

**Research Report**

**Accounting for new organisational forms:**  
the case of subcontracting and outsourcing

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# Accounting for new organisational forms: the case of subcontracting and outsourcing

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## Executive summary

- The report notes the emergence of new organisational forms in response to market uncertainty and volatility.
- In particular, it notes moves to focus the organisation around core activities.
- This has led organisations to outsource and subcontract non-core production and service activities.
- The project identifies key questions which are asked of management accounting in this business scenario, including the types of calculations and practices used in the decision to outsource, and the role of management accounting in the outsourcing process.

This work is grounded in contemporary evidence on the emergence of new organisational forms in the UK, and the consequent adoption of management accounting practices. After setting out the relevant theoretical and empirical background, the work evaluates the emergence of new forms, and the growth of outsourcing and subcontracting.

The quantitative questionnaire data points to a gradual emergence of new forms and, notably, to the delayering of organisations and an increase in outsourcing activities, new management teams and a desire to reduce fixed costs and to concentrate on core activities were major motivators.

Given the growth in outsourcing, all of the case study organisations had invested heavily in the supply chain function, which was seen as a key competitive business variable. In general, traditional management accounting practices and metrics were used, although the 'Balanced Scorecard' was prominent, based on a number of key financial and non-financial indicators. The main changes in the management accounting function were the ways in which they were integrated into the business and the tasks that they were asked to perform. With the case study organisations moving far more to multi-functional working, management accountants were far more integrated into core business areas, working alongside colleagues from other core functions. Management accountants were also increasingly taking on the role of business analysts, including a greater forecasting role.

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# 1. Introduction

The research reported in this volume will identify the ways in which management accounting is informed by developments in new organisational forms. In general the existing literature would point to new organisational forms emerging in response to heightened business competition brought about by globalisation and a compression of decision-making times due to developments in information and communication technologies. Such new forms have a variety of configurations but, in general, are flatter, leaner, less hierarchical and more flexible than the traditional bureaucratic forms.

A variety of methods are being deployed to achieve the new flatter and flexible firms including downsizing and delayering, brought about, in part, by a growth in subcontracting and outsourcing as part of an attempt by business to focus on core activities. The key questions in this project are to assess the extent of the introduction of such new organisational forms in contemporary UK business, and its consequent implications for management accounting. Key issues to be examined are: the influence of subcontracting on the organisation's management accounting; the management of buyer-supplier relationships and the impact of a changing organisational form on corporate performance. The subjects chosen for investigation, because of observed developments in their organisational form, are: a public sector organisation; a retail franchise operation; a major UK food retailer; an engineering manufacturer; and a food manufacturer. Two methods are used to gather the data for analysis: a series of in-depth face-to-face interviews; and a postal questionnaire. The former provides a set of detailed case studies, based on meetings with designers and users of management accounting systems; the latter will provide a larger representative sample of responses on which more sophisticated statistical analysis can be performed. The conclusions reached through qualitative analysis will be supported by statistical evidence.

To achieve these objectives, the report is divided into nine further chapters. Chapter two will provide the theoretical background and chapter three will outline the research methodology used. Chapters four to nine will outline the empirical research findings, with chapter four concentrating on the results of our questionnaire surveys, and chapters five to nine each concentrating on one of our case study organisations. Chapter ten draws conclusions to the report.

## 2. Theoretical background

### 2.1 Introduction

At the turn of the millennium there have been profound changes in organisational structure, strategy and form. More specifically, there has been a move from the bureaucratic hierarchical organisational form, deemed inappropriate and ineffective in the context of increased market volatility, uncertainty and increased competition. Replacing these, 'post bureaucratic' or 'post hierarchical' forms have been championed which are leaner and flatter and thus more responsive, flexible and focussed (Kanter, 1989; Mouritsen, 1999). At their extreme this has been characterised by the 'donut shaped' or 'virtual' organisational form. The new organisational forms have, it is argued, been both driven by and led to major internal restructuring involving, inter alia, overall employee reductions via downsizing (Radcliffe et al, 2001), centralisation of core activities, the outsourcing of non-core activities, the creation of alliances (Doz and Hamel, 1999), a reduction in the levels of hierarchy (delaying) and a more general redesign of core activities (Deakin and Mitchie, 1997; Dunford, 1995; Felstead and Jewson, 1999; Gibbons, 1998; Grabher, 1993; Nittin and Eccles, 1992).

At their extreme such new organisational forms may be unrepresentative. However, they represent an extreme of a general trend towards the decoupling of ownership and the production of goods and/or provision of services. Moreover, such trends are found in both private and public sectors, in services and manufacturing, and in new technology and older technology sectors. This has been variously described as externalisation (Pfeffer and Baron, (1988); the flexibilisation of employee relations (Atkinson and Meager, 1991), the growth of knowledge intensive work and service work (Adler, 2001; Das and Tang, 2001; Herriot and Pemberton, 1995) and 'cascading' subcontracting (Appay, 1998).

### 2.2 The impact on and of management accounting

These changes in organisational form give rise to several questions concerning management accounting (Lapsley and Pallot, 2000). Such questions include the following: Are new management accounting techniques being developed by companies with new organisational forms? Even if management accounting techniques have undergone no change in themselves, are they being used in different ways than previously (for example in terms of frequency of reporting, level of reporting, types of decision in which information is used)? In an examination of the consequences of exercising planning and control across organisational boundaries, Tomkins (2001, p.164) notes, for example, that 'basic accounting techniques may not need revision, but the way in which accountants perceive their roles and employ their techniques and information bases may well change'.

Seal et al (1999) identify three areas in an organisation, concerned with supply chain management, where management accounting has an important role to play. These are: first, in deciding whether to make or buy, and which outsourcing partners to use; second, in managing the partnership, once established; and third, in providing a measure of the benefits received from engaging in such a contractual arrangement. Thus an important consideration would be, if new accounting techniques have been developed to cope with outsourcing and subcontracting, then what precise new techniques have emerged? Where did these new techniques come from (consultants, imitation of 'best' industry practices, developed internally)? Did these new techniques predate or precede change in organisation form? How are they used in these companies? What effects if any, both intended and unintended, have they had on the way companies operate and on the performance capabilities of firms? For example, in a case study used to examine the functioning of a 'flexible firm', Mouritsen (1999, p.51) finds that 'the subcontractors...were integrated in its management control system as factors in a computer program. They were represented as variable costs, could be compared with each other, and could be rewarded on their productivity'.

Similarly, if management accounting techniques have not significantly changed but their use has, then why did such companies feel that no change in techniques was required? In what ways has the use of previous management accounting information change after the change in organisation form? What are the intended and unintended consequences on corporate functioning and performance of the changes in the use of management accounting information? If neither management accounting techniques nor the way in which they are used has changed, what effects did this lack of change have on corporate performance? After all, as Roodhooft and Warlop (1999, p.363) point out, 'outsourcing is only desirable when expected governance and coordination costs resulting from asset specific investments in the relationship with the future supplier are lower than the production cost advantage that the supplier may bring'.<sup>1</sup>

Does it really matter whether or not changes in management accounting take place when organisations change their forms? Radcliffe et al (2001, p.152) find, for example, that 'the influence of accounting on downsizing is much more about process than about particular techniques or critical numbers...(and) its contribution to the restructuring phenomena is not unique but instead part of a broader ascendancy of financial accounting control'.

<sup>1</sup> See also Chalos (1995) and Baiman & Rajan (2002).



Previous researchers have addressed some of these questions by either exploring management accounting change within the broader institutional context (Burns and Ezzamel, 1999; Burns and Scapens, 1998; Dekker, 2003; Langfield-Smith & Smith, 2003; Mouritsen et al, 2001; Reid, Mitchell and Smith, 2000; Van Deer Meer Karsistra and Vosselman, 2000), or in the context of other changes in management practice, such as team working (Ezzamel and Willmott, 1998) and reorganisation of manufacturing space (Miller and O'Leary, 1993; 1994). Chenhall and Langfield-Smith (1998), for example, examine the role of management accounting in developing new performance management systems in organisations undergoing change. They identify five factors that are seen to influence the participation by management accountants in 'change activities', as follows: (i) 'a shared view among managers and accountants of the role that the accounting functions can play within change programs'; (ii) 'accountants are less likely to participate in change when support for the development of accounting innovations is neglected by senior managers'; (iii) 'an 'accounting champion' may be required to promote the role of accounting in change activities'; (iv) there is a 'need for well-developed technical and social skills among accountants'; and (v) 'a reliance by management accountants on the formal structure for their authority was found to be an impediment to their involvement in change programs that involved team-based structures' (Chenhall and Langfield-Smith, 1998, pp.382-3).

Lapsley and Pallot (2000) too explore the role played by management accounting in organisational change; this study, however, concentrates on practice in local government. In the UK, they observe that its role has been limited. However, in New Zealand, they find that 'the introduction of a new breed of entrepreneurial accountant has shifted accounting from an external legitimating device with a limited impact on core activities to an integral part of all aspects of organizational life' (Lapsley and Pallot, 2000, p.227). Thus, as Covaleski et al (1996, p.28) observe, 'political events and ideologies, cultural norms and forces, social patterns of interaction and societal presuppositions, technological changes and subjective meanings that impel people to act in certain ways, all potentially impinge on the roles and nature of management accounting. It is in this manner that a different light is shed on the role and nature of management accounting practices by the research which draws from organizational and sociological theories'. However, the changes in organisational form and the impact of these changes on management accounting practices has not been fully and systematically considered by previous researchers. Thus this report makes a first attempt at evaluating empirically the changing role and importance of accounting under a variety of new organisational forms.

### 2.3 Organisational context

The organisational context for understanding new forms is the breakdown of hierarchy. 'Flexible', 'lean', 'flat' and 'responsive' all entered the lexicon of organisational theory, primarily through the 'guru' literature (Drucker, 1992; Handy, 1995; Kanter, 1989; Peters, 1992), alongside the need to be adaptable and cost conscious. Bureaucratic organisations, staffed by legions of middle managers, were, it is argued, core to the problems of UK and US organisational malaise. The 'end of hierarchy' was thus to be achieved through down-sizing, delaying and business process re-engineering. Such organisational restructuring was purportedly widespread, although previous research (Ezzamel et al, 1995; 1996) has questioned the extent of change; while in the US, Cappelli et al (1997) and Ichniowski et al (1996) have argued that, contrary to earlier assertions, the new forms of governance have introduced potential problems for organisational coherence and also potentially weakened long-term financial viability.

Gietzmann and Larsen (1998) investigate the changes that would be necessary for Western organisations to move to Japanese-style practices, which would involve organisations working more closely with their subcontractors or outsourced suppliers. Such a move, it has been argued, should improve flexibility, amongst other things (cf. Asanuma, 1989). However, they note that the relatively unsuccessful implementation in the West of such Japanese practices can be attributed, to some extent, to 'continued reliance upon traditional accounting governance structures, such as the make or buy competitive bidding calculus' (Gietzmann and Larsen, 1998, p.287). Thus, in order for outsourcing and/or subcontracting to work, perhaps there needs to be some innovation in the management accounting practices which monitor and control these contractual agreements.

Despite grandiose claims of widespread organisational transformation and new forms, academic research remains largely anecdotal and/or based on casual empiricism. If there is transformation, it would seem that this may well be confined to 'leading edge' organisations in, for example, high technology sectors (Kanter 1989; Powell et al, 1996; Reid and Smith, 2003; Walsh, et al 1997; Williamson, 1991). They may well presage a wider diffusion of new organisational forms, and there may be an 'emulation' effect from non-leading edge organisations in both private and public sectors. However, by the same token, they may just be different due to their differing business environments and may thus be somewhat unrepresentative of organisations as a whole. Moreover, separate research (Farrell and Morris, 2003; Ezzamel et al 1999) indicates that organisations, particularly in the public but also in the private sector, are motivated to organisational restructuring as much by cost cutting as a vision of becoming flexible, responsive or whatever. Further, earlier research (Ezzamel et al, 1996) echoes this sentiment, arguing that change is occurring, but that it is incremental, rather than transformational.

Ratto et al (2001) discuss the impact of proposed Government changes to the National Health Service (NHS). These involve the setting of 'team-based incentives'. How, they wonder, should such teams be identified? For example, where teams consist of individuals in different organisations, then 'the organisational structure can be quite complicated' (Ratto et al, 2001, p.30). Difficulties arise when it comes to assessing team performance, considering the usual agency risk problems of information asymmetry and moral hazard, and the potential for free-riders.<sup>2</sup> Furthermore, as Ratto et al (2001, p.30) note, 'possible conflicts between professional values and team member priorities may emerge and this makes it more difficult for team members to identify themselves as part of a team'. Thus such impacts and changes in organisational form throw up new problems for management accountants, in terms of monitoring and controlling resource allocations.

Whilst being cautious of the wilder claims of organisational transformation, three important developments would seem apparent. First, new organisational forms are emerging in new sectors, alongside restructuring in existing organisations. For example, Kulp (2002) examines the sharing of accounting information within a retail setting, and finds that both manufacturer and retailer 'expect that through coordination and information sharing, VMI (Vendor Managed Inventory) will increase supply-chain profits and efficiency' (Kulp 2002, p.654). In fact, she concludes (p.670) that 'VMI is more likely to lead to higher supply-chain profits if both companies commit to sharing precise internal accounting information and reliably transmitting, receiving, and using this information for inventory decisions'. Second, these new forms may be found in fast-growing sectors (for example, 'call centres'). Third, these new organisational forms are predicated upon the outsourcing of core and non-core activities, facilitated by, although not solely dependent on, dramatic changes in telecommunications and information technology.

What is evident, therefore, are changing boundaries of the organisation in relation to internal and external labour markets, based on new and/or increasingly important forms of organisation and of contractual relationships such as public-private partnerships, networked organisations, alliances and long-term supplier relationships. These types of relationships are selected in this study for their capacity to offer rich opportunities to analyse the links between organisational change and management accounting practices (cf. Chenhall and Langfield-Smith, 1998). There is evidence, for example, that the effects of the audit explosion associated with the introduction of new organisational forms and new systems for the management of performance may have been dysfunctional, creating conflicts between the overall objectives of the organisation and specific measures of performance. This 'audit explosion' refers to the spread of system of auditing, monitoring and evaluating business performance both to a wider range of organisations and further down organisational hierarchies (Power, 1997).

Caplan and Kirschenheiter (2000) explore the outsourcing of internal audit services to a public accounting firm, citing Kralovetz's (1996) finding that 12 per cent of companies outsource at least some of their internal audit work. They too acknowledge the agency problems that can arise under such contractual arrangements. However, in the case of auditing, they note (p.396) that 'outsourcing does not significantly affect management's ability to monitor internal auditing' as, according to the US rules under which their sample of firms operates, 'public accountants providing outsourcing services cannot direct the internal audit function; the top internal audit position must remain inside the firm. Hence, the ability of senior management and the audit committee to monitor the individual who has overall responsibility for the internal audit function appears unchanged. This individual's relationship with the audit staff changes, but the basic hierarchy of audit supervision and work remains in place'. Thus the extent to which management accounting is affected by outsourcing or subcontracting activities might depend, to a great extent, on the nature of the activity being outsourced.

## 2.4 Conclusion

The questions posed by this research proposal are best addressed using an inter-disciplinary approach (cf. Covaleski et al, 1996). A good means of understanding management accounting practices is to examine their emergence and functioning within their broader organisational context. This does not necessarily mean that management accounting always follows where management practices lead; for we wish equally to consider those situations where management practices, and indeed changes in organisational form, are promoted by certain management accounting practices. By locating management accounting practices within their organisational context, we wish to underscore the argument that both management and accounting practices can mediate and condition each other.

<sup>2</sup> See, for example Gibbons (1998) and Holmström and Roberts (1998) for more on the agency problem. See also Baiman et al (1995), who investigate organisational differences within a simple agency framework, and explore their effect on task allocation and compensation risk decisions.

The emerging organisational forms we have mentioned above are clearly interesting in themselves, but they also have important implications for management accounting (Tomkins, 2001). What is at issue here is the extent to which management accounting practices are deemed central to these developments. The running themes include: when and from whom it would be deemed advantageous to the company to subcontract; what are the attendant issues of managing dynamic and complex buyer-supplier relations (Seal et al, 1999); and what is the impact of the new organisational form on corporate performance. Some statements already exist in the literature, particularly in the form of consultant pronouncements, concerning what is deemed to be desirable attributes of management accounting in support of new organisational forms such as outsourcing (see, for example, Stacey, 1998). However, this literature amounts to no more than a straightforward listing of some of these desirable management accounting attributes which, however valuable, are not contextualised to account for the specific history, ownership attributes, technological and market characteristics of individual firms. Assessing the impact of new organisational forms on corporate performance has received very little attention. So far, some researchers have alluded to the desirability of employing 'aggregate performance measures', including such aspects as product quality, delivery etc, in addition to financial indicators on efficiency and effectiveness to assess the performance of networks and supplier chains (Beamon, 1999; Berry et al, 1999; Cohen and Lee, 1988; Oliver and Delbridge, 1999). These findings, however, are fairly tentative and research in this area remains at an embryonic stage. The increased reliance upon subcontracting which has been noted recently by many writers runs counter to the conventional arguments in support of vertical integration when the activities to be subcontracted could be produced by the firm (this is not an obvious option, at least in the short term, for retailers). Here, we are concerned with identifying the role of management accounting practices in the context of three inter-related questions centred around subcontracting: the decision to outsource; managing the supplier chain; and the impact of outsourcing on corporate performance. Chapter 3 now introduces the methodology by which we strive to achieve this aim.

## 3. Research methods

### 3.1 Introduction

Our aim is to understand management accounting practices in change situations by examining their emergence and functioning within the context of emerging supply chain relations. This research falls within the broader research category that seeks to contextualise the role of accounting practices within the broader organisational context. Previous work has, for example, included: analysis of the interface between organisational issues and management accounting (Ezzamel et al, 1995; Ezzamel and Wilmott, 1996; 1998); the investigation of alternative organisational forms from a management perspective (Farrell and Morris, 1999; 2003); and studies of venture capital, developments in information systems and organisational form (Reid et al, 1997; 2000; Smith, 1999a; 1999b).

In this research project we employ a combination of qualitative and quantitative research methods; a mailed questionnaire and case studies in five organisations. At the core of the project are the case studies discussed in Chapter five to nine, representing various organisational form archetypes. Case study research affords an in-depth analysis and interpretation of emerging forms of supply chain relations, and offers rich, contextualised and longitudinal understanding of micro-processes of organisational change situations. However, findings from case studies are difficult to generalise, partly because of the small number of organisations that can be studied in-depth and partly because qualitative research employs different research methods and methodologies (Eisenhardt, 1989; Hartley, 1994). In order to provide a more general understanding of accounting and supply chain relations in modern organisations, we complemented the case studies by the quantitative data gathered by means of a questionnaire survey, as discussed in Chapter four.

### 3.2 Research sites

In order to evaluate the changing role of accounting under new organisational forms, the research aimed to cover five archetypes of forms which include manufacturing and service sectors and high and medium level technologies, all in the private sector, and one public sector organisation. Recent research has identified various emerging organisational archetypes in the area of supply chain. These may include:

- Vertically disintegrated manufacturing companies in engineering and engaged in extensive sub-contracting relations.
- Vertically integrated manufacturers, such as those in the food industry, that rely on retailers to sell the bulk of their products while having some own outlets to sell a small part of their produce to the final customer.
- Franchise type of organisation such as that found in the manufacturing or retailing sector.
- Retail organisations which are dependent sub-contract manufacturers to stock up their shelves either with manufacturers own brands or with retailers brands manufactured for them by third parties.
- Quasi-market public sector organisations, such as hospitals and local education authorities.
- Hollow (donut-shaped) organisations, such as those working in software engineering.

In our selection of case study organisations to represent such a wide variety of organisational forms, we were naturally restricted by availability of good quality access. We were able to match five organisations to five of the above archetypes; the one missing category is the hollow form. As we restricted our number of case studies to five organisations to ensure our ability to gain in-depth and rich understanding of organisational processes, one category had to be sacrificed. The hollow form, while interesting, was the most difficult for us to secure access to in reasonable time. Nonetheless, our five organisations in which we held interviews cover a diversity of organisational forms, and display varying characteristics (in terms of ownership, size, age, industry, etc.). Our intention is that this research project captures variations as well as similarities in management accounting practices for supply chain relations across different organisational forms.

### 3.2.1 Vertically disintegrated manufacturing subcontract links

Manufacturing companies, in industries such as engineering, automotives and consumer electronics, have a long history of subcontracting out the production of components. However, the 1980s and 1990s witnessed a considerable breaking down of large vertically integrated manufacturing complexes in the UK, USA and elsewhere, largely influenced by the success of Japanese manufacturers in these industries. Indeed, not only are many non-core manufacturing functions being outsourced, but the logic of 'make or buy' decisions is being turned on its head. The dominant question is now 'why not outsource', rather than 'why outsource' (Anderson et al, 2000; Imrie and Morris, 1992; Morris and Imrie, 1991). Moreover, the definition of what are deemed 'core' and 'non-core' activities is no longer entirely, or even largely, dependent upon technical operating arguments but is becoming increasingly predicated upon the cost of making internally compared to the cost of buying by outsourcing externally (Ezzamel et al, 1999). These relationships are, however, characterised as long term partnership networks. While such a form offers flexibility for the large firms and potential cost-savings, it also adds considerably to the organisational complexity. To represent this organisational form, we selected a company in the automotive industry.

