-239

Scapens R.W (1985)“Management accounting: a review of contemporary developments.”
Macmillan. London.

Schroeder, R, Van de Van, A, Scudder, G and Polley, D (1986) “Managing innovation and change processes” Findings from the Minnesota Innovation Research Programme.
Agribusiness 2.4 pp 501.523

Sweeting R.C. (1991) “Early-Stage new technology-based business: Interaction with venture capitalists and the development of accounting techniques and procedure” British Accounting Review 23 pp 3-21

Sweeting R.C and Davies R.E (1995) "Industrial innovation and parallel accounting developments" Technovation 15.5 pp289-302

Van de Ven, A.H. (1986) Central problems in the management of innovation. Management Science.32 (5) pp 590-607

Von Hippel, E. (1977) transferring process equipment innovations from user-innovators to equipment manufacturing firms. R&D Management,8(1) pp13-22

Appendix I

We can also, at this stage, speculate about the characteristics of the “barrier of belief”:

Before the barrier:

- ? There is a focus on *cash* by the owner manager.
 - ? Concerns exist about new sources of funds but managers are unable to adequately estimate amounts needed and make suitable business cases.
 - ? Managers are not sufficiently conversant about the interacting mechanics of internal costs and revenues. They are unable to financially articulate strategy or make operational decisions, for example pricing, based on sound finance data and relevant applied techniques.
 - ? Managers may be uncomfortable about approaching/using/hiring external professionals, for example accountants. They may have little experience and knowledge about how to choose between professionals. They may feel challenged (if not threatened) as they cannot discuss and argue in the specialist areas of which they have little knowledge.
 - ? As the SME business grows and develops, the owner- manager learns, and if from a larger business, adapts, through an existentialist experience (Littler and Sweeting, 1990). It interacts with other owner-managers in networks of different kinds and so heads to breaking through the “barrier of belief” both in terms of themselves and development of management techniques and practices.
-

Through the barrier:

- ? The owner manager has more “openness to not knowing” (Littler and Sweeting, 1983), which comes from more business confidence and willingness to interact with new management ideas.
 - ? Increased willingness to bring in people from outside to fill knowledge and competency “gaps” and to recognise the value of this and the price to be paid.
 - ? Interaction with influential outsiders, for example venture capitalists, who may demand the engagement of professionals in the SME (Sweeting, 1991).
-

Tables and charts

Table 1

Comparison of the three control techniques analysed using the performance management framework

Question	Budgetary control	EVA	Balanced scorecard
1. Objectives	Financial objectives: -profit -cash flow -ROCE	Single financial objective	Multiple objectives based on strategy
2. Strategies and plans	Means/end relationships not formally considered, although budget is based on a plan of action.	Delegated to responsible managers. May be considered when setting targets	Implicit in selecting some performance measures: no formal procedures suggested.
3. Targets	Best estimates for financial planning; literature on target-setting gives some guidelines for control.	Some guidance is given with respect to 'inheritance effect'	Not considered, despite being central to balance
4. Rewards	Not addressed, despite many rewards now being made contingent upon budget achievement	Appropriate incentive schemes a central part of the methodology	Not addressed
5. Feedback	Short-term feedback of budget variances. Incremental budgeting from year to year	Some discussion of longer-term impact	Reporting of performance assumed, but no explicit guidance given

Source: Otley (1999)

Figure 1
Size profile in terms of turnover

	Services		Manufacturers		Total	
	(N=98)	% Of Services	(N=42)	% of manufacturers	(N=140)	% of total
<£250 k	17	17.3%	9	21.4%	26	18.6%
£250k - <£1m	39	39.8%	15	35.7%	54	38.6%
£1m-<£10m	30	30.6%	12	28.6%	42	30.0%
£10m-<£50m	6	6.1%	4	9.5%	10	7.1%
£50m-<£100m	0	0.0%	1	2.4%	1	0.7%
>£100m	1	1.0%	0	0.0%	1	0.7%
Not disclosed	5	5.1%	1	2.4%	6	4.3%
Total	98	100%	42	100%	140	100%

Figure 2
Size profile in terms of employees

	Services		# Manufacturers		Total	
	(N=98)	% of services	(N=42)	% of manufacturers	(N=140)	% of total
1-5 employees	37	37.8%	14	33.3%	51	36.4%
6-10 employees	17	17.3%	9	21.4%	26	18.6%
11-20 employees	22	22.4%	6	14.3%	28	20.0%
21-40 employees	9	9.2%	5	11.9%	14	10.0%
Over 40 employees	13	13.3%	8	19.0%	21	15.0%
Not disclosed	0	0.0%	0	0.0%	0	0.0%
Total	98	100%	42	100%	140	100%

t-test significant at 99.9% level of confidence reveals that manufacturing businesses employ more employees than service businesses

Figure 3

Profile in terms of age of business

	services * mean=13.4 yrs		manufacturers * mean=18.41 yrs		Total * mean=14.89 yrs	
	(N=98)	% of services	(N=42)	% of manufacturers	(N=140)	% of total
< 2 years	13	13.3%	7	16.7%	20	14.3%
3-5 years	19	19.4%	7	16.7%	26	18.6%
6-10 years	15	15.3%	8	19.0%	23	16.4%
11-15 years	11	11.2%	8	19.0%	19	13.6%
16-20 years	13	13.3%	3	7.1%	16	11.4%
> 20 years	20	20.4%	7	16.7%	27	19.3%
Not disclosed	7	7.1%	2	4.8%	9	6.4%
Total	98	100%	42	100%	140	100%