### 3.2.2 Vertically integrated manufacturer/retail supplier

Vertically integrated suppliers to retailers (notably in food and drink, clothing and other sectors) have been increasingly drawn into close links with large UK retailers, as a consequence of a number of factors. First, the growing concentration of retail in the UK; second, the growing proportion of sales through large retailers and third, due to the increasing burden of demands that the large retailers are placing on suppliers as they seek to use their supply chain as part of their competitive advantage. Large, mass producers in, for example, the food industry are expected to be increasingly flexible to meet frequent small batch demands of retailers and to look into their increasingly sophisticated supply chains. To represent this organisational form we selected a large multinational food manufacturer.

### 3.2.3 Franchise operation

In the late 1980s franchising was viewed amongst some as a representation of the enterprise economy. From 1985 to 1990, there was a five fold increase in franchise activity with 17,000 franchised outlets and nearly 150,000 employed either as franchisees or unit personnel (Felstead, 1991). By 1998, over 300,000 people were directly employed in the franchising sector, which accounted for 29% of all retail sales (NatWest, 1999). While franchises operate without close and direct supervision they are required to follow procedures clearly laid down and subject to unilateral change (Quinn, 1999; Falbe et al, 1999). Moreover, while they receive profits (after payment to the franchiser) and either buy or lease the means of production, the latter are similarly open to restrictions. Typically franchises are found in service provision (e.g. Molly Maid UK) or retail services, retail outlets (e.g. Body Shop International Plc), building maintenance (e.g. DynoRod Developments Ltd), health and leisure (e.g. Tanning Shop) and hotels and catering (e.g. Global Travel Group). To represent this organisational form, we selected a manufacturer/franchiser of chocolate, ice-cream and other confectionery.

### 3.2.4 Retailer buyer-supplier relations

Retailers have typically been vertically disintegrated, relying on third parties for the production of retail products and solely concentrating on the selling of these products. Broadly, this encompasses two types of arrangements. First, there are retailers who largely sell products branded by the manufacturer, and second, there are retailers who sell own brands manufactured by an independent supplier. For example, clothing retail may be typified by the example of Marks and Spencer (M&S) in the UK. Although M&S has little control in ownership terms over its subcontract clothing manufacturers, it has an extremely strong de-facto control over subcontractors due to the large volumes of garments that it subcontracts out and the high dependence (sometimes close to 100%) that subcontractors have upon M&S as virtually sole customer.

While these types of relationship are well established, two recent features have added considerable complexity. First, in the case of M&S, it has largely abandoned its 'buy British' policy and is now securing the majority of its garments from overseas. This adds considerable logistical complexity (Gereffi, 1996). Garment production, for example, is often subcontracted to a 'middle man' in Hong Kong who in turn subcontracts production to mainland China. Second, in the UK there have been a number of new retail entrants into this field, such as ASDA with its 'George' label. As an example of retailing, we chose a large UK retailer that does not engage in manufacturing but sells both the branded products of other manufacturers or its own labels manufactured by external suppliers.

### 3.2.5 Public sector

Public sector organisations have undergone a dramatic change in their form, structure and functions. Central to this change has been the growth of private outsourcing of services. Aside from legislative improvements (through CCT and Best Value), there have been the contradictory demands of capital spending and constraints at the same time as increasing demands for new skills and technologies and rapid productivity and performance improvements (Vincent et al, 2000). As a result there has been pressure to outsource non-core functions such as, in the NHS, non-medical services and information services (Boyne, 1998). Such outsourcing has led to the emergence of a partnership model involving new organisational forms, typically networked-based, which span organisational boundaries (Buckley and Mitchie, 1996; Farrell and Morris, 1999; Hoggett, 1996; Machado and Burns, 1998). To cover this organisational form, we selected a major teaching NHS Trust hospital.

### 3.2.6 Case study sample

In practice, the research sites to be used for the case studies were selected for their representativeness, in terms of the organisational forms that we wished to investigate, and for the participants' willingness to cooperate over a period of time. Easterby-Smith et al recommend (2002, p.91) that researchers 'avoid being over-anxious about getting all the data in one go. Relationships take time to form'. The sample finally chosen is as outlined below, although specific organisations are not identified, due to the confidentiality agreement made at the initial point of contact. Some additional information pertinent to the project is also given, in support of the decision to choose them for interview.

#### Case 1: The vertically disintegrated manufacturer

This Company has been around for 100 years, and is an integral part of the automotive industry. The Company's Chairman and CEO stated in their annual report for 2002 that 'our plan focuses on the fundamentals that drive success in our business: great products built with high quality at a low cost and strong relationships with employees, suppliers and dealers. For the year we exceeded nearly all the commitments of our plan'. He referred to a number of initiatives that the company had put in place to maintain Case one's competitive edge in the marketplace. For example, he explained that 'one of the processes we are expanding to accelerate cost reduction and quality improvement is...a data-driven methodology that uses statistical tools to reduce waste and variability'.

Another process that the company intends to expand is what they call Team Value Management (TVM). As the Chairman explained 'TVM brings our engineering, purchasing, manufacturing and finance areas together with our suppliers in commodity-focused teams to improve value while maximizing quality...TVM is a key component in achieving our financial objectives for the year'. Finally, he reports that 'in January 2003 we added a new process aimed exclusively at systematically accelerating our cost cutting. Our leadership team identified cost-reduction bottlenecks in two broad categories, global and operational, and assigned a cross-functional team led by a high-ranking executive to every issue. The teams and their leaders are responsible for finding faster and better ways to reach our cost reduction goals, and will report their progress to senior management on a monthly basis'. All of this is aimed at making Ford's plants throughout the world 'lean, flexible and cost-efficient'.

#### Case 2: The vertically integrated manufacturer/supplier

This case is the world's leading food company and Switzerland's largest industrial company. It's recent performance has been achieved through 'managing complexity...delivering operational efficiencies...driving growth...and creating winning environments'. A priority for the Group in 2002, as stated in its Management Report 2002, was 'to lay the foundations for continued improvements in business efficiency and EBITA (earnings before interest, tax and amortisation of goodwill) margins'. With this aim in mind, the company has pushed forward its GLOBE programme, which they define as below:

'GLOBE is designed to improve the performance and operational efficiency of our businesses worldwide and is making good progress with its three objectives: to establish best practice in business processes; to align data standards and data management and to use common information, systems and infrastructure'.

Of particular interest to this project is the company's aim of standardising data, which in turn consisted of three parts: establishing definitions for the data standards they wished to identify; data conversion, including 'cleansing, converting, comparing and loading; and finally, data management, which involved 'the implementation of new processes, organisations and tools'.

The results of the trials of the company's GLOBE initiative were successful, and summarised as follows in the group's Management Report (2002):

'A better understanding of our purchasing data has allowed us to identify on a global basis what we buy from which supplier...markets within a region are individually buying the same materials, even including globally and regionally traded items, from the same suppliers...it is clear that we have not been using our size as a strength and that we will be able to realise substantial savings from this initiative'.

**Case 3: Manufacturer/franchisor**

The company is involved in the retailing and manufacturing of high-quality chocolates, toffee, ice-cream and other confectionery. The Chief Executive's business overview for 2002 stated that: 'I make no apologies for putting an internal organisational initiative as a key strategic priority. The improvement in like-for-like sales in own stores and franchised locations has not arrived by accident, nor merely through improvements to the product range alone. Over the last two years, we have improved a number of internal processes and systems which have produced good results, particularly the management of stocks to avoid overhangs at the key seasons whilst assuming we do not run the risk of missing sales through stock shortages in stores. However, a recent review of the systems supporting our own stores identified that store managers were still spending an excessive amount of time on cumbersome administrative processes, not enough time on selling to customers and coaching their colleagues. We realised there was a golden opportunity to unlock this time and so further enhance like-for-like sales by, for example, redesigning the weekly stock ordering process and the planning of colleague hours.'

Further, and in relation to third party distribution, he added that 'we have now developed the wider distribution of (Case 3's) branded product through additional channels working in partnership with others, and we look to expand into further outlets in time. For this new business to be successful, we have to ensure we properly and professionally manage these new relationships and fully understand the different requirements needed from product development through to product distribution. This again will demand that we adapt our internal structure and processes to meet the exacting requirements of our new partners'.

**Case 4: The retailer**

This retailer has grown since its formation in 1924 as a small grocery store. It is currently one of Britain's leading food retailers, but is also now an International Group, providing, amongst other things, financial services and what they term 'non-food' items across the globe. Some of the company's success can be put down to its innovative 'step change programme', introduced on the principles of providing goods and services that were 'better, simpler and cheaper'. Case 4's systems are summarised in the company's Annual Review as follows:

- 'Our continuous replenishment system, where products are ordered automatically based on continuous information flows from our checkouts, is now operating on nearly all food and drink lines, raising availability and simplifying operations.'
- Using the world's first store-specific merchandising system we can now tailor each store range to meet the precise needs of its customers. Linked to continuous replenishments, product space is allocated to demand.'
- A new automatic scheduling system in stores works out the optimum staffing levels required at checkouts, to match 12 million customers per week with 18,000 checkouts.'

In addition, the company has extended its supply chain process, appointing a new team 'to increase our efficiency by better managing the movement of goods between suppliers and our regional distribution centres. By working with suppliers, hauliers and consolidators we can reduce costs, miles travelled, empty and lead times. We expect significant savings in the next three years'.

**Case 5: The NHS Trust hospital**

This NHS Trust provides acute hospital services to people living in Northern England, as well as specialist services to people from further afield who require specialist heart surgery, treatment for burns, plastic surgery, cancer services, renal services and rehabilitation for those with major physical disabilities. There is less in the public domain for the Trust than for the rest of our sample, given the nature of the organisation. However, we do have access to a Clinical Governance Review Report on the Trust, undertaken by the Commission for Health Improvement (CHI) in 2002.

Amongst other things, the CHI report concluded that 'the trust needs to develop strategies to ensure that progress on clinical governance covers the whole organisation. These strategies should help to extend its work or clinical governance across boundaries with partner organisations. CHI saw good examples of clinical governance working in clinical teams, but the trust needs to put structures in place to make sure that this is the norm and not the exception'. In terms of the Trusts organisation, the CHI observed that 'there have been many changes in the senior team in the recent past and also big organisational changes. This has left some staff feeling unsupported and the trust needs to find ways to listen to staff and provide supportive leadership to develop openness in the trust'.

**3.3 Research questions**

Having appraised the literature, a number of areas of concern were identified as being central to the role of management accounting in the context of supply chain relations and, therefore, worthy of investigation in the study. We have grouped the detailed issues we consider in our research under three headings: the role of management accounting calculations in the supply chain; the relationship between management accounting and the management of supplier-chain relations; and management accounting and the impact of outsourcing on corporate performance. These issues are detailed below.

### 3.3.1 The role of management accounting calculations in the supply chain

- What types of accounting calculations and practices are used in the decision to outsource? Have new accounting techniques been developed for that purpose? If yes, what are these new techniques, and where did they come from? Or are existing management accounting calculations being used in new and different ways from previously? If so, how?
- When a company has manufacturing facilities, what is the role of management accounting in deciding upon which activities are to be outsourced and which activities are to be performed internally?
- What other arguments, other than accounting, impact upon this decision? What is the role of management accounting in defining the terms 'core' and 'non-core'?
- How, and to what extent do these definitions of 'core' and 'non-core' vary over time and how does the role of management accounting in this context change over time?

### 3.3.2 Accounting and the management of supplier-chain relations

- Have new management accounting techniques been developed to manage emerging supplier-chain relations? If so, what are these new techniques, and where did they come from? Or are current management accounting techniques being used in new ways to manage supplier-chain relations? If so, what are the changes in the way management accounting information has been used?
- What is the role of management accounting in the writing of outsourcing contracts?
- What role does management accounting play in overseeing the exercise and revision of outsourcing contracts?
- What is the impact of accounting calculations on the determination of the length of the outsourcing contract?
- What is the role of management accounting in enforcing outsourcing contracts? In cases of breach of contract, how are sanctions defined and what role does accounting play in this context? Also, how are the costs to the company of breach of contract assessed? How is the impact of this failure upon the performance of other units/departments within the company assessed?
- How are different suppliers compared? What precise accounting metrics are used to rank suppliers? When is it felt desirable to terminate contracts with specific suppliers?
- To what extent do management accounting practices underpin network relations and facilitate or frustrate the development of mutual trust between the supplier and the company?
- How is expertise (technical, product design, etc.) assembled, promoted, and transferred within and across the supplier chain? Is this transfer of knowledge subjected to any form of accounting calculation? If so, how?
- Is there a transfer of accounting and finance skills from the company to the supplier? If yes, how is this achieved, and what are the perceived benefits?

### 3.3.3 Management accounting and the impact of outsourcing on corporate performance

- Is the impact of outsourcing on corporate performance assessed? If so, how?
- What measures of efficiency and effectiveness are used by companies? What is the accounting input in these measures?
- How, if at all, is value creation measured? Similarly, how is value capture measured?
- What is the basis for deciding to continue with outsourcing? Is it earning a predetermined profit target based on company's previous performance? Or is it based on bench-marking against major competitors? Or bench-marking against industry norms?

### 3.4 Research instruments

Two research instruments were designed around the themes identified above, in order to elicit the data required for the project. The first, a semi-structured interview schedule, was designed to enable the interviewer to cover a number of key topics, but also to give the respondent the opportunity to talk quite freely about the subject. A completely unstructured interview would provide 'large amounts of rich, fertile but disorganised data' (Jancowicz (2000, p.237)), whereas the more guided approach taken here allows specific identified issues to be addressed in some detail.

The second research instrument, a postal questionnaire, was designed to be sent out to a larger sample of firms and organisations. The main advantage with questionnaires is that 'it allows you to standardise your questioning to such an extent that a more numerate, statistically-based analysis is possible, and permits you to test out hypotheses more explicitly' (Jancowicz, 2000, p.269).

#### 3.4.1 Schedule for semi-structured interviews

Table 3.1 gives the semi-structured interview agenda that was designed for use during the face-to-face interviews with our case study sample. The full interview schedule is contained in Appendix 2 to this report.

**Table 3.1 Semi-structured interview agenda**

1. Deciding to outsource
2. Managing suppliers
3. Accounting implications
4. Company performance

The first section of the semi-structured interview schedule covered the decision by the company to undertake outsourcing in the first place. Respondents were given the following definition, before being asked to consider the rationale behind outsourcing their organisation's functions:

'Outsourcing is an arrangement whereby a third party provider assumes responsibility for performing functions at a pre-determined price and according to predetermined performance criteria'.



We were interested in the extent to which business activities were outsourced, as well as the effect on costs that they expected to see through outsourcing. It was also of interest to us to determine the motivation behind outsourcing, and the outcomes experienced compared to those anticipated.

Section two was concerned with the impact on the management of the organisation's suppliers. This covered the size and duration of contracts with specific suppliers, and the ways in which they were managed or controlled. Respondents were also asked to identify any 'hidden costs' or otherwise unanticipated problems with outsourcing, and to describe any ways in which these problems had been alleviated. In this regard, privacy and confidentiality were two issues that were addressed explicitly.

The third section of the interview schedule addressed the accounting implications of undertaking new outsourcing and/or subcontracting deals. This began with a look at the types of accounting calculations made to assist in making decisions about whether to outsource or not, and which suppliers to choose. We were also interested in determining whether any new accounting techniques had been developed explicitly to cope with these new contracts, and who would be involved in assisting these developments. We wanted to find out whether our sample companies had any influence over the accounting system of their outsourcing organisations, and the nature of any such influence. Finally, the last section of the semi-structured interview schedule enquired about the effect of outsourcing or subcontracting on organisational performance. This might be in financial terms, or it might be in terms of the quality of product or service the company offered.

### 3.4.2 Postal questionnaire

The postal questionnaire was developed along the same themes as the schedule for semi-structured interviews, but had five main headings, as in Table 3.2. The full questionnaire, as sent to the private sector companies in the sample, is contained in Appendix 4. The first section was designed to elicit some basic information on the organisation concerned. It covered items like the nature of the organisation, and its size, in terms of turnover and employees. It also enquired as to the extent of organisational change that had occurred during the previous three years, and the main reasons for the occurrence of such change.

Table 3.2 Postal questionnaire agenda

1. Company Information
2. The Decision to Outsource
3. Managing Suppliers and the Supply Chain
4. Accounting Implications
5. The Impact on Company Performance

The remaining section of the postal questionnaire covered much the same topics as in the semi-structured interview schedule. However, some notable differences are worthy of comment. First, the postal questionnaire was to be sent to three different organisational types: private sector companies (Private); local authorities (LA); and national health service trusts (NHS). Therefore modifications were made to the introductory letter (see Appendix three) and throughout the questionnaire, where necessary, to reflect the organisational type being approached. For example, we might expect to see a different response for private sector compared to public sector organisations when we ask questions about competitors and/or benchmarking.

The other main difference between the semi-structured interview schedule and the postal questionnaire is in the design of specific questions. With the postal questionnaire, questions were designed to elicit definite responses, which could be coded and classified for detailed statistical analysis, rather than written discursive comments, which are of more use for case studies. So, for example, many of the responses in the postal questionnaire could be coded as (0,1), or binary variables, where '1' signifies a positive response. Other variables were simply numerical – for example, 'how many employees do you have?' or 'what was your latest annual turnover?' And many of the responses were measured on a Likert scale, to gauge the respondent's strength of feeling about a particular statement. For example, 'on a scale of 1 to 5, where 1 is weak and 5 is strong, how much do you agree with the following statements? ...'.<sup>3</sup> These could then easily be entered onto a database for later analysis, as contained in chapter 4 below.

### 3.5 Interviewing

One potentially problematic area in the case studies is the issue of organisational access. Given research contacts in the UK gained over an extensive period by the three applicants, there were few, if any problems, in accessing the chosen research sites. However, good practice requires maintaining a good working relationship with the subjects of the research.<sup>4</sup> Potential respondents were therefore approached first of all with a preletter (see Appendix 1). This described the nature of the study, and was designed to elicit their participation, by promising to treat their responses with confidentiality.

<sup>3</sup> See, for example Easterby-Smith et al (2002), Chapter 5: Qualitative Methods, for more information.

<sup>4</sup> See, for example, Jancowicz (2000) Chapter 7 on 'gaining entry', for a discussion of best practice.

Once the pre-letter had been sent, follow-up phone calls were made to arrange appointments with one, or a number, of key personnel within the organisation. Meetings then took place with key staff, including both designers and users of management accounting systems (for example, strategy makers, managers at various organisational levels, staff involved in the supply chain, management accountants, and so on) in each of the case study organisations.

The interviews themselves began by the researchers introducing themselves and explaining that they were part of a multi-disciplinary project team examining the role of management accounting in processes of organisational change, with particular reference to supply chain relations. This enabled the respondents to learn about the main aims of the project and what the sponsors were hoping to gain from it. They were told that the researchers would like to conduct a number of interviews in the organisation and, in this way, additional contact names were obtained for possible future interviewees. Respondents were encouraged to participate by assurances of confidentiality and, once they felt comfortable with the researchers and the fieldwork methods being used, they generally agreed to the interviews being tape-recorded. Following the interview, a thank you letter was sent to those who had participated, and the recorded interview was transcribed in order for them to be analysed. In total, 93 interviews of between one and two hours were conducted.

### 3.6 Postal questionnaire

The postal questionnaire (Appendix 4), in its varying forms, was sent out along with the descriptive pre-letter (Appendix 3) to a sample of organisations. The private organisations selected were the Times 500 companies. For the sample of Local Authorities, the Guardian Local Authority Directory was consulted. The NHS Trusts sample was taken from The Fitzhugh Directory of NHS Trusts. The number of valid responses received from the mail shot were  $n=73$  (private sector organisations),  $n=29$  (National Health Service (NHS) Trusts), and  $n=30$  (Local Authorities (LA)). Overall, this represents a response rate of around 15 per cent, which is about what would typically be expected using such data collection method.

In some instances, the questionnaire was returned unanswered or not returned at all. In these cases a follow-up letter and additional questionnaire were posted, and potential respondents were given the opportunity to state why they had refused to complete the questionnaire, or why they felt unable to do so. Occasionally, the original questionnaire had been misplaced, or misdirected, so this additional follow-up enabled the sample to be extended to some (albeit small) degree.

### 3.7 Conclusion

This chapter has discussed the methodology used in collecting the data for this study. Two new research instruments were designed for use: (a) in semi-structured fieldwork interviews; and (b) as postal questionnaires. A description is given of the ideal research sites to be used in addressing the research questions identified. Then, the actual sample of organisations approached is described in some detail, without being identified explicitly. An illustration is given of the interviewing process, as it was undertaken. Finally, the ways in which the postal questionnaire survey was undertaken are outlined. The next chapter now goes on to discuss the information obtained from the postal questionnaires.

## 4. Analysis of questionnaire results

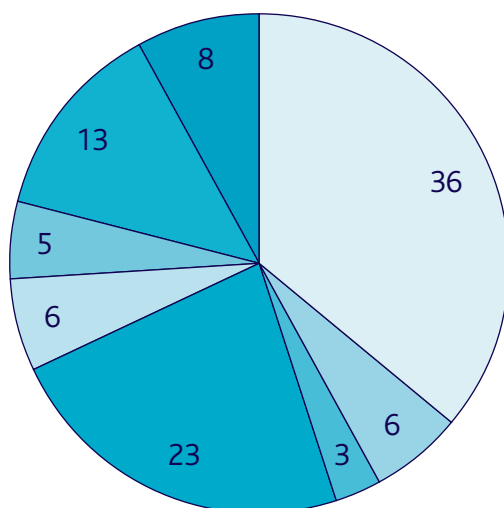
### 4.1 Introduction

This chapter presents our findings from the data gathered by postal questionnaire. It covers a representative sample of responses from private sector companies, NHS Trusts, and Local Authorities. Thus it provides preliminary evidence of the ways in which management accounting is influenced by developments in organisational forms. The key issues examined are as identified in earlier chapters, and include: the influence of subcontracting on the organisation's management accounting, the management of buyer-supplier relations and the impact of a changing organisational form on corporate performance.

### 4.2 Background information

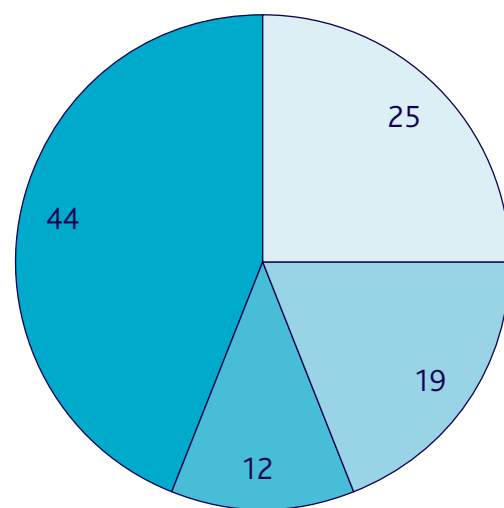
Figures 4.1 to 4.3 show the breakdown of organisational types into their constituent parts. First, in Figure 4.1, we have the private sector companies who participated in the survey. Manufacturing accounts for just over a third of respondents (36%), followed by retail and wholesale at just under one quarter (23%), then financial services at 13%. Figure 4.2 gives the National Health Service (NHS) Trusts breakdown. Hospital Trusts, unsurprisingly, were the largest group, at 44%, followed by Mental Health Trusts (25%), Ambulance/Paramedic Trusts (19%) and Community Trusts (12%). Finally, the geographic operations of the Local Authorities who responded were primarily District (66%), followed by London or Metropolitan (14%), then County and Borough at 10% each. Thus we have a good distribution of respondents from across our organisational forms.

Figure 4.1 Private sector companies



- 36% manufacturing
- 6% energy and water
- 3% construction
- 23% retail/wholesale
- 6% hotels/restaurants
- 5% transport/communication
- 13% financial services
- 8% business/IT services

Figure 4.2 National Health Service (NHS) Trusts



- 25% mental health
- 19% ambulance/paramedic
- 12% community
- 44% hospitals

Figure 4.3 Local authorities

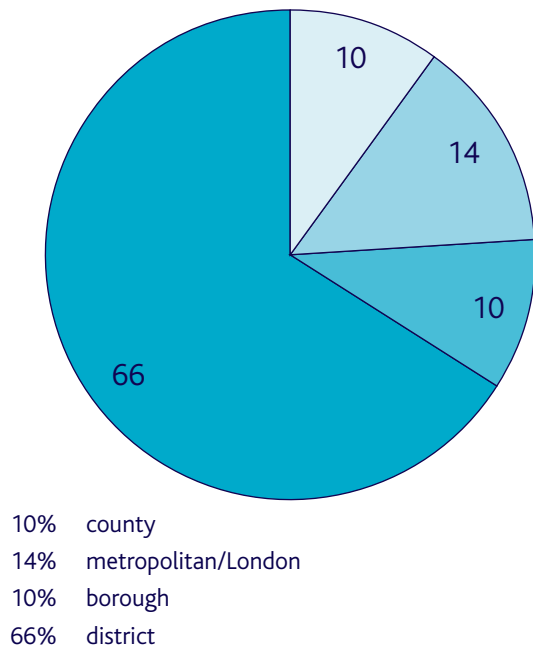


Table 4.1 now summarises some of the key features of the organisations approached. Respondents were asked to indicate on the questionnaire which size grouping they fell into, in terms of the number of employees (EMPLOY). Private sector companies (PRIVATE) had, on average, between 5,001 and 10,000 employees; NHS Trusts (NHS) between 2,001 and 5,000; and Local Authorities (LA) the same, between 2,001 and 5,000. The extent of organisational change (CHANGE) experienced during the last three years was most marked in the NHS (=3.80), and similar for private companies (=3.57) and LAs (=3.5), where the variable was coded on a Likert scale from 0 (= no change) to 5 (= extreme change).

Table 4.1 Summary information

	Private 1.00 Mean	NHS 1.00 Mean	LA 1.00 Mean	Total Mean
EMPLOY	5694.08	3163.79	3429.69	4629.56
CHANGE	3.57	3.80	3.55	3.61
MERGAQ	.51	.43	.19	.42
DEMDIV	.23	.17	.13	.20
STRATALL	.23	.43	.35	.30
INCDIV	.31	.50	.03	.29
REDDIV	.26	.20	.58	.32
REMLAY	.44	.37	.55	.45
NEWFORM	.55	.77	.68	.62
MA	.95	.97	.41	.83
MASTAFF	7.36	10.03	5.00	7.75
OUTSOUR	2.60	2.67	2.66	2.63

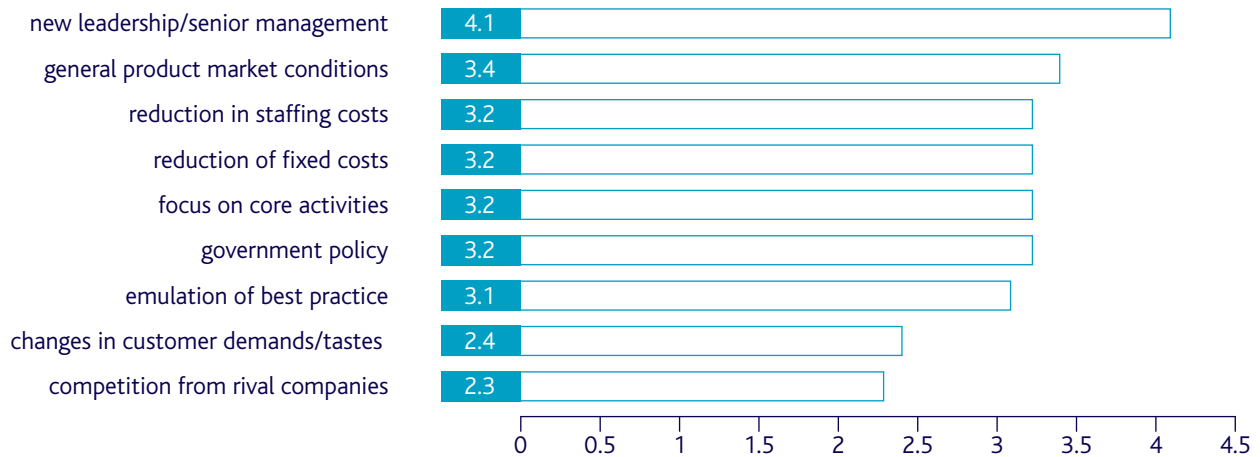
#### 4.2.1 The extent and form of organisational change

Dummy variables (0-1; 0 = no change; 1 = change) were introduced to capture the nature of the recent change that had occurred in organisational form. First, in terms of formal or legal structure, about one half of private companies had been involved in a merger or acquisition (MERGAQ =51%); and 43% of NHS Trusts had seen a merger or amalgamation. Just under one quarter of private companies had been through a demerger or a divestment of part of its activities (DEMDIV =23%), but this was relatively unimportant in the NHS (=17%) and LAs (=13%). On the other hand, the NHS had been most likely to see a strategic alliance or partnership come about (STRATALL =43%), followed by one third of LAs (=35%).

The internal effects of these changes varied across organisational types. The NHS had been most likely to see an increase in the number of departments (INCDIV =50%), whereas about one third of private companies (=31%) had experienced an increase in the number of departments or divisions. LAs, on the other hand, were more likely to have seen a reduction in the number of departments (REDDIV =58%). Reductions were less likely in private companies (=26%) or NHS Trusts (=20%). However, the removal of managerial layers (REMLAY) to simplify and flatten organisational structure was quite common throughout (LA =55%; Private =44%; NHS =37%). The NHS was the most likely type to have seen the introduction of a completely new structural form or model (NEWFORM =77%); though the majority of LAs (=68%) had also seen similar developments. Just over one half of private companies (=55%) had, similarly, seen new structures introduced. Thus the changes in organisational form discussed in the literature are evident in the sample analysed in our study.

Respondents were given the opportunity to identify the factors which were most likely to have influenced changes in organisational form. The questions measured the importance of a given statement on a Likert scale where '1' signifies 'unimportant' and '5' signifies 'very important' ('irrelevant' was coded as '0'). Their responses are graphed in Figure 4.4 below. Clearly, the most important factor in influencing change in form was the introduction of new leadership or senior management team to the organisation. This was followed by a response to the general product market conditions. Of lesser importance, though still quite influential, was the need to reduce staffing or fixed costs, the wish to focus on core, rather than peripheral, activities, or the imposition of new government policy. A desire to emulate best practice was also relatively important, but changes in customer demands or tastes, and competition from rival companies were seen to have little influence on organisational form.

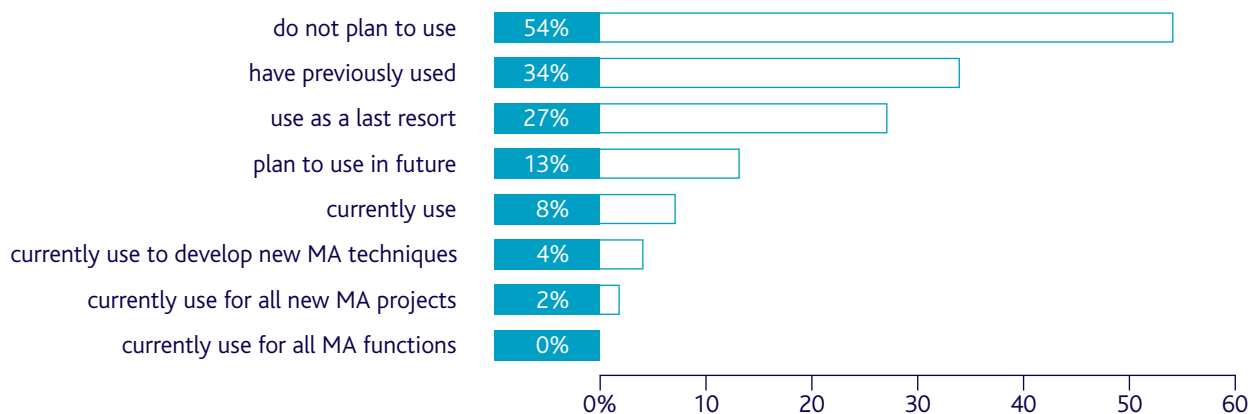
Figure 4.4 Factors influencing change in organisational form



Looking at the information on management accounting facilities by organisational type, nearly all private sector firms had a specialist management accounting function (MA =95%), as did most NHS Trusts (=97%); compared to only 41% of LAs. For those who did have such a function, the average number of management accounting specialists working in the organisation was 10 (NHS), 7 (Private), and 5 (LA).

Figure 4.5 gives evidence on the use of management accounting consultants. Overall, more than half (54%) of respondents said that they had no plans to use consultants for management accounting purposes. Just over one third (34%) had previously used consultants, but 27% said that they would only use them as a last resort. Only a minority of all of the respondents to the questionnaire said that they currently used management accounting, whether for routine purposes, new projects or to develop new techniques.

Figure 4.5 The use of management accounting consultants



### 4.3 The decision to outsource

The questionnaire contained the following explanation in relation to outsourcing, so that respondents were fully conversant with what was required: 'by outsourcing, we mean an arrangement whereby a third party provider performs functions for your company to meet pre-determined price and performance criteria'.

#### 4.3.1 The extent of outsourcing and subcontracting

Across all organisational types, the extent of outsourcing and subcontracting (OUTSOUR) was similarly moderate, on average (Private =2.6; NHS =2.67; LA =2.66), on a scale from 0 (none) to 5 (a great deal) (cf. Table 4.1). Overall data on the nature of outsourcing is contained in Table 4.2. The activities which are currently outsourced are listed in the first column from most to least important. So cleaning and catering top this list, with security and maintenance also being outsourced by more than half of respondents. Payroll and distribution were equally likely to be outsourced (38%), then computing or IT facilities. Of least significance, and probably to be

expected, only 8% of organisations subcontracted or outsourced part of their core business. The third column in table 4.3 shows, for those who currently outsource an activity, the percentage that had previously conducted this activity in-house. The most striking observations are on payroll and core business. One half (50%) of those who now outsourced payroll had previously handled this activity in-house. Two thirds (64%) of organisations outsourcing core business had previously dealt with this in-house.

Possibly of more interest is the final column of this table, which shows whether the activity now being outsourced was calculated, or perceived by our respondents to cost more than, less than, or the same as previously, when it was undertaken in-house. Most activities appear, on average, to cost the organisation less under outsourcing and subcontracting. Two are seen to cost the same, these being computing or IT facilities, and those core business activities which were subcontracted. Only training and recruitment were reported to cost more under outsourcing.

Table 4.2 The nature of outsourcing

Service/activity	Percentage contracting out	Of those outsourcing, percentage previously in-house	Activity now costs
Cleaning	77%	35%	Less
Catering	61%	38%	Less
Security	57%	34%	Less
Maintenance	52%	40%	Less
Payroll	38%	50%	Less
Distribution	38%	30%	Less
Computing	28%	40%	Same
Printing	19%	42%	Less
Training	18%	41%	More
Recruitment	15%	41%	More
Core business	8%	64%	Same

Table 4.3 Reasons for outsourcing

Activity	Save money	Activity	Improve service	Activity	Focus on core	Activity	Improve flexibility
Core business	73%	Training	50%	Recruitment	50%	Training	27%
Printing	57%	Computing	47%	Distribution	48%	Core business	20%
Security	47%	Payroll	38%	Catering	46%	Recruitment	19%
Maintenance	47%	Maintenance	29%	Cleaning	41%	Maintenance	16%
Cleaning	45%	Security	26%	Printing	39%	Distribution	16%
Catering	45%	Catering	26%	Computing	38%	Catering	13%
Payroll	40%	Recruitment	25%	Maintenance	33%	Computing	12%
Distribution	34%	Core business	20%	Core business	30%	Cleaning	11%
Recruitment	33%	Printing	18%	Security	27%	Security	10%
Computing	26%	Distribution	18%	Training	23%	Payroll	7%
Training	14%	Cleaning	17%	Payroll	21%	Printing	5%

However, these are functions at which an organisation would not necessarily be adept, and so paying others to improve the skills of the organisation may be seen as a benefit which outweighs the additional costs incurred.

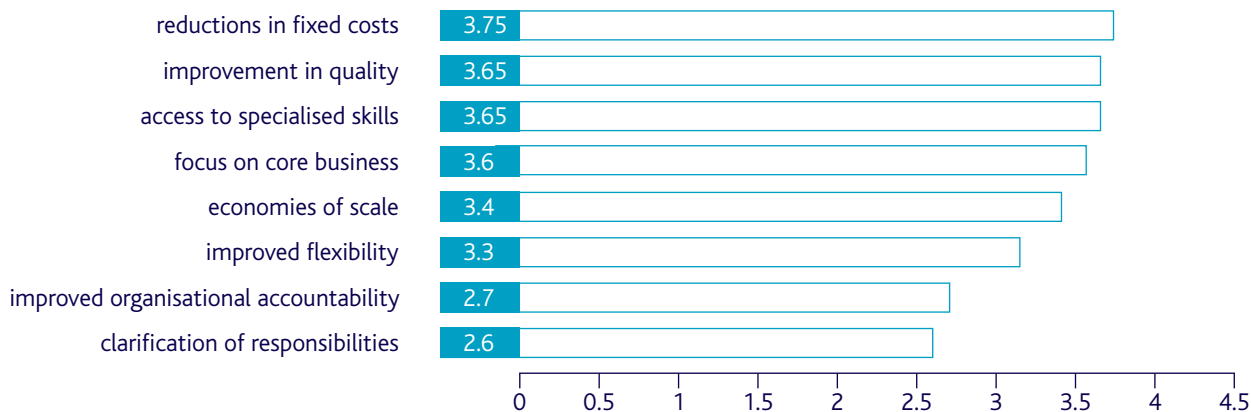
Table 4.3 gives additional information on the reasons for which particular activities were first outsourced. Of those outsourcing their core business, 73% reported that they did it primarily to save money. The cost-benefit analysis undertaken must have suggested this would be the eventual outcome, though our evidence from table 4.2 shows that, on average, these costs stayed the same, as noted above. The activity most likely to be outsourced in order to improve the service was training (50%), followed by computing (47%). This is consistent with the earlier evidence; organisations are clearly willing to pay the additional costs if they believe that the skills of their staff will improve. Delegating recruitment was important to half of our respondents (50%) for the prime reason that they wished to concentrate more on core activities. Again, this is consistent with our findings above

that, although outsourcing recruitment costs the organisation more, this is a cost that they are willing to bear if it will free up time for them to concentrate more on their core business. Finally, training was outsourced by 27% of firms in order to improve their flexibility.

#### 4.3.2 The main factors in decision-making

Figure 4.5 shows the respondents' responses to statements about the most important factors in making the decision whether or not to outsource the organisation's activities. As earlier, these were measured on a Likert scale from 1 ('unimportant') to 5 ('very important'). The most important reasons for outsourcing an activity were to achieve: reductions in fixed costs; an improvement in quality; access to specialised skills; and a greater focus on the organisation's core activities. Economies of scale and improved flexibility were additional benefits that the organisation hoped to experience. Factors such as improved organisational accountability and a clarification of responsibilities were seen to have lesser importance than the rest.

Figure 4.6 Main factors in decision-making



We used the data we have gathered to correlate the extent of organisational change and outsourcing with the nature of such change, and the results are reported in Table 4.4. First, private companies associated organisational change with an increased importance of focusing on core activities (FOCUSCOR = 0.272; Prob. val. = 0.022). Conversely, those who had experienced a greater extent of outsourcing were less likely to agree that focusing on core activities was a key concern in decision-making (FOCUSCOR = -0.280; Prob. Val. = 0.021). Of all our organisational types, only private companies showed a positive association between outsourcing and the use of MA consultants for all new MA projects (USENEW = 0.335; Prob. Val. = 0.012).

The NHS showed some strong positive associations between the extent of outsourcing and the nature of organisational change. Thus it was associated with new Trust leadership or senior management (NEWLEAD = 0.538; Prob. Val. = 0.004); a need to focus on core activities (FOCUSCOR = 0.461; Prob. Val. = 0.016); and a wish to emulate 'best practice' (BESTPRAC = 0.439; Prob. Val. = 0.022). Local authorities only showed significant correlation between the extent of outsourcing and the introduction of new senior management (NEWLEAD = 0.381; Prob. Val. = 0.041). Whilst these are measures of association, rather than of causality, it might reasonably be assumed that new management and/or leadership have been the instigators of an increase in the use of subcontracting or outsourcing in public sector organisations like the NHS and LAs.

Table 4.4 Outsourcing and nature of change

	Private		NHS		Local Authorities	
	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing
NEWLEAD	-0.069	-0.075	0.163	0.538**	0.279	0.381*
FOCUSCOR	0.272*	-0.280*	0.208	0.461*	0.116	0.048
BESTPRAC	0.162	-0.104	0.283	0.439*	0.349	0.103
USENEW	0.060	0.335*	0.176	n.a.	n.a.	n.a.

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)



#### 4.4 Management accounting implications

In this section we present the results pertaining to the management accounting techniques used by our respondents in the context of outsourcing decisions, and the effects of outsourcing activities upon management accounting.

##### 4.4.1 Management accounting techniques in use

An important goal of our work is to identify the role of management accounting in the decision to outsource and/or to choose between alternative suppliers. We were interested in discovering whether new accounting techniques were being developed for such purposes. If so, what were those new techniques, and where did they come from? Or was existing management accounting being used in new and different ways from previously? Table 4.5 gives evidence on the use of traditional management accounting techniques in each of our three organisational types. The NHS is shown to be the most intensive user of these 'tried' and 'tested' methods, rating the importance of each option as higher than did both private sector firms and local authorities. For example, cost-benefit analysis (COSTBEN) was given a mean value of 4.04, where the scale ranged from 0 (irrelevant) to 5 (very important).

Table 4.5 Accounting techniques

	Private	NHS	LA	Total
	Mean	Mean	Mean	Mean
NPV	2.91	3.52	2.97	3.06
DCF	2.96	3.41	3.03	3.07
BRKEVN	2.76	3.30	2.67	2.85
COSTBEN	4.01	4.04	3.80	3.97
PAYBACK	3.13	3.43	3.17	3.21
NONFIN	0.54	0.65	0.56	0.57

All methods were rated as important to some degree. In order of importance, following cost-benefit analysis, were: net present value (NPV = 3.52); payback (PAYBACK = 3.43); discounted cashflow (DCF = 3.41); and breakeven analysis (BRKEVN = 3.30). Private sector firms placed most importance on cost-benefit analysis (COSTBEN = 4.01) when making the decision to outsource, or evaluating alternative suppliers, followed by the time taken to pay back (PAYBACK = 3.13). These were also the two methods on which local authorities placed most importance (COSTBEN = 3.80; PAYBACK = 3.17). We also included at this point a variable to examine whether or not non-financial measures (NONFIN) were used to help organisations assess the decision whether or not to outsource and/or to choose between alternative suppliers. This variable was measured on a scale of '0-1'; '0' = 'no' and '1' = 'yes'. As we can see, across the board, non-financial measures were deemed to be of some, but not much, importance (NONFIN = 0.54, 0.65, 0.56, for Private, NHS and LA, respectively).

Whilst the mean observations give us an intuitive idea of how important is each technique to the different organisational forms, we can employ more rigorous statistical testing to examine this further. Table 4.6 contains the results of a nonparametric test, which computes ranks for the variables being observed. In this example, the variables are ranked from least (lowest number) to most (highest number) important (Mean Rank), but have been re-ordered, and numbered 1 to 6, from most to least important. The test statistic, Kendall's W, is the coefficient of concordance. Essentially, here, it measures the extent to which respondents agree in the rankings they assign to variables. Thus for Private Sector firms 42.8% of respondents agree on the order in which they rank our variables. This result is highly statistically significant (Prob. val. = 0.000). Indeed, our results are consistently significant across organisational types.