Figure 4
Advanced manufacturing techniques used by manufacturers

Technique used	Total usage	
	(N= 42)	% of manufacturers
MRP	3	7.1%
Computer Integrated Manufacturing	4	9.5%
JIT	15	35.7%
Flexible Manufacturing Systems	9	21.4%
TQM	16	38.1%
OTHER	6	14.3%

Figure 5
Turnover growth profiles

	manufacturers		services		Total	
	(N=42)	% disclosing turnover growth	(N=98)	% disclosing turnover growth	(N=140)	% disclosing turnover growth
Negative growth	11	27.5 %	19	21.8%	30	23.6%
No change	10	25.0%	25	28.7%	35	27.6%
Growth (1-10%)	11	27.5 %	21	24.1%	32	25.2%
(11 -25%)	6	15.0%	14	16.1%	20	15.7%
(26-50%)	2	5.0%	1	1.1%	3	2.4%
(More than 25%)	0	0.0%	7	8.0%	7	5.5%
Total	40	100%	87	100%	127	100%
Not disclosed	2		11		13	

Figure 6
Planned growth strategies

Strategy	manufacturers		services		Total	
	(N=42)	%	(N=98)	%	(N=140)	% of total
Acquisition	8	19.0%	16	16.3%	24	17.1%
New markets/customers	39	92.9%	82	83.7%	121	86.4%
Improving competition	31	73.8%	57	58.2%	88	62.9%
New products	31	73.8%	59	60.2%	90	64.3%

Figure 7
Cost management Techniques used

	Total Users		Manufacturers		Services	
	(N=140)	%	(N=42)	%	(N=98)	%
Cost of Quality	23	16.4%	9	21.4%	14	14.3%
ABC	37	26.4%	11	26.2%	26	26.5%
ABCM	18	12.9%	2	4.8%	16	16.3%
NPV	10	7.1%	3	7.1%	7	7.1%
Payback	16	11.4%	7	16.7%	9	9.2%
IRR	6	4.3%	1	2.4%	5	5.1%
ARR	4	2.9%	1	2.4%	3	3.1%
Cost modelling	6	4.3%	3	7.1%	3	3.1%
Strategic Mgmt accounting	14	10.0%	4	9.5%	10	10.2%
Life cycle costing	7	5.0%	1	2.4%	6	6.1%
Target cost planning	28	20.0%	5	11.9%	23	23.5%
Break even analysis	55	39.3%	18	42.9%	37	37.8%
Other	9	6.4%	4	9.5%	5	5.1%

Figure 8a
Cost Information-Longer term

	Manufacturers		Services		Total		Average employee Size	Growth>0	
	(N=42)	% of 42	(N=98)	% of 98	(N=140)	% of 140			% of users
Business strategy	13	31.0%	36	36.7%	49	35.0%	23.4	31*	63.3%
New products and services	17	40.5%	39	39.8%	56	40.0%	21.5	29	51.8%
Investment justification	17	40.5%	37	37.8%	54	38.6%	27.4	34*	63.0%

*Statistically significant at 95% confidence level (t -test)

Figure 8b
Cost Information-Short term

	Manufacturers		Services		Total		Average employee Size	Growth>0	
	(N=42)	% of 42	(N=98)	% of 98	(N=140)	% of 40			% of users
Budgetary planning And control	17	40.5%	53	54.1%	70	50.0%	24.3	41*	58.6%
Pricing	36	85.7%	80	81.6%	116	82.9%	19.2	56*	48.3%
Procurement	25	59.5%	65	66.3%	90	64.3%	19.2	43	47.8%

*Statistically significant at 95% confidence level (t -test)

Figure 8c
Performance measurement

	Manufacturers		Services		Total		Average employee Size	Growth>0	
	(N=42)	% of 42	(N=98)	% of 98	(N=140)	% of 40			% of users
Management performance	11	26.2%	31	31.6%	42	30.0%	26.9	24*	57.1%
Business performance	25	59.5%	55	56.1%	80	57.1%	23.5	42*	52.5%

*Statistically significant at 95% confidence level (t -test)

Figure 8d
Cost reduction

	Manufacturers		Services		Total		Average employee Size	Growth>0	
	(N=42)	% of 42	(N=98)	% of 98	(N=140)	% of 40			% of users
Cost reduction	28	66.7%	52	53.1%	80	57.1%	22.2	41*	51.3%

*Statistically significant at 95% confidence level (t -test)

Figure 9
Business advice and assistance

	Always		Usually		Sometimes		Never		Total
		% of usage		% of usage		% of usage		% of usage	
Academic Institutions	1	1.1%	3	3.2%	22	23.7%	67	72.0%	93
Support Agencies	2	1.9%	8	7.5%	42	39.6%	54	50.9%	106
External Accountant	11	9.5%	35	30.2%	52	44.8%	18	15.5%	116
Network of contacts	9	8.0%	43	38.1%	37	32.7%	24	21.2%	113
Consultants	3	2.9%	7	6.7%	47	44.8%	48	45.7%	105
Other	4	15.4%	6	23.1%	7	26.9%	9	34.6%	26

Figure 10
Role played by the external accountant-growth

	Total		Growth>0		Manufacturers		Services	
	(n=140)	% of total	% of users		(n = 42)	% of manufacturers	(n= 98)	% of services
Active member of management team	6	4.3%	4	66.7%	2	4.8%	4	4.1%
Business Advice for management	46	32.9%	21	45.7%	12	28.6%	34	34.7%
Source of emergency advice	52	37.1%	21	40.4%	16	38.1%	36	36.7%
Financial management support	44	31.4%	27	61.4%	10	23.8%	34	34.7%
Statutory advice	98	70.0%	46	46.9%	30	71.4%	68	69.4%
Other	9	6.4%	5	55.6%	3	7.1%	6	6.1%