Table 4.6 Ranking of techniques

	Private		NHS		LA	
	Mean rank		Mean rank		Mean rank	
	4.88	1. COSTBEN	4.60	1. COSTBEN	4.85	1. COSTBEN
	3.79	2. PAYBACK	3.90	2. NPV	4.06	2. PAYBACK
	3.75	3. DCF	3.88	3. DCF	3.83	3. DCF
	3.66	4. NPV	3.75	4. PAYBACK	3.69	4. NPV
	3.39	5. BRKEVN	3.69	5. BRKEVN	3.23	5. BRKEVN
	1.52	6. NONFIN	1.19	6. NONFIN	1.35	6. NONFIN
N	64		24		26	
Kendall's W	0.428		0.500		0.547	
Chi-Square	136.927		60.03		71.154	
df	5		5		5	
asymp.Sig.	0.000		0.000		0.000	

In terms of the order in which techniques are ranked, private sector companies thought that cost benefit analysis was most important, followed by payback, discounted cash flow, net present value, breakeven analysis and non-financial analysis, in that order, which is consistent with our mean values, but is now given statistical support. Local Authorities agreed with this ranking. The NHS Trusts, however, differ slightly. They too regard cost benefit analysis as the most important technique. However, the ranks for payback and NPV are exchanged, with NPV being second most important, and payback being fourth. We can explore these differences further by computing an analysis of variance from the mean for the NHS, as compared to the others. In fact, there are two variables that stand out as being significantly more important to the NHS than to the other organisational forms. These are NPV (Prob. val. = 0.058) and breakeven analysis (Prob. val. = 0.065). So while breakeven analysis is ranked only fifth out of six, in terms of importance, across all organisational forms, as a technique for deciding upon major decisions like outsourcing it is statistically more important to the NHS Trusts than to our other two organisational forms. We conclude that older, more traditional management accounting techniques still play an important role in decision-making in modern organisational forms. Cost benefit analysis remains important, especially in the public sector, where expenditure often must be justified, but it is not clear why NPV might be more important to the NHS than to others.

#### 4.4.2 Effects of outsourcing on management accounting

Having established that traditional methods are still important, our next goal was to examine the extent to which a given list of changes in and effects on management accounting systems had taken place in the organisation since beginning to outsource or subcontract. Table 4.7 gives the mean responses, which were, again, graded on a scale from 0

(no change at all) to 5 (great change). In general, there was no strong agreement with any of the alternatives offered. The strongest agreement of private companies was with the statement that: 'we have introduced new cost centres to account for outsourced activities' (ACOUTE = 2.37); followed by 'management accounting staff are involved in evaluating the costs of a failure of contractual relationships' (ACOUTG = 2.36). NHS trusts agreed slightly more strongly with both of these statements (ACOUTE = 2.64; ACOUTG = 2.84). Local authorities also were most likely to have established new cost centres (ACOUTE = 2.77). Their next strongest agreement was with the statement that 'we have increased the level of responsibility of those staff involved in reporting' (ACOUIC = 2.50).

Table 4.7 Effects of outsourcing on management accounting

	Private 1.00 Mean	NHS 1.00 Mean	LA 1.00 Mean	Total Mean
ACOUTA	1.57	1.60	2.03	1.69
ACOUTB	2.24	1.84	2.37	2.19
ACOUTC	2.10	1.96	2.50	2.17
ACOUTD	2.23	1.84	2.40	2.19
ACOUTE	2.37	2.64	2.77	2.52
ACOUTF	2.31	2.20	2.47	2.32
ACOUTG	2.36	2.84	2.07	2.39
ACOUTH	2.11	2.16	1.87	2.06
ACOUTI	1.43	1.24	1.57	1.43

While there was only limited agreement with the aforementioned statements, there was even less agreement with the remaining statements. These were:

- 'we have changed the frequency of reporting' (ACOUTA)
- 'we have increased the level of detail in our reporting' (ACOUTB)
- 'we have modified our budgeting processes' (ACOUTD)
- 'we have developed new management accounting techniques and measurements to cope with new requirements' (ACOUTF)
- 'we make specific calculations on the cost of contractual failure on company performance' (ACOUTH)
- 'there has been a significant transfer of accounting skill and information to suppliers' (ACOUTI).

Respondents were next asked to indicate how strongly they agreed with statements about the nature of any change in management accounting systems. Their mean responses are contained in Table 4.9. There was fairly strong agreement overall for the statement that 'we set budgets as part of our master budget for each outsourced activity' (ACSYSJ = 3.71 (Private), = 3.74 (NHS), = 3.73 (LA)). There was also a general consensus that outsourced suppliers were treated as on-going 'partners' (ACSYSL = 3.68 (Private), = 3.78 (NHS), = 3.63 (LA)). Across all three organisational forms, monitoring of outsourced suppliers was common (ACSYSN = 3.67 (Private), = 3.33 (NHS), = 3.77 (LA)).

Table 4.8 Correlation of outsourcing with change in management accounting

	Private Extent of outsourcing	NHS Extent of outsourcing	Local Authorities Extent of outsourcing
ACOUTA	-0.034	0.469*	0.230
ACOUTD	0.168	0.241	0.453*
ACOUTF	0.182	0.332	0.376*
ACOUTH	0.001	0.581**	0.262

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

So far, there is little evidence to suggest that changes in organisational form, of the nature we have discussed above, have any great impact upon the development of accounting systems used within organisations. We chose, therefore, to investigate whether there was any significant correlation between the extent of outsourcing and subcontracting undertaken and the level of agreement with statements about changes in MA systems. Table 4.8 contains the significant relationships observed. It is interesting to note that there was no significant relationship between the extent of outsourcing and management accounting change for private companies. However, there were positive significant associations between outsourcing and change in MA systems for both the NHS and LAs. First, the greater the degree of outsourcing, the more frequent was MA reporting in the NHS, since beginning to outsource (ACOUTA = 0.469; Prob. Val. = 0.028). In addition, the greater the extent of outsourcing, the more likely were the NHS to make specific calculations of the cost of contractual failure on their organisational performance (ACOUTH = 0.581; Prob. Val. = 0.005). For local authorities, more outsourcing had led to a modification of budgeting processes (ACOUTD = 0.453; Prob. Val. = 0.014). Further, it often meant that new MA techniques and measurements had been developed in order to cope with the new requirements it imposed (ACOUTF = 0.376; Prob. Val. = 0.044). Thus we do observe a positive impact of outsourcing on management accounting systems.

Table 4.9 Changes in management accounting

	Private 1.00 Mean	NHS 1.00 Mean	LA 1.00 Mean	Total Mean
ACSYSA	1.75	1.57	2.13	1.80
ACSYSB	3.28	3.29	3.35	3.30
ACSYSK	2.22	2.29	2.67	2.34
ACSYSD	1.18	1.00	1.40	1.20
ACSYSE	1.77	1.93	2.37	1.95
ACYSO	n/a	1.74	2.07	1.91
ACSYSF	3.50	3.25	3.50	3.45
ACSYSG	2.88	2.67	2.87	2.83
ACSYSH	2.49	1.75	2.00	2.22
ACYSI	1.61	1.26	1.68	1.55
ACSYSJ	3.71	3.74	3.73	3.72
ACSYSK	3.03	2.58	3.43	3.03
ACSYSL	3.68	3.78	3.63	3.69
ACYSM	3.11	2.26	2.70	2.84
ACYSN	3.67	3.33	3.77	3.62

Respondents disagreed with many of the statements they were given. The strongest disagreement overall was with the statement that 'our new ideas for management accounting come from hired consultants' (ACSYSD = 1.18 (Private), = 1.00 (NHS), = 1.40 (LA)). There was also disagreement that 'we exert considerable control over our outsourcing suppliers' accounting systems' (ACSYSI = 1.61 (Private), = 1.26 (NHS), = 1.68 (LA)).

In general, there was also disagreement, though weaker than in the above cases, with the following statements:

- 'we have had to make major changes in our management accounting systems' (ACSYSA)
- 'we have had to develop our own methods of analysis to cope with outsourced contracts' (ACSYSC)
- 'our new ideas for management accounting come from imitating other organisations' (ACSYSE)
- 'deciding which functions are 'core' and which should be outsourced depends largely on cost considerations' (ACSYSH)
- 'our new ideas for management accounting come from imitating private sector organisations' (NHS and LA only) (ACSYSO).

In Table 4.10 we present further correlations between organisational change and outsourcing and the effect of these on accounting systems. In private companies, greater outsourcing was associated with a greater agreement that new ideas for management accounting were developed internally (ACSYSF = 0.255; Prob. Val. = 0.036); and also that

there had been a change in the types of decision for which MA information was used (ACSYSG = 0.295; Prob. Val. = 0.014). With the NHS, we observe that greater outsourcing was positively associated with the increased exertion of control over outsourcing suppliers' accounting systems (ACSYSI = 0.440; Prob. Val. = 0.031); and with the imitation of private sector organisations for new MA ideas (ACSYSO = 0.430; Prob. Val. = 0.036).

The local authorities associated change in organisational form with a number of MA issues. The greater the change, the more likely were they to agree that: they had needed to develop their own methods of analysis to cope with outsourced contracts (ACSYSC = 0.411; Prob. Val. = 0.024); but also that they had developed new ideas for MA with the help of hired consultants (ACSYSD = 0.548; Prob. Val. = 0.002); and by imitating other public sector organisations (ACSYSE = 0.456; Prob. Val. = 0.011). There was also a positive association with change and largely using costs to determine which functions were 'core' and which should be outsourced (ACSYSH = 0.555; Prob. Val. = 0.001). Further, LAs which had experienced greater change were more likely to treat outsourced suppliers as on-going 'partners' (ACSYSL = 0.388; Prob. Val. = 0.034); and to have developed new ideas for MA through imitating private sector organisations (ACSYSO = 0.488; Prob. Val. = 0.006). Finally, the greater the extent of outsourcing undertaken by LAs, the more likely were they to agree that they would continually monitor those outsourced suppliers (ASSYSN = 0.423; Prob. Val. = 0.022).

Table 4.10 Outsourcing and its effects on management accounting

	Private		NHS		Local Authorities	
	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing
ACSYSC	0.204	0.087	-0.294	0.089	0.411*	0.134
ACSYSD	0.028	0.026	-0.089	0.295	0.548**	-0.081
ACSYSE	0.027	-0.110	-0.076	0.298	0.456*	-0.085
ACSYSF	-0.085	0.255*	-0.151	0.253	0.191	0.071
ACSYSG	0.147	0.295*	-0.079	0.359	0.303	0.007
ACSYSH	0.020	0.015	0.136	0.26	0.555**	0.048
ACSYSI	0.024	-0.117	-0.091	0.440*	0.291	0.159
ACSYSL	-0.053	0.040	-0.010	0.189	0.388*	0.354
ACSYSN	-0.033	0.214	-0.329	0.248	0.278	0.423*
ACSYSO	n.a.	n.a.	-0.156	0.430*	0.488**	0.049

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

In terms of the effect on management accounting systems of the decision to outsource, we can make a number of observations. First, the least impact would appear to be in our private sector companies. These were the most likely to use hired MA consultants for new projects, the more they undertook outsourcing. However, they also had developed their own new techniques for accounting for outsourced contracts, and found that there had been changes in the types of decision for which MA was used.

In both types of public sector organisations, new leadership or senior management was associated with changes in organisational form, increased outsourcing and subsequent impacts on management accounting. In the NHS, greater outsourcing led to more frequent reporting of management accounts, a greater likelihood of analysing the potential costs of a breakdown in contractual relations, increased control exerted over subcontractors' accounting systems, and an increased chance of getting management accounting ideas through imitation of private sector companies. Local authorities that experienced more outsourcing also noted increased changes in methods of budgeting, and the development of new MA techniques. They got new ideas for MA through imitation of both private and public sector bodies, but also would hire in consultants for help, alongside developing their own ideas. And while increasing their monitoring of outsourced suppliers, they would also see them as on-going partners with whom they could work in tandem.

#### 4.5 Managing the supply-chain

The term 'supply chain management' was defined for respondents as 'the coordination of all aspects of manufacturing, purchasing, distribution and sales, whether performed within or beyond the organisation'. The next section of the questionnaire was concerned, therefore, with the management of suppliers and the supply chain. We were interested in finding out whether new management accounting techniques had been developed to manage emerging supplier-chain relations and, if so, what were those new techniques, and from where did they come. Perhaps management accounting techniques were being used in new ways to manage supplier-chain relations. Table 4.11 gives the summary statistics on supply chain management within our three organisational forms. In general, respondents were almost neutral on the statement that 'we need to modify our existing administration practices for our outsourced functions' (MANAGF = 2.99 (Private), = 3.21 (NHS), = 3.28 (LA)). There was moderate disagreement with the additional statement that 'we treat every outsourcing supplier as a separate cost centre' (MANAGG = 2.45 (Private), = 2.76 (NHS), = 2.88 (LA)). Thus there is little to suggest that management accounting was strongly influenced by the introduction of new outsourced suppliers.

Table 4.11 Supply chain management

	Private 1.00 Mean	NHS 1.00 Mean	LA 1.00 Mean	Total Mean
MANAGA	2.92	2.48	2.50	2.72
MANAGB	2.97	2.34	2.88	2.81
MANAGC	3.27	3.14	3.34	3.26
MANAGD	4.03	4.14	4.00	4.04
MANAGE	2.58	2.69	3.03	2.71
MANAGF	2.99	3.21	3.28	3.11
MANAGG	2.45	2.76	2.88	2.62
MANAGH	2.58	2.52	2.63	2.57
MANAGI	2.58	2.86	2.81	2.69
MANAGJ	2.14	1.52	1.84	1.93
MANAGK	3.27	3.03	3.26	3.22
MANAGL	2.26	2.69	2.88	2.50
MANAGM	2.67	2.76	3.42	2.86
MANAGN	2.01	1.93	2.25	2.05
MANAGO	1.37	1.59	1.56	1.46

We therefore probed further into the role of management accounting in the writing of outsourcing contracts. For example, what roles might management accounting play in overseeing the exercise and revision of outsourcing contracts? What was the impact of accounting calculations in determining the length of the contract, and what was the role of management accounting in enforcing outsourcing contracts? In cases of breach of contract, how were sanctions defined and what role did accounting play in this context? Respondents expressed some strong agreement in this section. For example, the statement that 'we need to incorporate back-out clauses in case we are unhappy with suppliers' (MANAGD) gave averages of 4.03 (Private), 4.14 (NHS) and 4.00 (LA), showing quite strong agreement. There was also some level of agreement for the statement that 'being tied into contracts is a disadvantage if we want to change our company strategy or direction' (MANAGC = 3.27 (Private), = 3.14 (NHS), = 3.34 (LA)). Only LAs mildly agreed that the administration and transaction costs of monitoring contracts were burdensome (MANAGE = 3.03). And there was mild disagreement overall with the remaining statements that 'it is important to try small, short-term contracts until we get to know our suppliers better' (MANAGA), and 'long-term contracts tie the company down and are too restrictive' (MANAGB).

Next, respondents were questioned on the impact on their organisation of having introduced subcontracting or outsourcing. For example, to what extent did management accounting practices underpin network relations and facilitate or frustrate the development of mutual trust between the supplier and the company? Firstly, there was mild disagreement with both statements that 'outsourcing has led to an erosion of staff skills within our company' (MANAGH), and 'we have employed supervisors to oversee our outsourced functions' (MANAGI). Local authorities were the only organisation type to agree, albeit mildly, that 'our existing staff have experienced a change in the nature of their job since we started to outsource' (MANAGM = 3.42). Private sector companies and the NHS Trusts disagreed with this statement. Strong disagreement across the board was voiced, however, for the statement that 'since we started to outsource, we have suffered a breach of confidentiality' (MANAGO = 1.37 (Private), = 1.59 (NHS), = 1.56 (LA)). Respondents generally did not think that their existing staff were unhappy about the decision to outsource (MANAGL). Nor did they agree that outsourcing had led to any loss of privacy (MANAGN).

Finally, within this section, we enquired into how expertise (technical, product design, etc) might be assembled, promoted, and transferred within and across the supply chain. For example, might the transfer of knowledge be subject to any form of accounting calculation? Did a transfer of

accounting and finance skills exist between company and supplier, how was this achieved, and what were the perceived benefits? In general, there was strong disagreement from all that 'we impose changes on our outsourced suppliers' accounting systems' (MANAGJ = 2.14 (Private), = 1.52 (NHS), = 1.84 (LA)). However, there was mild agreement that 'we require regular reporting of financial measures from our outsourced suppliers' (MANAGK = 3.27 (Private), = 3.03 (NHS), = 3.26 (LA)).

CHANGE measures the extent of organisational change experienced over the previous three years. OUTSOURC measures the extent of outsourcing in each organisation. Table 4.12 correlates CHANGE and OUTSOURC, for each type of organisation, with the extent of agreement with a number of statements about supply chain management. There was no significant agreement between any of our statements about supply chain management and change in organisation or the extent of outsourcing, as far as our private companies were concerned. For the NHS, there was some positive association between the extent of organisational change and the feeling that it was important to try small short-term contracts until they got to know their suppliers better (MANAGA = 0.421; Prob. Val. = 0.023). Additionally, the greater the extent of outsourcing, the more likely were the NHS staff to have experienced a change in the nature of their job since starting to outsource (MANAGM = 0.470; Prob. Val. = 0.015).

Table 4.12 Change, outsourcing and the supply chain

	Private		NHS		Local Authorities	
	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing
MANAGA	-0.111	-0.006	0.421*	0.095	0.117	-0.073
MANAGB	-0.092	0.083	0.072	-0.013	-0.356*	-0.086
MANAGF	0.152	0.004	0.290	0.141	0.395*	0.085
MANAGG	0.174	-0.010	-0.117	0.029	0.379*	0.184
MANAGK	0.018	-0.138	-0.020	0.218	0.426*	0.435*
MANAGM	0.089	0.149	0.015	0.470*	0.333	0.293

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

Local authorities were more likely to agree with our given statements, the greater their change in organisational form. For example, it was positively associated with a need to modify existing administration practices for outsourced functions (MANAGF = 0.395; Prob. Val. = 0.025); the treating of every outsourcing supplier as a separate cost centre (MANAGG = 0.379; Prob. Val. = 0.032); and a requirement for regular reporting of financial measures from outsourced suppliers (MANAGK = 0.426; Prob. Val. = 0.017). Furthermore, the greater the extent of outsourcing, the stronger the agreement with a need for regular financial reporting (MANAGK = 0.435; Prob. Val. = 0.016). An interesting observation here is the negative correlation between the extent of organisational change and agreement with the statement that long-term contracts tie the organisation down and are too restrictive (MANAGB = -0.356; Prob. Val. = 0.045). In other words, the greater the change, the less likely are LAs to believe that long-term contracts are too restrictive, which is an encouraging result, from the point of view of sub-contracting organisations. On the contrary, greater organisational change in LAs would appear to actively encourage the use of outsourcers or subcontractors on long-term basis.

A greater use of outsourcing by private sector companies had no significant impact on the ways in which the supply chain was managed. In the NHS, where change had been introduced, our respondents indicated that staff had experienced a change in the nature of their jobs since outsourcing had been started. However, they were also rather cautious in thinking it important to try out small contracts with outsourcers, before getting tied in to long term contracts, a result which echoes the 'conservatism' of health care organisations found by Roodhooft and Warlop (1999). In local authorities, a change in organisational form was associated with administrative changes, for example, through the introduction of new cost centres. Long-term contracts with outsourcers were not thought to be restrictive, but LAs kept a close eye on them through regular financial reporting.

#### 4.6 The impact of outsourcing on corporate performance

The final part of the questionnaire was aimed at determining the extent to which outsourcing had improved (or otherwise) the organisation's performance. The initial question has to be whether or not the impact of outsourcing on corporate performance is assessed. If it is, what measures of efficiency and effectiveness are used by companies, and what is the accounting input in these measures? How, if at all, are value creation and value capture measured? Furthermore, what bases do organisations use when deciding to continue with outsourcing?

The final data are contained in Tables 4.13 and 4.14. Overall, private sector companies were most likely to agree with the statements relating to the improvement in performance. For example, outsourcing and/or subcontracting had improved 'our financial performance' (IMPACTB = 3.05), 'our access to specialised skills' (IMPACTC = 3.27), 'our company responsiveness and/or flexibility' (IMPACTD = 3.34), and 'the extent of our cost savings'.

Table 4.13 Impact on performance

	Private 1.00 Mean	NHS 1.00 Mean	LA 1.00 Mean	Total Mean
IMPACTA	2.92	2.88	2.97	2.92
IMPACTB	3.05	2.88	2.67	2.93
IMPACTC	3.27	2.88	3.20	3.18
IMPACTD	3.34	2.52	2.72	3.04
IMPACTE	3.24	2.92	2.97	3.11
IMPACTF	1.83	1.56	2.07	1.83
IMPACTL		2.20	2.90	2.57
IMPACTM		2.12	1.76	1.93
IMPACTN		2.40	2.03	2.20
IMPACTO		1.76	1.62	1.69
IMPACTG	3.82	3.58	3.59	3.72
IMPACTP		3.88	3.48	3.66
IMPACTH	2.52	3.25	3.10	2.80
IMPACTI	2.55	2.21	2.90	2.56
IMPACTJ	2.34	2.25	2.62	2.39
IMPACTK	2.89	2.92	3.20	2.97
HAPPY	2.82	2.43	2.59	2.69

(IMPACTE = 3.24). They disagreed mildly that it had improved 'the quality of our product or service to customers' (IMPACTA = 2.92). The NHS Trusts showed mild disagreement with all of the above statements, and the local authorities agreed only that their access to specialised skills had improved.

In terms of measuring the impact of outsourcing, private sector firms were most likely to do this in financial ways (IMPACTG = 3.82). They disagreed that they might use any of the other given measures, including predetermined profit levels (IMPACTH), or by benchmarking against industry norms (IMPACTI), competitors (IMPACTJ) or 'best practice' (IMPACTK). The NHS and LAs agreed that financial measures were used to assess the impact of outsourcing (IMPACTG = 3.58 and 3.59, respectively). However, the NHS trusts were most likely of all to measure success in non-financial terms (IMPACTP = 3.88). Both methods were also relatively important to the LAs (IMPACTG = 3.59, IMPACT P = 3.48).

The NHS and LAs were given a number of additional areas to assess, in terms of the impact of outsourcing (IMPACTL to IMPACTO). They were asked whether it had improved: the timing of their supplier deliveries, the lead-time for the delivery of orders, the quality of deliveries and their credit terms. There was disagreement from both organisational types with each of these statements, most strongly with IMPACTO, that credit terms had improved. The final question in this section enquired into whether or not respondents were happy that they had the best possible contracts with their outsourced suppliers (HAPPY). Across the board, there was some disagreement with this statement, showing that most thought there was room for improvement in the relations with their outsourced suppliers.

Table 4.14 contains correlations between the extent of organisational change, outsourcing and agreement with statements about organisational performance. Only one is significant for private companies; the greater is their level of outsourcing, the more likely are they to be happy that they have the best possible contracts with their outsourced suppliers (HAPPY = 0.276; Prob. Val. = 0.029). This suggests that the more happy organisations are with the relationship with their outsourced suppliers or subcontractors, the more likely they are to outsource additional activities. The greater the extent of outsourcing in the NHS, the more likely were they to measure its success by benchmarking against industry norms (IMPACTI = 0.541; Prob. Val. = 0.009), and the more likely too were they to measure success by benchmarking against 'best practice' (IMPACTK = 0.522; Prob. Val. = 0.013).

Finally, LAs showed the most significant correlations. First, greater change in organisational form was associated with improvements in organisational performance (IMPACTB = 0.373; Prob. Val. = 0.042); better responsiveness or flexibility (IMPACTD = 0.493; Prob. Val. = 0.007); and enhanced quality of deliveries (IMPACTN = 0.443; Prob. Val. = 0.016). The greater the degree of outsourcing, the more likely were LAs to agree that: the quality of service to customers had improved (IMPACTA = 0.492; Prob. Val. = 0.008); and that financial performance was better than previously (IMPACTB = 0.553; Prob. Val. = 0.002).

Table 4.14 Change, outsourcing and impact on performance

	Private		NHS		Local Authorities	
	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing	Change in form	Extent of outsourcing
IMPACTA	-0.211	0.112	0.087	0.216	0.327	0.492**
IMPACTB	-0.095	0.204	0.203	0.401	0.373*	0.553**
IMPACTD	-0.169	0.179	0.023	0.352	0.493*	0.345
IMPACTI	n.a.	n.a.	-0.055	0.541**	0.306	0.199
IMPACTK	-0.115	0.072	-0.144	0.522*	0.243	0.245
IMPACTN	n.a.	n.a.	-0.009	0.089	0.443*	0.173
HAPPY	-0.119	0.276*	-0.071	-0.039	0.079	0.152

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)



#### 4.7 Conclusion

Overall, our findings from the questionnaire suggest that management accounting systems are influenced by changes in organisational form. Our analysis of the summary information yields some interesting results. Change in organisational form, across types, during the previous three years, was shown to have existed, although on average it was not great overall. The existence of outsourcing or subcontracting was only moderate, on average. The changes observed therefore support earlier findings of incremental, rather than transformational, change (cf. Ezzamel et al, 1996). As such, we might not necessarily expect massive breakthroughs in the nature of change in management accounting systems. In fact, we find that traditional management accounting methods, such as net present value, discounted cashflow, breakeven analysis, payback and, especially, cost-benefit analysis, are still considered to be amongst the most important techniques available to the modern manager when considering issues such as outsourcing decisions.

The impacts of outsourcing that we might have expected to see on management accounting were not as great as anticipated overall, with the major effect being the introduction of new cost centres to account for the organisation's outsourced activities, and to facilitate the monitoring of the organisation's outsourcing suppliers. Our further enquiry into the nature of management accounting change found that standard accounting techniques were generally considered to be adequate for the purpose, but that any new management accounting techniques or would mainly be developed internally rather than by hiring consultants or imitating other organisations.

There is evidence to suggest that managing the supply chain relationship has increased the burden of monitoring on organisations. For example, our respondents generally agreed that they had needed to modify their administration practices to cope with outsourced functions, and that regular reporting of financial measures was required by suppliers. In order to protect against unsatisfactory relations, back-out clauses were usually built into contracts with suppliers. In terms of the overall impact of outsourcing on company performance, there was some agreement that it had improved the organisation's access to specialised skills, and therefore the company's flexibility and/or responsiveness (cf. Atkinson and Meager, 1991). And there was additional agreement with the statement that outsourcing had led to cost savings. Thus support exists here too for the earlier findings of Ezzamel et al (1999).

While our evidence shows only moderate change and adaptability, overall, it does suggest a relationship between the extent of both organisational change and outsourcing and the impact on management accounting systems. This is probably least evident in private sector companies. They would develop new systems and techniques internally (and sometimes, though not frequently, through employing consultants), and were happier with their outsourced activities, the more extensive these were. The NHS and LAs together appear to have experienced more change, and therefore their MA systems have been affected to a greater degree. For example, new senior management corresponded with more outsourcing or subcontracting. This in turn led to greater requirements for reporting, the development of new cost centres, and administrative changes. LAs in particular, had reported improvements in performance related to changes in form, including improved flexibility and quality of service.

What we have presented here is some new evidence on changes in three types of organisation: private sector companies, NHS Trusts and Local Authorities in the United Kingdom. We have explained the nature of this change by reference to the extent of outsourcing and/or subcontracting in each of these organisational forms. We have discussed if, and how, management accounting systems were modified and/or developed in the face of the changes experienced. The following chapters present five in-depth illustrative case studies which highlight a number of the issues raised in this larger scale statistical analysis, but in much greater detail, and link these developments to the specific context of each of the case studies.

## 5. FoodUK

### 5.1 History and context

FoodUK is a major subsidiary of a major international corporation that is one of the largest food companies in the world. The parent company was founded abroad in the 1860s, its workforce now is nearly a quarter of a million people, with over 500 factories in more than 80 countries. FoodUK began its manufacturing activities in the late 1880s, and now has about 12,000 employees with turnover of nearly £1.6 billion with many of its products having become household names. FoodUK is organised into five product divisions, with many plants scattered across the UK and overseas, and a number of corporate functions providing services and information across the divisions. Each division has profit responsibility and semi-autonomous discretion over decisions with the European Headquarters retaining considerable control over issues deemed to be key to the survival of the group. In the 1980s the FoodUK expanded its size significantly, mainly through acquisitions of existing well-known brands. In 2001 a number of brands were sold and others acquired in reorganising one of the divisions in an effort to focus on what were deemed to be key and profitable brands.

Prior to the 1990s, FoodUK 'had no function core supply chain, neither did it really have anything that was doing that job with a different name' (former Supply Chain Director). During that phase, the company had a logistics operation which did not include 'upstream' physical distribution but it combined planning and customer services together. No customer services role was set up within the company, only a stock and order management group existed within distribution. Many of the activities that now come under the banner of 'supplier-chain relations' were managed by the buyer/seller relationship, a trend that was typical of the industry at the time, so that the national accounts manager dealt with the buyer in each of FoodUK customers.

Twenty years ago or so, it was claimed, the industry was characterised by the mode of 'direct store delivery', with each store ordering and getting deliveries individually, a direct route that cut out a lot of supply chain noise, even though it may lead to a 'messy distribution set up.' As customer stocks tended to be relatively high, a few days delay in delivery were not thought to be serious, particularly in the case of ambient products, like many of those produced by FoodUK. Gradually, however, retailers began to set up regional distribution centres which created a new demand for supply chain within the industry. But the initial reason why retailers set up regional distribution centres was to take costs out of their supply chain.

While the establishment of regional distribution centres was reported to have taken some costs out of the supply chain, it gave rise to two other consequences. First, retailers began to realise that a lot of their costs occurred in the 'last 100 yards', particularly when the retailer had no warehouse at the back of the stores and goods are delivered more than once daily. Secondly, retailers began to notice inefficiencies in their systems that did not clearly show product shelf availability. In their quest to taking the cost out of the supply chain, retailers began to request more frequent deliveries daily from FoodUK, instead of the previous Day 1 to day 4 system (order on day 1 is delivered on day 4).

Following a very large acquisition by the FoodUK in the early 1990s, a new Chairman was appointed, and among the changes he introduced was the setting up of a supply chain re-engineering team in order to look into ways to improve customer services. The exiting approach based on one-to-one relations between the national accounts manager of FoodUK and the customer buyer was now considered unsatisfactory because communication between the national accounts manager and FoodUK was not always effective and because there was no face-to-face contact with customers. This approach, characterised as 'lobbing an order over the wall', was made worse by the inadequacies of the EPOS data-based information system prevalent at the time. One manager explained how under this approach customer orders were filled. The store manager would check stores then ask the regional depot for a given quantity of the product to be delivered. The depot will then add up all the stores it services and report the aggregate quantities needed to head office, and the latter would adjust these quantities to reflect other factors such as brand promotions, and after that an order is issued which 'had taken days to accumulate in the pipeline and more importantly did not reflect actual customer uptake' (Director, Supplier Chain). Measures of delivery performance used at that time were later construed as being partial and the performance of FoodUK was considered unsatisfactory even using such partial measures. The most important measure was case fill against order was not measured across the whole business but was calculated for only certain activities. Further, even using this partial case against fill measure, the company was achieving something between 94% – 97%, with the average towards the bottom end, which was not considered high enough for the industry.

### 5.2 Launching the supply chain function

To deal with the above limitations, the over-riding aim was to move the customer service performance of the company within three years to be in the top three within the industry, while also reducing working capital. This new approach sought to promote supply chain thinking and concepts that are linked to information systems, and to ensure that there is consistency, direction and uniformity in what the different parts of the business are doing. The new supply chain function incorporated purchasing, logistics development, distribution, finance and customer service, thereby integrating both downstream and upstream activities into one function. Also, for each of the product divisions supply chain functions were established.

A more ambitious target of customer service (case fill) of 98½% was set in the belief that if customer service improves on a consistent basis, then it would be easier to get new products launched, and product promotions agreed with the customers. To facilitate this, the company set about trying to work more closely with its main customers, jointly planning events and making use of customer EPOS data bases. FoodUK also gives its customers software platforms to work with and they use customers' software platforms to exchange information, to help plan things together such as brand promotions. A whole new way of monitoring customers' shelves was also sought. Previously, once orders were delivered by FoodUK to customers, it was left to the customer to check product availability on their own shelves. FoodUK began to cultivate the idea with their customers that, given their common interests, it would be profitable to both if they worked closer together. Apparently, the customers have come a long way to recognise the importance of co-operating with FoodUK as their supplier. Customers, however, are still pushing for more costs to be taken out of the supply chain by asking for more frequent deliveries at much shorter time intervals than previously. Informants in FoodUK find this particularly frustrating, given that the bulk of their products are ambient products with a long shelf life.

### 5.3 Integrating the supply chain function: from farm to fork

In 2002, a new Director of the supply chain function was appointed, and he set about to develop the supply chain function further by seeking to create a more integrated supply chain 'from farm to fork' via a demand-led model that began with customer demands and ended with physical flows required to meet that demand. The previous strategy was criticised for being focused upon reducing cost rather than driving growth; hence the new focus upon growth. The supply chain function was conceptualised as an integrated 4x4 wheel: four processes: serving the customer, planning and forecasting, product availability, and buying; four enablers: people, data, systems and finance. The underlying motif was one of driving growth and adding value through customer focus, by 'making the supply chain better, faster, simpler, and closer to customers and suppliers' (internal document) by promoting innovation and improving distribution channels. The super-imposing of these four processes upon the four enablers were expected, or assumed, to lead to the emergence of a new organisation with new key attributes. First, it will be an organisation that actively promotes best price, best service and best value in all sourcing decisions. Second, it will demonstrate a relentless commitment to customer service. Third, its supply chain will become a source of competitive advantage commercially. Fourth, FoodUK will become the supplier of choice for customers seeking supply chain development. And finally, FoodUK will become recognised as an integral part of, and lead player in, all zone and global developments.

### 5.4 Networking with customers

With over 1100 customers of FoodUK products, the top four account for about 70% of total sales and the top eleven account for about 90%, so the focus is mainly on the 'Big Four' followed by the remaining 'Big Seven'. Because of the strength of the brands produced by FoodUK, the initial relation between the company and any of its customers is not organised through formal and detailed written contracts. Essentially, the customer would place an order of a given number of products of a particular size at a previously agreed price and state expected times of delivery. Some of these details are written in fairly short statements, others are agreed verbally over the telephone or negotiated through a member of staff who is ear-marked to deal specifically with a particular large customer. FoodUK assigns responsibility for liaising with each of the top 4 customers to one manager who heads a small team. The responsibility of this manager and the team is to develop a network with the customer based on information sharing, regular contacts, visits, and staff placements at customer locations in order to ensure that customer needs are met and to also explore possible opportunities of mutual benefit such as launching new product categories, new brand promotions, etc. These arrangements are vested in perceived mutual interest and is typically underpinned by cost considerations and key performance indicators. Managing customer relations is based on a number of strategies shown below.

#### 5.4.1 Cultivation of trust ties

There seems to be an element of deferral to the other's competencies within the supply chain network and in the process seemingly promoting a strong measure of trust. This trust covers both elements of confidentiality over 'sensitive' information shared between supplier and customer and also technical competence. Such trust needs to exist in order for the flow of sensitive information to run smoothly. Benefits include better forecasting and more flexibility of order and stock management. This cultivated trust extends to expectations by each party of the network that the other party will honour its commitment. Thus, customers expect FoodUK to deliver the required product range on time, with the correct quantities and requisite qualities at the agreed prices. Similarly, FoodUK expects its customers to place its products on the shelves appropriately, to sell them at the right price and to ensure that they do not run out of the product. These trust relations do not seem to be constituted in broad terms but are rather targeted at specific areas. Nevertheless, it was recognised that as customer and supplier, the two parties to the network are likely to encounter situations of tension, friction and conflict in interest because each side is commercially-driven.

#### 5.4.2 Focusing upon own competencies

The explicit recognition by customers and FoodUK of their differing core competencies was reported to lead to careful and considered assessment by each side of new proposals that surface through network interaction. Here the concern is whether or not the proposals fall within what is considered a core competency and also whether the 'numbers add up'. For example, one customer sought to tempt FoodUK to go into organic foods, which is fundamentally different from FoodUK's focus upon functional foods but FoodUK turned that down because it did not fit with its core plans. Such considerations are also affected strongly by cost-benefit calculus. Alternative opportunities were subjected to this calculus to decide their acceptability in terms of the marginal contribution of the alternative; at the very least the alternative had to be 'cost neutral' to be accepted.

#### 5.4.3 Managing by levers and negotiations

The relationship between FoodUK and its customer seems to be managed predominantly via negotiations and the use of levers, and to a much smaller extent by reference to clauses in written contracts. It seems that there are situations where seeking to enforce writing detailed contracts simply would not work. The 'dynamics of the business' militates against extensive use of detailed written contracts, because the customer decision time-frame is not long enough. Further, the dynamics of product innovation in the market and the strength of the brand name militate against heavy reliance upon written contracts. One of the key reasons why such a negotiated arrangement could work is the nature of the interlocking relationship within the network and the regular contacts and visits between the two parties. Informants told us that when problems arise, for example failure to meet targets, rather than seek immediate financial penalties based on some reading of a written contract, the two parties engage in a mature debate, with each side using whatever levers they have to reach agreement. Many of these negotiations are underpinned by a close understanding between FoodUK and its customers, built over a long period of trading together.

#### 5.5 Accounting for the supply chain in FoodUK

In FoodUK, it seems that the role of accounting in the writing of contracts with customers has been minimal, simply because few contracts were, if ever, written. However, accounting played crucial roles in the various stages of the supply chain.

#### 5.5.1 Accounting measures for the supply chain

Once an order from a customer was identified, a process of gathering 'data elements' began, seeking together detailed information about the order: quantities and qualities of items required, location of transactions, customer codes and supplier codes, times, dates weeks and months of sourcing, manufacturing and delivering products, and quantities of deliveries. This basic model of supply chain information flow was complemented by a cycle of continuous improvement beginning with objectives, through measuring performance and analysis to reviewing processes and objectives. The aim of this cycle was to enhance supply chain efficiencies in three areas: reliability, speed and cost. A hierarchy of information flow (both financial and non-financial) was developed, and it showed at its apex key performance indicators (KPIs), followed by process performance indicators, process control information and operational support information. The KPIs covered a range of areas, including customer service as measured by case fill and line fill percentages, demand plan accuracy, schedule attainment, supplier service, inter-market supply, finished goods and raw materials stock cover, cost of distribution, cost of manufacture, cost of raw and packaging materials, and cost of failure in delivering orders classified by customer code. The remaining three categories in the information support hierarchy cover other complementary measures. For example, process performance indicators seek to monitor the extent to which a particular process contributes to the overall KPI performance, whereas process control information focuses upon the extent to which current processes are considered complete. All these measures are of a historical nature, essentially comparing an actual statistic against a pre-specified target. The key focus is upon rendering the various elements of supply chain costs visible. The KPIs were subordinated to two bottom-line financial measures: Real Internal Growth (RIG) and Earnings Before Interest on Total Assets (EBITA). RIG adjusts for the impact of inflation and currency fluctuations, and also takes into account the effects of acquisitions and other changes in the shape of the organisation. Two additional measures are also emphasised: market share and overheads.

#### 5.5.2 Commercial profitability analysis

The accounting function in FoodUK took major steps to liaise with and provide strong support to marketing staff, with the aim of making them financially aware, by reporting and analysing information on brand contribution, profit forecasting, and customer contribution in a manner that made sense to the marketing staff. New designations of accountants as 'marketing financial analysts' and 'sales accountants' were earmarked, and courses for customer contribution were run annually by accountants for the benefit of the marketing staff, with several reviews conducted every year with each accounts manager to check the extent to which the manager is on target to deliver key customer KPIs.

Previous emphasis in FoodUK was centred on volume, in terms of how many tons were being sold in a given period. To mark the shift in emphasis towards greater commercialism, profitability analysis began to be performed at the levels of brands, product categories (the pack format the product is being sold in), customers and channels. Sometimes, profit per category was broken down to a finer level of sub-category in order to prompt correct decisions. In FoodUK customer profitability analysis (CPA) is dubbed customer contributions statements (CCS). Although CCS was known for years within the Group, its use began to occur on a large scale within the Group and FoodUK in 2000.

The calculation of CCS begins with sales revenue from a particular customer, and taking out of that the costs of various relevant trade discounts. The cost of goods sold, trade spend, variable distribution cost, and sales force cost. Some of the distribution and sales force costs are specific to a particular customer, such as staff working specifically for that customer, others are shared across customers and have to be allocated. Emphasis to identify contribution per customer was the result of both the drive towards greater customer focus and the desire to trace costs down to activities, with individual customers being considered an activity. The lowest accounting level of detail was the stock keeping unit (SKU), which could be aggregated across product, customer or division up to company level. Given the level of detailed reporting available now in FoodUK, it is possible for information to be generated on category customer share, or category channel and market share per customer. Knowledge of these details is deemed important because the brand or pack mix within a customer is one of the levels the sales staff could tweak to achieve their target profitability.

The use of CCS involves differentiating customers by distribution routes and routes to market. FoodUK growth was assessed to be in newer channels with newer product types that tend to be more expensive than established channels. Fast moving consumer goods (branded goods) tend to be shelf stable, have heavy brand awareness and hence are subject to promotions. Their sales may increase marginally but they are relatively mature markets and FoodUK has to fight other competitors to keep its market share. Large customers tend to have their own distribution networks, suitably located large warehouses and big regional distribution centres to which FoodUK can make few large and hence economic, deliveries of fast moving consumer goods. Medium sized or small customers tend to order smaller sizes for which the route to market is expensive. Because of the relative high cost of these deliveries, FoodUK recently sub-contracted this service to a third party. Against this apparent economy bias for larger customers must be balanced the recognition that these customers are more demanding on suppliers.

In preparing CCS, the top ten customers in each channel are identified, which accounts for approximately 80%+ of the channel. So, across all channels, there are probably up to twenty-five customers for whom separate CCS are prepared. No CCS is performed for the remaining customers because of their relatively small size. The focus in this case is upon grouping (e.g. group petrol stations forecourt sales instead of sales per individual station) in order to assess volume sales, frequency of transactions, cost of delivery and whether or not sufficient profits are being earned from them. These details are then used to decide on whether it is economical for a sales person to call on those shops. CCS statements are prepared monthly. It was not considered worthwhile to prepare them for shorter intervals because brand promotions, which are difficult to predict in advance, militate against making such shorter reporting intervals sensible. Indeed, these promotions made even monthly statements difficult to interpret, hence the focus tended to be on year-to-date comparisons. Analyses of CCS were made by the sales support accounting staff on a monthly basis, including the overall investment, volume, and mix of volume per customer. Annual summaries were then prepared and submitted to the Board for consideration.

### 5.5.3 The effect of discounts and penalties on customer profitability

FoodUK offered discounts to its customers based on specific conditions: 'business efficiency discount', based on the volume of annual sales per customer, which ranges between 0.5% and 3%, and 'logistics efficiency discount' based on the supply chain performance of the individual customer concerning the size of the order. Customers could order in full truckers, full pallets or smaller than full pallets. The maximum discount is 2% for a full trucker, and a smaller percentage for a full pallet with no discount for smaller orders. Customers were reviewed on a six-monthly basis so that the terms of the discount were revised according to their buying behaviour over the previous six months. Getting these discounts 'right' is considered crucial because if the discount was too high it reduced customer profitability but it had to be sufficiently high to be attractive to large customers.

Brand promotions also affect CCS. Typically, the customer suggested to FoodUK the best times and conditions under which a product promotion should be made. For example, a promotion based on 'buy one get one free (BOGOF)', entailed FoodUK bearing the direct cost of that promotion, in the hope that this will result in stronger consumer loyalty to the brand or, better still, increased future sales. The terms of these agreements tended to be agreed verbally at the outset between FoodUK and its customers, but there was increased recognition that these terms should be written, and initial steps were being taken in this direction. Disputed amounts between customers and FoodUK were charged as trade spend to sales managers and thus they impacted adversely upon their customer volume and profit KPIs, so that sales managers had a strong incentive to minimise these deductions by getting their administration 'right'. Their performance was measured on the basis of net customer contribution, which equalled the marginal contribution per customer minus the cost of servicing that customer. If FoodUK made the wrong delivery to a customer, for example in terms of the wrong price, size order, packs or items then either the items are returned to FoodUK at their own cost or some deductions from the original price charged is effected. If disagreements over deductions made by the customer occur, then negotiations began to resolve the deduction.

#### 5.5.4 KPIs and customer profitability

Profit targets (KPIs) were determined on the basis of a product mix-based budget that was supposed to deliver these targets. The challenge for FoodUK was to stick to that mix throughout the year, but this could change because of possible shifts from singles to multi pack formats with a lower profit margin. Profitability analysis sought to establish the extent to which a particular consumer bought because of brand loyalty or because of opportunism with a view to shifting to other cheaper brands in the future. This knowledge was deemed crucial, for once it is gathered, FoodUK then communicated with the customers with the hope of working together to create demand. Although FoodUK's big customers gathered and communicated such intelligence consumer information, FoodUK preferred to take a proactive approach of not sitting back and waiting for the customers for fear that they might approach competitors.

#### 5.5.5 The supply chain and accounting for credit

Until recently, separate functions existed for accounts receivables and credit control. The problem with this arrangement was that if prices were not set up on time or were not determined correctly queries were initiated by one of these two units and then the customer came back complaining of overcharges. A decision was taken in 2001 to group these two units into one function, commercial administration, but with a reduction of staff numbers by about 25%. This new department assumed responsibility for setting up prices, agreeing bonuses/discounts, overseeing credit control, and liaising with the sales staff by organising financial awareness programmes to highlight the financial consequences of their decisions. This new department is also under pressure to justify its costs, by being asked to benchmark itself.

The number of credit queries was one of the KPIs for this department, in addition to the amount of overdue debt, so the pressure was there for the department to keep the number of queries as low as possible. Most of the problems seem to occur in promotion arrangements, whereby FoodUK agrees with one of its main customers for a promotion of specific brand lines over a limited period, such as 'BOGOF'. Sometimes errors crept in because after agreeing a discount with the customer, the customer was then billed mistakenly for the full price, leading the customer to delay payment or pay a proportion of the invoice and complain about the error. In other cases, the errors may have arisen because salesmen agreed a discount with customers without obtaining authorisation, or because of imperfections in the customer information system. In this latter case the department offered technical advice to the customer to help sort out the problems, and the two sides exchange information on queries to clear the backlog, so some measure of knowledge transfer seems to flow between the company and its customers. Also, the previous practice of allowing customers different dates of payment has now been displaced by a standard system according to which all customers have to pay their debts on the 16th of every month.

#### 5.5.6 Accounting and supply chain problems

FoodUK products can be broadly classified into three categories: strong (household name) brand with high profit margins, low profit margin products, and private labels manufactured by FoodUK on behalf of and branded under the name of one of its big customers which produce very little margin, if any, for FoodUK, so they mainly just keep the factories going. Up to a few years ago, FoodUK's product range was concentrated in the strong brand category, but increased competition began to gradually erode this market dominance through the emergence of private labels, so that the market share of some key brands fell from about 90% to 20%.

The low profitability of many of the products was made worse by incessant customer drive to push costs up the supply chain. For example, it was much more economical for FoodUK to deliver its products to customers in pallets to reduce handling costs and also in full vehicles to reduce transportation costs. The customers drive for lower supply costs by carrying lower stock levels, however, led them to demand 'just in time' deliveries of smaller loads (a small number of pallets or even one part of a pallet) which also tend to be delivered on vehicles that carry less than full loads. The customer services staff would try to draw the attention of the customers to the high cost to FoodUK of meeting customer demands, and if the customers insisted, negotiations began to agree a new price that reflected some of this increased cost.

Customers quest for holding lower stocks through securing just in time deliveries impacted on the cost structure of FoodUK factories which, without exception, operated with over-capacity and were fiercely competing against other factories within the Group to remain open by keeping unit production costs as low as possible. Customer pressure necessitates focusing upon long production runs, which undermined high production flexibility to meet just in time customer orders. This pressure has led to quite understandably divided views within FoodUK concerning length of production runs and their associated costs, with some supporting the interests of the factories in maintaining long production runs and others arguing that FoodUK must accede to customer demands for just in time supplies notwithstanding resulting higher production costs.

Manufacturing costs were considered easier to quantify, in contrast to the cost of the supply chain which was perceived to quantify in terms of costs and benefits. There also was wide recognition that KPIs are necessary to motivate managers to perform and to hold them accountable. But there was also concern that appropriate KPIs that are relevant to the objectives of both the individual and FoodUK, otherwise there was the real risk of outcomes being inconsistent with the interests of the company, particularly because the achievement of KPIs was directly linked to managerial bonuses. Calls were therefore made by various staff to ensure that KPIs were 'balanced' between individual and company objectives. There was also concern that while it may be relatively easy to develop KPIs at higher levels in the hierarchy, it may be difficult, even impossible, to develop KPIs that make sense at lower and shop-floor levels.

## 6. Truststar

### 6.1 History and context

Truststar is a large teaching NHS Trust Hospital in England attached to a prestigious university. It has an annual budget of over £170M, employs well over 5000 staff, and provides care for nearly half a million inpatients, outpatients and accident and emergency patients. It performs a wide range of medical procedures, including heart and lung conditions, transplantation, cancer, plastic surgery burns, mental health, renal services, and rehabilitation of patients with physical disabilities. Within less than a year of the beginning of our interviews, a team of new, young executive directors were appointed to all the board. This followed a crisis caused by what were deemed by a national audit committee to be manipulation of statistics of some key performance indicators whose targets were set nationally, which resulted in downgrading its previously awarded performance rating. Truststar had a financial deficit of a few million pounds. It was also involved in a major Private Finance Initiative (PFI) which was launched just before we began our interviews, an outcome of which was a 35-year outsourcing contract of cleaning/housekeeping and building maintenance with two external private suppliers.

Truststar was organised along a divisional structure, with three main divisions covering medicine, heart and lung, and surgery, each employing staff of around one 1000 staff. Moreover, the hospital had an Accident & Emergency, Maternity, and Acute Units. The recent troubled history of the hospital put greater pressures on its staff to cut costs, improve the quality of health care delivery, meet the nationally tight performance indicators targets, and restore the public and institutional lost confidence in order to improve its ratings. Interviews were held with board members, medical directors and other senior staff in the three main divisions, surgeons, ward sisters and nurses, finance staff, HRM staff, and various administrative staff involved managing outsourcing activities.

Our interviews uncovered three main types of outsourcing activities in which Truststar was involved: (1) building maintenance and housekeeping (the PFI concession agreement); (2) recruitment of nursing staff; and (3) surgical procedures. Each of these types of outsourcing was motivated by different kinds of pressure upon Truststar.

### 6.2 Forms of outsourcing

#### 6.2.1 Housekeeping, supplies and building maintenance: legally forced outsourcing

An essential part of the PFI agreement was for certain activities to be farmed out to private suppliers, chief among these were housekeeping matters such as cleaning the wards and other buildings, providing toiletries, food both for patients and staff, laundry, beddings, ambulance services and building maintenance. These activities were outsourced to two private organisations, one for building maintenance and the other for the remaining services. Truststar had to acquire these services from these two private suppliers, with no discretion to shop around. The management of contractual relationships was organised through a consortium which mediated between Truststar and the private suppliers, with monthly meetings held between representatives of the three sides.

These contracts proved to be extremely difficult to oversee and monitor for four main reasons. First, virtually all senior staff from Truststar who were involved in developing and finalising these contracts had left almost as the contracts were being launched, so there was no one there to clarify contractual ambiguities when they arose. Secondly, many of the contract clauses were found later to be quite vague to the benefit of the suppliers. Whenever the monitoring staff from Truststar were unhappy with what they deemed to be below standard quality of service, the providers insisted that they had observed the terms of the contract. Thirdly, the duration of the contract was seen by virtually all our informants to be prohibitive, in terms of reducing their scope for action and the perceived potency of any sanctions they felt they could exercise. Fourthly, a cultural gap between the public sector ethos and the private sector focus upon profits created a schism between the two sides in terms of both the timing and quality of service delivery.

While a number of our informants have suggested that progress on a number of issues and new detailed agreements have been reached with the private suppliers, others felt a 'loss of control' over what they deemed to be fundamental NHS services and that the problems were significant and persistent. Many of these problems emerged in part with different dimensions of the services delivered, and whenever the contracts were consulted for clarifications they were found to be wanting. Another reason was the difficulty of quantifying performance targets for certain dimensions of the services provided, such as cleanliness. It was also stated that, immediately after serious complaints from Truststar, the suppliers would improve service delivery substantially, but only for a limited period of time after which service delivery lapses back into lower quality. To move matters forward, a team was set up with a member each from the Consortium, Truststar and the supplier to conduct random, spot checks, with immediate penalties whenever service delivery was found to be wanting.



### 6.2.2 Recruitment of nursing staff: organisationally convenient outsourcing

The varied mix of nursing skills required in Truststar was acquired via three sources: ward own regular nursing staff; a back-office set up by Truststar that has a pool of nurses that can be deployed on demand; and a private agency. An outsourcing contract was set up for an initial two-year period, which was later extended by one more year, with a family-owned, small private agency. The terms of the contract stipulated that the agency had to provide on Trust demand a minimum of two thousand shifts per month, with a financial penalty if provision falls below that. The agency undertook to find and provide nurses with the levels of skills required within an agreed period that varied from one or two weeks to a few days for emergency situations. Out of the nine nursing grades (progressing from A to I), only additional requirements of three nursing grades, A, D, and E were outsourced. The contract specified the responsibilities of each side and the financial details involved, and accounting expertise was called upon to help draft the financial details. The contract also stipulated that Truststar did not have the right to shop around with any other private agencies, not even if the private agency engaged failed to find the required nurses; it was up to the private agency to shop around on behalf of Truststar. If the agency reported back to Truststar that other private sources could not provide the required nursing skills, the back-office engaged in spot checks verify the authenticity of this claim simply by ringing other private agencies. However, a get-out clause was written in the contract to allow Truststar to seek another agency should the engaged agency fail frequently to deliver required nurses.

The relationship between Truststar and the private agency was co-ordinated via regular consultations and meetings. The relevant staff in a ward or theatre would identify additional needs and types of nursing skills and report those to the back-office. The back-office will try to provide this requirement from its own pool, and failing that will ask the private agency to provide. Representatives of the agency met regularly with staff from the wards and the back-office to identify the additional nursing skills required by each ward or theatre. Monthly monitoring meetings were held between back-office staff and the private agency. Also, quarterly meetings were held between the private agency, the Trust Chief Nurse, back-office staff, the relevant divisional general manager, and a senior management accountant to oversee progress and iron out any emerging problems. Good relationships were reported to have prevailed between the private agency and Truststar, because of personal ties with the family owners, and the high percentage of their business conducted with Truststar. It was reported that during the three-year duration of the contract, the agency never failed to meet the minimum number of monthly shifts it had to deliver.

This arrangement, however, came to an end by 31 March 2003 with the emergence of the NHS Professionals (NHSP), an organisation set up nationally to perform exactly the same role that the private agency played at a commission. The NHSP claimed all work previously outsourced to the private agency and also overtook responsibilities of the back-office. If the NHSP could not provide the required nursing staff from its own pool, it shopped around to acquire these nurses from private agencies, but in this case it did not receive a commission. Given the abolishment of the back-office, ward or theatre, additional needs of nurses are now reported directly to the NHSP, who try to provide from its own pool and failing that have to shop around for a provider. The NHSP overlapped with the private agency for a period of six months to ensure the smooth transfer of nursing recruitment, becoming the sole provider as from 1 April 2003. The relationship between Truststar and NHSP is regulated through national guidance and service level agreement.

### 6.2.3 Surgical procedures: politically imposed outsourcing

Truststar is expected to meet various nationally determined targets for key performance indicators including very tight waiting times. The current Labour Government has provided all hospitals with additional funds to be able to meet these targets, by outsourcing over-capacity surgical procedures to private hospitals. Truststar began recently to farm out to a small number of private hospitals surgical procedures it could not handle in house because of capacity constraints. These outsourcing activities are managed through written contracts that specify the medical details, patient types, nature of information flow, cost of each medical procedure, and sanctions that could be exercised by Truststar in cases of failure. A middle manager has been appointed to manage the interface with the private providers, and an administrator has been earmarked in each of the medical divisions (surgery and heart & lung) where outsourcing occurs, to select those patients who should be outsourced. The outsourcing of surgical procedures has received mixed reactions in Truststar.

First, most staff felt that NHS patients should not be forced out of the NHS into the private sector but should be treated within the NHS as a matter of right. Secondly, only 'straightforward' procedures were outsourced to the private hospitals because their small size meant that they could not support complex surgical procedures. This has resulted in Truststar retaining all complex surgical procedures. This impact on patient mix has led to: (i) increasing the cost per patient and the cost profile of treatment; (ii) increasing mortality rates per patient population, given the much higher risks to patient lives in complex surgeries; (iii) increasing work complexity for medical staff who now have to be able to deal with a much higher percentage of the most complex, and highly stressful cases; and (iv) depriving young medical staff from an all-round learning through experience with a balanced portfolio of surgical procedures. Thirdly, outsourcing is seen to be both expensive (paying private rates) and reducing the control of Truststar over its patients treated privately. Although in the majority of cases these patients have been operated on by consultants from Truststar, other medical services are conducted by the staff of the private providers. When problems emerge, Truststar staff feel their own procedures should prevail, but this does not always occur. Fourthly, the problems of managing the day-to-day interface with the private providers have not always been smooth, and commands considerable resources in terms of staff, money and time. Additional problems have been caused by differences in priorities and temporal preferences between Truststar and private providers, in some cases leading to cancellation by private providers of NHS surgical procedures at very short notice because of preferential treatments for their own private patients. Although these problems are ultimately ironed out, and financial sanctions applied in cases of delayed treatments, they continue to occur.

### 6.3 Accounting for outsourcing in Truststar

The accounting system used in Truststar collates and then traces out costs to individual operating theatres and other major functions using activities as cost drivers. Costs cover staffing and non-staffing items separately, and are used to derive an average cost of treatment per medical procedure, or per speciality. Costs are also aggregated into monthly statements for every type of expenditure, for example drugs, bandages, needles, etc. over all specialities. At the time of its negotiation, it was estimated that the PFI will lead to a reduction in activities by 23%, but it was later found out that, if anything, the number of activities increased post the PFI. This was caused by the increased complexity of the patient mix being treated at Truststar because outsourced patients were the most straightforward cases.

#### 6.3.1 Accounting for housekeeping, supplies and maintenance

A team of monitors was established to oversee the delivery of these services, with representations from across the various sections of Truststar. The monitoring team has developed six performance indicators (PIs) by which to judge the performance of their suppliers. These PIs are: (i) cleanliness standards; (ii) response time to ad hoc requests; (iii) valid complaints against the number of tasks suppliers do in total in a week; (iv) suppliers meeting legislation when carrying out domestic services; (v) suppliers meeting Truststar policies and procedures relevant to the performance of domestic services; and (vi) presentation and communication of supplier staff. The leader of the monitoring team suggested that the time spent on the cleanliness standard PI is larger than the other five PIs because it is quite a specific assessment and it can't be office-based.

These PIs are quantified in order to facilitate their measurement in more 'precise' terms. In particular, the cleanliness standards PI is measured in terms of a 'dust-test'; a threshold of a given amount of dust measured by thickness and length (one centimetre thick and over three inch long) which signalled that the cleanliness standard has been violated. It is therefore an output measure, rather than in terms of how many times a particular part of Truststar had been cleaned by the supplier in a week. Response time was measured by the time that elapses between an ad hoc request and the response by the supplier. Similarly, the third PI was measured by the number of cleaning tasks over which valid complaints have been made divided by the total number of weekly tasks. Even the remaining three PIs were converted into numeric measures showing how many times the supplier failed to meet legislation on domestic cleaning (PI4); how many times they failed to meet Truststar policies (PI5) and how many times their staff appearance and communication was below standard (PI6).

The relationship between Truststar and the private suppliers in this area has been quite problematical, and most clearly the worst of all three types of supplier relations specified above. In part, this is because the PFI contract was felt to be 'quite woolly', leaving considerable room for disagreement between the two parties. One senior member of the finance staff claimed that, rather than drawing upon her financial skills in managing outsourcing relations, she spends most of her time working like a lawyer, attempting to sensibly interpret the terms of the contract and then negotiate new understandings of these terms with the suppliers. The monitoring staff have also indicated that because of contract ambiguity, they have been supplementing the contract with various appendices to specify new agreed understandings of service deliveries from suppliers. Considerable time has also been spent by the monitoring team with the solicitors of Truststar to seek legal advice in the many disagreements that emerged with the private suppliers.

Financial sanctions, such as refusal to pay for all, or some of, the full cost of the service have been exercised by the monitoring team from Truststar whenever service delivery was below agreed standards, provided that the consortium was supportive. Given the various complaints made already, and the refusal of the private supplier to concede that their service delivery has been well below expected standards, Truststar sought to impose a heavy financial sanction on the supplier. The consortium intervened and proposed that the sanction be suspended pending the outcome of an ad hoc new monitoring initiative by a team made up representatives of Truststar, the private supplier and the consortium on a daily basis for a whole month. Each morning, the consortium representative drew a number of cleaning tasks 'from a hat' to be monitored on that day (to reduce the opportunity for the supplier to manipulate the results if those tasks to be monitored were known in advance). The results so far vindicate Truststar, as many of the monitored tasks were well below agreed standards, and it looks like Truststar will be able to activate its suspended financial penalty. These problems combined has led a number of our respondents to suggest that there is very little trust at this point in time between Truststar and the private suppliers. To add to this problem, frequent staff changes at one of the suppliers made it difficult for personal relations and trust to be cultivated between members of Truststar monitoring team and the private supplier staff. It seems that the only reason why the service is continuing is because of the written contract (along with the clarifying appendices) and the threat of financial sanctions from Truststar.

### 6.3.2 Accounting and the recruitment of nurses

The level of minimum monthly provisions of two thousand shifts agreed with the private agency was calculated to be about £170,000. Accounting expertise was directly drawn upon in the writing of the contract with the private agency. This not only included stipulating the minimum number of monthly shifts that had to be provided and their average total costs, but also the payments to cover employment costs of nurses and the commission for the agency. Moreover, a financial penalty clause was calculated and entered in the contract to cover for the possibility that the agency might fail to deliver the minimum monthly number of shifts. The financial contractual agreements involved paying the private agency the salaries of the nurses, based on the national cost at mid-point of the relevant scale, plus 2% to attract good quality nurses, in addition to other employment costs such as national insurance and employer contribution. On top of that, the private agency received 17% of nurse salaries (excluding additional employment costs). The private agency could either make some savings or incur more costs if the actual salary they paid the recruited nurses was below or above the relevant mid-point on the scale.

Despite the good record of the private agency, at times things went wrong, such as when the agency sent nurses who were not judged by the ward nurse to be sufficiently competent. When this occurred, a number of scenarios were followed. The nurses provided by the agency were first 'audited and sort of watched and monitored just to see whether they are capable of doing that job' (Ward Nurse). If the nurses were found to be wanting in competence, they were sent for further training, or employed to perform lower grade jobs and at the extreme simply sent back to the agency without payment. It was up to the private agency whether or not they made some nominal payment to the nurses out of their own money. A senior management accountant was regularly involved in these scenarios.

The financial penalty, which has never been invoked because of the good record of the agency, was £5,000 minimum and rose with the gap between the minimum monthly number of shifts stipulated in the contract and the number actually delivered by the agency. The incentive for the agency to deliver was not simply to avoid paying this penalty and any adverse reputational effects; it also stood to benefit because the more nurses it delivered the higher the commission amount it received. Yet despite the agency's good record, the financial penalties were thought to be essential because 'if you don't have any sort of penalty clause then they could just be left to do what they like and there's no real incentive to meet the terms of the contract' (senior management accountant).

The shift from external outsourcing (the private agency) to 'internal' outsourcing (NHSP) was not thought by Truststar staff to offer real savings and was possibly more costly. The rates stipulated by a government directive is to pay the nurse the grade plus two percent, and the NHSP then receives 7.5% fee from Truststar. NHSP have been hard selling their scheme, by focusing on the quality side and also intimating that trust hospitals would get better terms than if they dealt with private agencies. Yet, the NHSP is seen as a more costly alternative to the private agency. Truststar now pays the NHSP 2% above the salary scale for a given grade for all nurses and receives a fee of 7.5%, on nurses who previously would have been recruited by the back-office; a cost not previously paid. This cost was calculated to be well above the 17% commission that the private agency charged on the much smaller number of nurses they provided. To add to the cost of Truststar, while the abolition of the back-office was calculated to save about £17K per year, new monitoring will be required to manage the relationship with the NHSP. An additional source of extra-cost was calculated to result from having to pay more to private agencies whenever the NHSP fails to provide nurses from its own pool and engages private agencies.

### 6.3.3 Accounting and outsourcing surgical procedures

Five main KPIs, which are national indicators, were used: financial bottom line; waiting time guarantee for inpatients and day cases; waiting time outpatients guarantee for consultation time; patients cancelled at last minute as a percentage of total number of procedures carried out in Truststar; and adherence to the two week cancer wait for all surgical procedures. It is evident therefore that patient waiting time is particularly prominent. This represents a fundamental shift from the previous emphasis on waiting lists (or waiting numbers). When hospitals had to meet waiting list targets, all they needed to do was to farm out to the private sector the requisite number of cases that would reduce the waiting numbers to the desired level, and these tended to be the simplest possible cases even if the patients had not been long on the waiting list. Using waiting time as KPIs meant that it was the surgical procedures of those patients who waited the longest that had to be outsourced, hence it became more difficult for hospital managers to manipulate the numbers to meet the targets.

Outsourcing contracts have been three to six months in duration, and very occasionally stretching to one year. Demand for accounting and other information therefore reflects this short-term emphasis. Outsourcing activities are seen as a pot of money earmarked for private treatment that had to be managed centrally by Truststar. Accounting is seen to play a variety of roles. First, planning future numbers and mixes of patients to be treated privately. This involved working from previous year's figures and taking into account projections of numbers and mixes of patients for the following period, theatre capacity, and surgeon capacity. Excess numbers that could not be treated internally within the appropriate time frame drawn from waiting time KPIs are identified. Once the numbers to be outsourced were determined, steps were taken to identify the appropriate private hospital(s) to engage to get the best treatment at the best price possible. The cases were put out to tendering, and accounting staff became directly involved in drawing out the terms of tendering and also in the selection of the best private hospitals for the surgical procedures required. Negotiations between Truststar and the private hospital took place to determine prices for a given number of procedures.

This negotiating process over prices and times of treatment was also infused with power relations between Truststar and private hospitals. On the one hand, private hospitals seem to command much relative power in this process because they recognise the limited choice that Truststar could exercise. The room for manoeuvre available to Truststar is further limited by the extent to which its own surgeons preferred to operate in these private hospitals. On the other hand, some private hospitals had spare capacity, and NHS work represented a relatively significant proportion of their total volume. Truststar was able to more or less guarantee a given volume of outsourced procedures to the private hospital which allowed the latter to plan its activities better. However, because of the nature of the flow of and uncertainty over NHS funding, Truststar could only plan the dates and

numbers of their procedures for outsourcing only a few months before the treatments were required. Truststar attempted to convince private hospitals that whatever numbers are being negotiated for outsourcing at a particular point in time, was only the beginning with more volume to follow in the future.

It was acknowledged that the success or otherwise of this process depended on having a good flow of relevant information. Partly, much of this information, particularly that relating to forward planning of patients and specialities to be outsourced, came from working with the relevant divisions and speciality staff in Truststar. Information concerning price was collected through the tendering process and the stock of past information from previous outsourcing activities. The Private Sector Project Manager also took active steps to build up her own data base, by creating her 'own little discs and spreadsheets', as well as soliciting price information for specific surgical procedures from the Strategic Health Authority (SHA) that has its own database. However, it was recognised that the SHA database is of limited value because 'there's nothing to say where that data's come from, in which organisation they have bought in high volume, so it's weak and not going to do anything for you', because she could not use it to challenge the price tenders of a specific private hospital. Despite this information flow, and the various skills exercised by the staff from Truststar to get the best price possible, there was a general feeling that 'the private sector massively overcharges the NHS and nobody's getting to the bottom of that' (manager, private sector project team).

The other crucial item of information is the amount of money Truststar was given by the Health Authority to pay for outsourced procedures. This created a major uncertainty, for while once agreed, the price of outsourcing to a particular private hospital became fixed, but the financial resources offered from the Health Authority could fall significantly short of the price. This was because additional state funding to reduce waiting times is based on average cost-per-case, in turn based on previous year's total spend and total case mix. Because the private hospital charged on the basis of speciality rather than each individual case, Truststar invariably had a deficit which it had to renegotiate with the state. A particular example illustrates this dilemma. Recently, Truststar was allocated £1.5M to treat 1500 patients of different case mixes in the private sector in order to achieve its waiting time targets, funded at £1000 per case. When their treatment was tendered for in the private sector, the price based on speciality was significantly higher, reaching £2.9M. Truststar went through a funding renegotiation process that saw its budget raised, but only to £2.5M, prompting one manager to say 'it's this whole triangle of you know achieving the impossible again.' It was felt that if such intelligence information comes late, which made it difficult for Truststar to get the budget properly adjusted.

Written contracts were then produced, which specified the terms and conditions for speciality surgical procedures, prices, breach day, penalties for failure to meet breach day, and get out clauses. Breach day is the date by which the patient must have been treated. If the private hospital failed to meet that breach day for a particular patient (or group of patients), the contract specified that the patient must be treated free of charge. Despite the writing of these contracts, the general view was that they were not legally binding, in terms of the NHS guaranteeing to outsource the number of patients and specialities specified in the contract, with either side having the opportunity to 'opt out'. However, there was mention of the 'civil' dimension of the contract and the mutual dependency between Truststar and private hospitals as forces that tended to make contracts functional. Indeed, there were a few cases when penalty clauses in the contracts were invoked successfully when the private hospital in question failed to meet the breach day and ended up treating the relevant patients completely free of charge.

Once a private hospital is engaged, accounting was called upon to provide a host of information items to ensure that the process is managed appropriately. These included ensuring that the right number of patients are being outsourced and charged for, identifying their specialities, and the specific private hospital to which the patient is sent. Monitoring patient treatment in the private hospitals was a major occupation for Truststar. First, in order to ensure that breach date was observed, and clarify any potential financial penalties that had to be exercised as well as face-to-face negotiations that had to take place. Further, the provider private hospital was expected to submit information to the Private Sector Project Manager on calculated length of stay in total cost, and other data needed for clinical audit. This information is required not only for clinical audit, to clarify the total cost that Truststar was going to be billed for, to allow Truststar to monitor under-spending on its patients by the private hospitals and claw the savings back, and to make it easier for Truststar to sensibly plan its financial commitments in a timely fashion.

These specific details of accounting-based monitoring are nested within a broader set of monitoring and feedback which involves the Trust own consultants operating on the Trust patients privately, patient own feedback through questionnaires, the Private Sector Project Manager who meets with opposite numbers in private hospitals weekly and is in daily contact with them by telephone/correspondence, and finally in the worst case scenario when patients who had been treated privately return to Truststar for further treatment.

#### **6.3.4 Differences in time frame between the private sector and the NHS**

For all this focus on cost control of outsourcing procedures, the real concern for Truststar has been its ability to meet waiting time targets, particularly in light of the initial low assessment of performance (one star compared to three stars achieved by comparable teaching hospitals). When the private hospitals failed to meet breach days, the financial savings arising from free patient treatment offered little comfort to Truststar management. The problem with meeting these waiting time targets seems to emerge for two reasons; differences in the time-frames of the private hospitals and Truststar, and the relative power of the private hospitals compared to Truststar.

A basic reason for the difference in time frame between the private and the public sectors is the fundamentally different flow of work in both types of organisation. NHS hospitals treat much larger volumes of patients with a greater variety of medical complexities, a significant number of whom arrive unexpectedly. NHS hospitals also need to have access to several data items in real time, for example when a patient is admitted and discharged in real time because they have to report on length of stay. In contrast, most private sector hospitals deal with a much smaller volume of essentially self-pay patients and a few insurance companies and hence they were perceived by our informants as having no need for real time reporting. This difference in time frame has resulted in what one informant called a 'massive gap in information that private hospitals provide on our patients and what we need for our system.'

The other reason for time frame differences between Truststar and private hospitals relates more to the perceived lower priority by which private hospitals treat NHS work. There is a general feeling that, despite some scope for the NHS to exercise some influence, private hospitals are considered to 'still hold the cards' (general manager, Division C). In one case one private hospital cancelled a previously agreed operation on an outsourced NHS patient because of an unexpected demand for treatment by one of the hospital's own private patients.

## 7. Retail UK

### 7.1 History and context

Retail UK is one of the largest UK supermarket retailers. Historically, it has been primarily involved in UK – based retailing sales from stores. In common with other UK retailers, however, it has diversified its broad ranges of product offering. Notably, it has massively expanded its wine, beer and spirits offerings to a point where it is the largest UK sales outlet for such goods. More recently it has diversified into sales of a variety of major non-food items including clothing, consumer electronics, white goods, pharmaceuticals, books, recorded music etc. This diversification strategy moved onto the sales of a variety of financial and credit services. Mode of sales delivery has also diversified, including Internet retailing, and with store sizes varying from very small and 'convenience stores' to extremely large 24-hour 'hypermarkets'. UK-based store numbers have, for example, increased by 20-25% per annum including the 'garage-type' stores with a turnover of £30 to 60,000 per unit, mainly located in the south east. Home (Internet) shopping, meanwhile, has grown to approximately £500 million turnover per annum, with a longer term target of £2 billion.

The third type of diversification has been geographical, with Retail UK internationalising, with 378 stores in 10 countries outside the UK, notably in Ireland, Eastern Europe and East Asia. While this is still minor compared to the UK operations (nearly 2000 stores), overseas expansion has been fairly rapid and fairly recent. This international expansion has, in part, placed Retail UK in the top ten global retailers, although, in common with all of its international competitors it is dwarfed by the giant US-owned retailer Walmart, which owns the UK retailer ASDA. These various diversification and expansion strategies are reflected in all of its international competitors.

Such diversification and expansion strategies are reflected in various indices of growth. Turnover in 2001, for example, was £26.3 million, compared to £13,900 million in 1997, and the company employed over 188,000 staff.

### 7.2 Business strategy

Changes to the supply chain and the consequent changes in accounting need to be understood within the context of business strategy. As the introduction indicated, the organisation has changed considerably since the mid 1990s due to considerable expansion. These changes have been driven by a particular, sometimes close to evangelical, style of strategic management from board level and especially its chief executive, but also the finance director. The company has a mission statement aiming to be the outstanding company in its sector for customer service by building lifelong brand loyalty in its customers. To these ends, the main changes in business strategy took place in the mid-to-late 1990s. In order to compete directly with competitors on the basis of their perceived business strategies, Retail UK aimed to raise its quality to levels at least those of the two competitors noted for quality levels, while retailing products at the same price or below that of its

main competitor with a low price focus. This strategy, in turn, is predicated upon changing customer demands, namely that customers are increasingly sophisticated and demanding, and are looking for different products and services. The demographic profile of customers has also changed considerably in the UK in the past 10 years. In particular the growth of an ageing population, a major increase in single person households, and the growth of the ethnic minority population with different tastes and demands.

The key strategy driver in 'growing the business' relates to a decision taken not to raise the level of margin on products sold, fixing it at 6% (as opposed to the previous 9%) on most retail produce. Any increase in dividends for shareholders would, therefore, have to be achieved through overall business growth, and particularly through opening new stores. Any productivity gains from, for example, more efficient supply chain management, would be routed back to customers through cheaper prices and/or better service. As such Retail UK has invested £1 billion over 5 years in price reduction and £60 million in the current year.

Despite geographical diversification, the main focus has been on UK operations. These are structured into three main divisions, based on a buy-move-sell logic, namely commercial (buying), logistics and IT (supply chain relations) and retailing (stores). In addition to these three functional areas represented at board level including group finance and marketing. At a senior, and more operational level, there is a matrix-type managerial structure, with managers working in cross functional teams.

Retail UK's broad business strategy has four main missions or 'pillars'; to be as big overseas as in the UK; to be as big in non-food as in food; to offer the lowest prices in UK (through maintaining low margins and driving profits through growth) and to create lifelong loyalty by customers through excellent customer service. In particular, Retail UK is attempting to use its name to represent a brand of quality, service and value whatever particular goods or services it is offering, be it groceries or financial services (the exemplar cited is Virgin).

Historically, the company has shifted its business strategy considerably. In the 1970s the company was perceived (and indeed sold itself) as a 'pile-it-high, sell-it-cheap' retailer with discounts offered in the form of a dividend stamp. In the late 1980s the company closed all its UK stores for a three day period, physically re-vamped the stores and dropped the dividend stamp and concentrated on price competition. In the late 1980s and early 1990s it concentrated its focus on investment in the supply chain. In the 1990s it invested heavily, both financially and culturally, in a 'listening to the customer' ethos and a major investment in stores and infrastructure.

Core capabilities within Retail UK are judged to be servicing customers, supply chain management and site development. The company regards itself as being 'world-class' at understanding customer needs and being close to the customer and at developing ranges. It considers itself very good, meanwhile, at managing the supply chain (and particularly good at fast stock turns) and at site development. The supply chain is described as the 'lifeblood of the whole business'.

In terms of market segmentation, Retail UK serves upmarket, middle market, and less affluent customers, with a product range that reflects this. The company therefore has to compete on both quality and price and senior managers are conscious of the potential of falling between these two positions and ending up with a bland offering.

### 7.3 Supply chain development

The supply chain function has changed considerably. Historically, the ethos of Retail UK was that supplies were bought, were sold and a profit made, with little regard for what the customer wanted. Indeed, one of the interview respondents (a supply chain director) described the organisation as 'very retarded' in the mid 1980s in terms of the supply chain. In 1985 the organisation decided to invest heavily in its supply chain function, following a major management shake up in 1983. Initially there was an extensive recruitment drive to bring in specialists. A stock management function was introduced with two prime aims. First to manage distribution centre replenishment and second, to ensure that one person was in charge and, therefore, to introduce accountability. Prior to this there had been a considerable lack of co-ordination. A buyer could, for example, purchase huge volumes to ensure an extensively competitive price but then flood distribution centres with goods that they could not store. Moreover, the system was extremely tardy; in 1985, for example, it took one week to order. Seventy per cent of goods were supplied directly to stores which created significant 'book-room' storage for the stores. In 1985, therefore, the whole stock management function was centralised. The stock management function was further developed in the early 1990s with the advent of electronic point of sale (EPOS) technology. The years 1985 to 1996, therefore, brought considerable developments in supply chain management through new systems and efficiencies. By 1996, however, it was felt that there was a loss of a wider business focus in the stock management functions, partly because staff who had driven the change had been promoted elsewhere in the organisation.

In 1996, therefore, the stock management function was disbanded and integrated into the three main operating divisions, namely commercial (i.e. buying), distribution and retail (i.e. stores). This change, however, was not judged a success; respondents described this time as one of 'standing still' in terms of supply chain developments. There was little improvement, for example, in key performance indicators in the supply chain but this was, to a certain extent, ignored as the overall business was doing well and the company profitable.

In 2001, therefore, the stock management function was re-introduced, albeit as a supply chain function. A similar structure was reintroduced. The main difference, however, was that new management principles were introduced, described by the acronym RACI – responsibility, accountability, consult and inform. This is a tool used across the organisation and intended to concentrate a staff focus on the wider business implications of a particular functional decision. If a Retail UK buyer, for example, negotiates a particular product promotion (such as a 'buy-one-get-one-free'), they are obligated to inform and consult with distribution and retail on the wider implications of this move.

The mission of supply chain management is to be 'world class in availability and efficiency'. Supply chain specialists in Retail UK acknowledge shortcomings. Company respondents, for example, felt that it still holds too much stock and that it cannot respond quickly enough in certain circumstances (for example, the provision of fresh foods and reacting to weather changes). As one respondent commented 'the business is, because of its size, a bit like an oil tanker'.

Contractually, the arrangements with suppliers are fairly loose ones, with Retail UK brand products, for example, it is rare for the company to have a written contract with suppliers. Rather, the company has a relationship with suppliers based on performance. Such performance is measured on the basis of a 'scorecard', including such measures as delivery, availability, quality and price. Inevitably, there are trade-offs between these measures with, for example, lowest price not always being the only criteria. These measures are reviewed on a regular basis. Retail UK agree with suppliers specific objectives around the scorecard which are measured and fed back to suppliers on each of the dimensions. These dimensions differ from supplier to supplier, as does the relative weightings of dimensions, but there are common generic measures such as service level. The brand supply chain target is, therefore, 'cost affective availability'.

An important key performance indicator (KPI) which drives the group and is crucial for the supply chain is the 'availability' target, which currently stands at 98.7% (i.e. if an 'average' customer walks into a store, 98.7% of what they want will be available in-store). Given that the cost basis of the competing retailers are fairly similar, the supply chain is seen to be a huge competitive advantage, and one that has taken 7 to 8 years for Retail UK to make competitive. Stock turnover is extremely quick, in the leading stores, 80-90% of goods delivered will be sold on that day.

Effective chain management is not only core to achieving customer satisfaction, but it has important financial implications. Supply chain costs, for example, are 12% of sales and two-thirds of these costs are labour costs (including in-store staff responsible for replenishing shelves).

The relationship with suppliers inevitably differs from supplier to supplier, with suppliers ranging from small companies to companies that are large multinational food and drink producers in their own right. However, the main hold that Retail UK has over such suppliers, in terms of price, is market forces in terms of the price level that individual products can be sold at. Nevertheless a Retail UK respondent described the relationship with these major brand suppliers, as a 'dynamic tension'. A majority of sales (55%) are of Retail UK 'own label' products and a further 15% are products primarily produced for them. Thus some 30% of products sold are non-Retail UK brands, sourced largely from multinationals such as Nestlé, Coca Cola, Kellogg's, Heinz etc.

#### 7.4 Managing the supply chain

The central functional actor in Retail UK relations with external suppliers was its supply chain division. The supply chain was described by one of Retail UK's senior directors as the 'lifeblood of the whole business, bespoke, and one which we would never outsource'. The company undertakes no manufacturing and, moreover, over 50% of its distribution and warehousing is provided by external suppliers, using a combination of national and regional distributors and logistics providers. However, this figure is relatively low compared to some of Retail UK's major competitors which have outsourced all of distribution and warehousing. Moreover, Retail UK has largely resisted the temptation to outsource other functions such as information technology (IT) and human resource management (HRM) and its large call centre operation. Indeed the major outsourcing is of peripheral functions such as facilities management, catering and cleaning etc.

Information exchange and the perceived need for the company to control its supply chain management were the prime focus. Retail UK regards itself as at the 'leading edge' of best practice in their field, although market intelligence was gathered on the practices of retail competitors (and, indeed, non-retail companies). Indeed ideas for improvements above were drawn from specialist manufacturers, distributors and logistics companies.

The company efforts were concentrated on reconciling the demands of quickly growing sales levels and rising market share and stopping escalating costs in the supply chain. A variety of innovations have been introduced. These include a programme of 'continuous replenishment' with store managers reporting twice a day on sales information. Deliveries are adjusted to more accurately reflect actual, as opposed to projected, demand. This has resulted in more frequent deliveries and a greater need for accuracy and co-ordination across the supply chain, with increased pressure on suppliers to ensure their information's correct and their servicing accurate and on-time.

Supply chain management has also sought new practices for working and relations with suppliers. For example, new warehouse automation systems have been introduced, as well as the co-ordination of ex-factory deliveries direct to stores.

Tension exists with regard to the degree of information-sharing between Retail UK and suppliers. Suppliers were broadly regarded as contractors, with their own business strategies and aims, rather than as partners, with strong mutual interests. The high degree of market share of Retail UK increased the hold that the company has over suppliers which may not exist in smaller retailers. In general there was recognition that there was a limit beyond which information exchange between Retail UK and suppliers would not extend. For example, while operational information could be exchanged, longer terms contract and business planning would not be. However, while certain UK retailers have demanded 'open book' inspections of suppliers, Retail UK has not pushed for this, accepting the commercial independence of suppliers.

The current supply chain strategy has three 'pillars'. First, to develop a business plan whereby customers are incorporated into the supply chain; second, analysis, which involves understanding the business in terms of inventory, lead times, waste, distribution centre operations, and process; third, to incorporate certain principles such as making things better for staff, simpler for staff and cheap by integrating end-to-end processes. In order to develop this strategy Retail UK's supply chain staff are developing mechanisms to predict stress points in supply and distribution.

Several new supply chain projects including 'right place – right time' and flow through measures. The first of these is aimed at imposing secondary distribution (that is from Retail UK's distribution centres to stores). Distribution centres (DCs) are broadly divided into three types. First there are 8 'fast' DCs, with 4000 products each and orders come in twice per day. These 8 DCs are regional and supply to about 100 stores each. Second, there are 3 'semi national' DCs which stock slower selling items, located again on a regional basis and supplying to around 250 stores. Finally, there are four national network DCs which store, for example, alcohol or organic goods. Goods are 'trunked' from these through the semi-national DCs to others. Over and above this, certain bulky fast selling items such as milk and bread are supplied directly to stores from regional suppliers. The company is now trying to provide other suppliers of fast selling bulky items (such as breakfast cereals) to supply directly from factories to stores.

The products are 'assigned' to the various types of DC according to 'product categories', but this has thrown up a number of anomalies. Dog food, for example, is a product category which is in the fast goods category, and yet only three brands are fast selling. By contrast, alcohol is categorised as a 'slow' line and yet certain items (for example, vodka) are very fast selling. Thus stores need to be supplied vodka twice per day, but are currently being supplied every other day. This is one such anomaly which the 'right place right time' programme is addressing.



Ownership and running of Retail UK DCs varies. Some are owned by the company and run by it, some are owned by the company but run by a 'third party' logistics and distribution company with their own labour and others are owned and run by a third party. There are a number of reasons for such a mix. First there is the 'legacy position' whereby ownership is largely for reasons of history. Second, outsourcing offers Retail UK a degree of flexibility over labour. Third, the company occasionally wants to access the expertise of third party specialist, as was the case in a recently opened frozen foods DC.

As indicated earlier the availability target is currently 98.7%. In a large store, some 80-90% of deliveries will be sold that day. This calls, however, for an extremely efficient supply chain. Some 200 Retail UK lines account for 10% of the sales with 6 lines that sell one million items plus per week (including milk, bread, lottery tickets, bananas and breakfast cereal). In total 15,000 lines are sold, but 500 account for 15% of lines and 90% from 50% of the lines. However, customers wish to purchase from a range of brands, even if they don't buy them. Thus, for example, 50 brands of coffee may have to be stocked even though only 5 sell. Similarly there are 'hero' lines which sell slowly but are deemed essential by customers (for example, Brasso) and so called 'destination' lines such as Bicolod, soya and organics which are slow selling but necessary to get customers into the store. The majority of food stuffs are either sourced from the UK or a UK source, or from Europe.

A major problem bottleneck, or stress point, is in the backrooms of stores where goods are delivered so frequently that they cannot be shelved quickly enough. Thus while there is 97.5% availability against a target of 97.8%, the dotcom measure is 91-92% which reflects on-shelf availability as opposed to in-store availability (including back-room). 'Continuous replenishment' is one major supply chain project which is currently being implemented. This is a sales based ordering system which has pervaded through all of the supply chain. Essentially, this is an ordering system based on daily fluctuations, almost measuring real-time variations. Moreover, quick moving products are now delivered from suppliers on wheeled trolleys which can be moved directly onto shelves. As indicated earlier the 'availability' KPI is seen as one of the company's most important ones. The introduction of the dotcom business has focused this measure considerably.

Suppliers are ranked in a league table using a 'traffic light' system, with red a problem, amber means that the supplier may be getting into difficulties or getting out of them and green is satisfactory. There is information exchange between Retail UK and suppliers on a weekly basis on, for example, sales and in 'common performance forward planning' which is process-orientated.

Typically, contracts are offered for between three and five years and KPI's are applied to them. For distribution centres, for example, two major ones are unit per man hours (UPMN) and costs per hour (as payroll makes up 65% of costs).

In terms of outsourcing functions, a fairly crude accounting decision is made and that the organisation must decide it can save over 15% due to outsourcing the function. Different decisions are made, however, according to functions. Routine information technology roles are, for example, outsourced because they are seen as a distraction from core activities (although the 15% rule of thumb is applied). In finance, however, outsourcing is undertaken to gain key skills which are hard to come by in the open labour market.

Contra to perceived wisdom (both in academic and practitioners circles), certain UK Retail respondents felt that outsourcing did not add to organisational flexibility, rather it was inflexible in that the organisation ended up in permanent contractual discussions with suppliers. Structured formal contracts did not exist with suppliers but informal, open and indirect ones did in the form of transparent service agreements. The main disadvantages are that if service provider suppliers do not perform to standard, then those agreements are much more difficult to rectify than if the work had been retained in-house.

A number of accounting measures are used for sub-contracting services, a return on investment calculation (15% plus), pay-back periods and then qualitative measures. Each piece of outsourced work is measured as a separate cost centre. Certain functions are monitored very frequently, due to their importance (for example, hauliers) while other, less critical, functions are monitored on an annual basis. Rates-of-return on investment are typically around 30% over a 12 to 18 month period. As indicated earlier, certain service functions are under consideration for outsourcing by Retail UK. Payroll is, for example, the next service function to be considered for outsourcing, provided it can be done more cheaply and at a similar quality. Certain functions, however, would not be considered for outsourcing. Finance, for example, has been outsourced by other large UK organisations such as BP, but would not be outsourced by Retail UK. This is because if the organisation was to undergo a major change, they would need the flexibility of an in-house operation. Thus Retail UK has outsourced services which are considered 'low risk' activities, such as catering, cleaning, security, training and 'code crunching' IT, but nothing that is regarded as 'value added'. The organisation is now considering the outsourcing of 'mid risk' activities, but is conscious that outsourced activities often have many 'hidden costs'.

### 7.5 Management accounting

Management accounting at Retail UK is organised around the principles of the 'balanced scorecard' approach, balancing various aspects of the company operations (both financial and non-financial). These, in turn, are predicated upon the core mission and strategy of the organisation, particularly the emphasis as customer focus. The balanced scorecard approach was introduced in 1996, with the assistance of a large management consultancy (Cap Gemini). The scorecard is pictorially represented, and characterised as, a steering wheel. The wheel is divided into four quadrants, reflecting the competing needs of the business. These are, namely, Customer, Operations, Finance and People.

The four broad quadrant areas are reflected in a number of key performance indicators (KPI) per quadrant, again both financial and non-financial. The scorecard/steering wheel approach is rolled out across the organisation, both functionally and hierarchically, with a cascading system of KPIs according to function and level of hierarchy, but all within the context and forms of the steering wheel. In other words each function and level of hierarchy would be a set of individual KPIs within the four company-wide quadrants of the steering wheel. These KPIs are fairly traditional, but all are geared towards customers in one way or another. Set within the context of the balanced scorecard approach, KPIs are intended to focus the business in a forward looking manner rather than backward looking, reliant on KPIs. Indeed, this is part of a gradual change in financial roles, as indicated to us by senior Retail UK financial staff, towards a more forward looking system. This might include changing metrics, or changes in reporting and calculation formats. Any changes would, however, be tested alongside the existing methods. If the new methods were judged to be better than previous ones and, after the costs of changing systems was taken into account, the new ones would be adopted.

Information on the 'steering wheel' (i.e. the various KPIs) is compared to the previous year and against projected or planned performance. Huge amounts of information are gathered, controlled and used by Retail UK, from customer satisfaction surveys, focus groups, the company's loyalty card and the company's call centre. All is fed into a five year rolling plan, which is directed by the board of directors. KPIs are revisited and readjusted on a yearly basis, with some omitted and others added.

The function of management accounting at Retail UK is to provide clarity for meeting business aims, according to senior management. To these ends, centralised accounting information systems which co-ordinate standardised information flow were introduced in the late 1990s. Accounting metrics were revised in order to measure particular aspects of performance and service provisions more transparently.

While there is a central management accounting function, the majority of the information required for reporting is generated by non-accounting staff using standardised systems co-ordinating stock and sales. Such systems include, for example, an activity based costing approach rather than a more conventional resource-based approach. This change was introduced as it relates more accurately to financial costs, such as overheads, and 'hidden costs' in distribution and warehousing to the processes that generate such costs. This enables decision makers with the organisation at all levels to make the necessary improvements in working processes, as well as identifying specific product costs. Hence there is an attempt to identify cost and value information at every level within the business based on the logic of working backward from point of sale to the customer to assigning resources necessary to deliver the product/service. Thus within Retail UK there is an internal market, with each function and unit having a supplier and customer interface.

Retail UK has also introduced specific cost models for each product retailed or, in some cases, grouped-together similar products. A number of variables, including size, weight, pack size, method of storing, length of 'on the shelf' stay and whether the products are chilled, frozen or ambient products, are all taken into account in developing and assigning cost models. These models, together with other improvements, have assisted Retail UK in co-ordination of linked activities, such as the 'buy-move-sell' function. The modelling of customer demand, based as the historical performance, enables predictions made of the daily sales per product. Thus deliveries and stock levels are adjusted and streamlined with, for example, 14 to 16 days stock held in stores and depots.

With a cross functional management team driving process change and the use of a combination of financial and non financial key performance indicators, the potential for conflicts between functions arises. Conflict arises, however, less than might have been expected, according to interviewees. An example of this was the potential conflict between purchasing, distribution and retail functions. Purchasing staff were, primarily, concerned with margin issues and thus seek economies of scale. Distribution staff, meanwhile, were keen to reduce the value of unsold stock-holdings. Finally, retail staff were concerned with examining and rewarding performance. Thus progressive fine-tuning attempted to strike a balance between 'lean' practices in servicing on the one hand and the need not to run out of stocks in shops on the other.

Activity-based costing is being introduced along process-streams which cut across operations and functional areas, for example, the replenishment stream.

In terms of day-to-day accounting procedures, this is carried out by Retail UKs Divisional Group reporting team. Their duties include internal management reporting, external financial reporting and new accounting projects and techniques. In addition this team includes a small team involved in updating Retail UKs board of directors on developments in accounting standards. A key driver of this team is the harmonisation of accounting standards. At present the group company uses UK Gap but, by 2005, will have to use international standards. This will entail changing certain aspects of Retail UKs accounting practice.

The accounting year is broken down into weekly reporting periods (i.e. monthly). In period (P) 3 and 6 the organisation assesses its performance against a profit plan and works out what the organisation needs to do to reach its profit target. In P6 and P12, Retail UK produces six month and full year figures, which is a formal report to the City of London. At these stages, the accounting function examines how performance-related projections and business strategy is adjusted accordingly.

Although there are changes in finance roles in Retail UK, this is a case of a gradual change in such roles, with an emphasis on continuity rather than extreme change. While there is a tension between what is described as 'driving the business forward' and establishing continuity in reporting systems and standards, these changes have, however, made the accounting functions more 'forward looking' than before.

While accounts are done on a monthly basis, as indicated earlier; the company consolidates every week and this information is presented to the board. The division group reporting board's role, aside from the presentation of accounts, is to look at any variance historically and to plan and comment on it for the main board. Anything over half a million pound variance would have to be explained (i.e. 1% plus).

#### 7.5.1 Capital return on investment (CROI)

The key management accounting measure is capital return on investment, or CROI. All major spending decisions are referred to Retail UK's operational capital committee, comprised of a number of key board members. For example, business analysts could be asked to present a financial support case for this. The time period for CROI would be three years for major projects, although it might be less or up to 6 or 7 years, dependent on the project. One such project being evaluated at the time of the study was the 'right product, right place' one to reduce the number of times that fast selling firms were transferred in the supply chain.

In line with the idea of the balanced score card approach, measures which do not have an immediate financial impact are also used. One of the major projects was called 'one in front' whereby if customers had more than one person in front of them in a checkout, then other checkouts could be opened. This was introduced after considerable market research which indicated that queues were a major irritation to customers. This was a project which had few immediate benefits (at least in CROI terms) and considerable staff costs. Given that CROI could not be reasonably used in this case, a series of financial costs alone were considered, for example, cost parameters.

Accounting measures and conventions are set within the philosophy of RACY mentioned earlier; identify responsibility of who does the work; accountability – or who is accountable, consult who is affected and inform who needs to be informed. While all new projects have to deliver productivity benefits and add to profits, they also have to make sense for the whole of the business.

#### 7.5.2 Management accounting and its impact on performance

Interviews at Retail UK revealed a differentiation between financial accounting and the production of reports and information for internal management. Management accounting reporting is driven strongly by the firm's business strategy. The weekly operations board meeting of Retail UK drives the weekly management accounting reporting round. These provide detailed aggregate information to the board on financial performance measures (cost, sales value, value of stock held etc) and non financial measures (volume, service levels, delivery accuracy) and are assessed against performance for the relevant week, the previous year and planned performance. These are fed into a balanced scorecard approach to the business's planned performance, developed by outside consultants. At lower senior management and operational levels, the weekly information relates to different business units and is broken down to the level of the region, store, depot etc. at each level of the business. There are key performance indicators relating to financial and non-financial aspects of performance. These are tied to staff remuneration.

## 8. Carco

### 8.1 History, activities and the market

Carco is a long established multinational automotive producer operating in a number of locations in the UK, but reporting to a European Division. Indeed, Carco's UK plants work, interchangeably, with sister plants in Europe, either supplying them with major automotive subsystems to be built into cars or vice versa. Moreover, this geographic widening of the integrated production base is further spreading to global scale, with UK plants producing either models or subsystems for sale in Carco's markets worldwide (unlike previously, where North American plants would produce for their own markets and European ones for theirs etc.). UK turnover was over £9 million in 2000, and over 40,000 were employed.

In common with many of the major car producers, Carco generally, and its European division in particular, is facing intense competition which has led to major financial losses. This stems from overcapacity in the industry following Japanese auto producers' success in Carco's major markets in the 1970s and 1980s, from 'new entrant' producers in the 1980s and 1990s (notably from Korea), from revitalised smaller producers following take-overs (Seat, Skoda etc.) and from, more recently, other automotive multinational corporations building capacity in low cost eastern European locations, such as Poland, Hungary and the Czech Republic (a strategy Carco has eschewed).

In the early 1990s, Carco faced what has been termed a 'life and death' crisis. Up until the 1960s, all Carco products sold in the European market were based on North American designs. In the late 1960s and 1970s, however, the company completely reversed its strategy and produced cars designed purely for the European market. This was an extremely successful strategy and, ultimately, kept the company afloat in that profits made in Europe subsidised huge losses in the North American division. However, a world car strategy in the 1980s was largely unsuccessful and, in the 1990s, Carco came under extreme competitive pressures in its main European market, the UK. Nevertheless, the reversal of its fortunes in the early 1980s represented a remarkable turnaround, from close to extinction to the top of US automobile manufacturer.

The turnaround was accompanied, however, by radical changes in the organisation, both in the company philosophy and its operations. In particular, the company invested heavily in total quality management, in design and in simultaneous car development and design. There were also major job losses in both North America and Europe in the 1980s; in Europe for example, approximately one third of the organisation's jobs were lost. Lean production techniques were introduced, copied in part from a Japanese car producer in which Carco took a major financial stake. The supplier base was rationalised, with the number of suppliers decreasing from 2200 in 1980 to 1200 in 1990 and a systematic grading system introduced for individual suppliers. Part of the

reduction of this supply base was due to a considerable consolidation of the supplier industry through merger and acquisition activity as individual suppliers strove to become larger in order to achieve the economies of scale necessary in an increasingly competitive environment. Increasingly, suppliers supplied to the major manufacturers such as Carco on a global basis for particular parts. This volume of business, in turn, allowed Carco to leverage cost reductions. One negative impact, at least for Carco and the other major automotive manufacturers is, however, a reduction in competition due to a smaller number of suppliers. A further major change is that Carco has outsourced complex, but non-core, activities which are not necessarily efficient for Carco to produce. In particular, Carco has required suppliers to make subsystems which may consist of several hundred components which can be delivered line-side to be 'plugged in' to the cars. Thus suppliers take responsibility for part consolidation, assembling the subsystems and delivery in vehicle line sequence. Considerable work is then eliminated from the organisation and transferred to the supplier in an area where they have expertise.

Carco has attempted to simplify the supply chain by changing and introducing common components and subsystems for a variety of different models and, in particular, has introduced Carco parts and subsystems in models produced by the niche manufacturers it has taken over. Three volume produced models in the small to medium sized car segment, for example, use a common platform.

Carco has responded to this competition in a number of ways. First, it has made prolonged and sustained efforts to increase productivity, both internally, in its suppliers and in its supply chain generally. Second, it has cut its own capacity by plant closures and partial plant closures, with considerable job losses. In 2003, for example, the company cut its workforce by 35,000 and closed several North American plants. Third, it has taken a major part in the consolidation and rationalisation of the industry by taking over, for example, a number of smaller European-owned quality niche producers and buying a controlling stake in a Japanese producer. Fourth, and again in common with other major MNC producers, it has focussed on its core business of producing cars and divested itself of parts of its business. This has taken a number of forms. Several major Carco-owned parts divisions have been divested by selling them off, certain parts of the production process have been subcontracted out and, finally, virtually all auxiliary services are now third-party provided. The end result is that a company (and industry) which has been characterised by, and characteristic of, vertical integration became vertically disintegrated. This aside, while Carco is producing and operating in a mature industry and represents a traditional engineering sector, the firm has adapted to a new organisational form, namely the vertically disintegrated core business type. Despite these cost cutting and rationalising measures, the European division of Carco is heavily loss-making.

After a business recovery in late 2001 and early 2002, Carco returned to major losses in 2003. This has been largely as a result of decreased margins due to price cuts and other buyer incentives. While the company is expected to return to profitability, has a large number of new models coming on stream and is investing heavily in its premium division (largely through takeovers), further job cuts in Europe are anticipated (which are likely to be in the UK). Moreover, the company has been outmanoeuvred strategically in the marketplace by being slow to develop new models which would meet market demand for certain types of vehicles (multipurpose vehicles, or MPVs, and diesel cars). It has also over-relied on its major European market, the UK.

## 8.2 Supply chain management

Supply chain management at Carco is extremely complex with many different models, many derivatives and many thousands of parts, given that there are approximately 2000 parts per car.

The supply chain at Carco has undergone a transformation over the past twenty years first in response to intense competition in core markets (the USA and UK) from new entrant producers, second due to major productivity gaps that emerged between US producers such as Carco and their Japanese competitors and third, due to the more general intensively competitive environment which has pervaded the industry since then.

The supply chain overhaul has taken several forms. First, as indicated earlier, Carco divested itself of several major parts and components divisions which are themselves multinational corporations in their own right. This was done for reasons of 'core competence' (and ultimately cost reduction) with Carco reasoning that it could make greater profits if it focused on its core competency of the manufacture and assembly of vehicles, while the parts supplier could focus on its core competency and thus deliver cheaper parts to Carco.

There are continued cost pressures on components and trade offs between just in time production, sourcing low cost components typically from low cost international locations and quality and manufacturing who want continuity of supply. Nevertheless, in a situation where major financial losses are being accrued, the purchasing division is powerful, with for example, a 5% material cost reduction required per annum.

A senior financial manager expressed this tension within the team value management philosophy.

'I mean there's two ways to go and get costs down, you just go and tell the supplier you're taking twenty percent out of his cost and tell him to deliver it and he goes bankrupt. Or there's actually collaborating with them as a team and that's the philosophy. The closer we can work with people then the better benefit we'll get for everybody and it won't be all beating the suppliers up at the cost to the supplier, it's joint team effort and that's the big culture change.'

Despite this, there has been an increase in the number of suppliers which are experiencing financial difficulties due to the level of competition, which is of some concern for Carco finance staff, particularly in situations where the company relies on one supplier for a part. The supply base has, therefore become more volatile due to the overall volatility of the supplier, mergers and acquisitions amongst the supply base and a change in the level of work that they are doing.

New suppliers are actively sought out but, having chosen a new supplier, their components are not used for a year (a company rule) while engineering tests are carried out. Price levels are approximately set initially by benchmarking against the previous suppliers but, as the financial manager indicated, '...there's always lots of brinkmanship. We at Carco think that we're in the driving seat – we always feel that because we are such a big player.'

Carco conducts a thorough history of a new supplier, including their technical and engineering capacity. Initially, however, they will dual-source the component, using the old and new supplier (the new supplier initially has a third of components) before gradually increasing the business with new suppliers. Every supplier goes through a similar supplier audit of financial capability, quality checks and logistics.

In the case of new components, Carco makes an 'educated guess' based on initial calculations by their engineers. Material costs are calculated plus production costs calculated by industrial engineers and the process is, therefore, very cost-driven. Occasionally, parts producers under-quote on components. The supplier is typically then allowed to requote, but Carco purchasing would be cautious of using them in the future.

Technology transfer will typically take place between Carco and its suppliers, especially over production bottlenecks. One major supplier, for example, had problems with component quality and Carco loaned them an engineering manager for seven months. Carco also does 'spot-checks' on suppliers plants and industrial engineers go in to suppliers to check on costings. Contract length with suppliers can be up to eight years but will typically be in the range of five to eight years or a model cycle. While these contracts are relatively long, prices are re-negotiated every year. Moreover, there is a notice period for both parties in which they can terminate the contract. It is not common, however, for Carco to switch suppliers mid-contract. In particular, if suppliers have invested heavily in a contract through, for example, locating on one of Carco's industrial parks or investing in expensive presses, then Carco would attempt to give the supplier several contract periods. Thus Carco's relationship builds with a number of large key suppliers, whereas it has a more arms-length relationship with other, smaller, ones.

Within the contract there are clauses which stipulate delivery and quality expectations, in addition to cost details. If the supplier does not meet the contract, there are penalty clauses. For example, if Carco loses production as a result of non delivery, the supplier is charged for Carco's idle time plus overheads and any special freight costs. Revenue based costs are not recovered (for example, lost sales), however, as this would be too complex. In extreme cases, Carco would challenge the supplier legally.

Carco has, since the late 1990s, sought a year-by-year reduction in parts costs. In 1999, for example, there was a major material cost reduction programme which resulted in savings of £90 million but there is a growing feeling that further reductions would be more and more difficult to achieve. Nevertheless, 75% of the cost of the material is in the design in that once a product is designed, it is very difficult to reduce material costs.

In the past, Carco has had a 'league table' of suppliers which it published. However, this was felt to be counterproductive and the company now relies on key performance indicators on delivery, quality and cost. For example, Carco benchmarks its individual models against other producers' models which it regards as 'best in class.' For one of its models it has 300 'things gone wrong,' compared to 100 for their competitor's best in class. The company is continually seeking to meet these benchmarks. Metrics for delivery, quality and cost are used, but they are not published. Given that the company has thousands of suppliers, Carco tends to focus on larger suppliers, largely based on the 80-20 guideline (i.e. they concentrate their attention on the 20% of suppliers that are responsible for 80% of supplies by value).

Typically, the product development stage in the automotive industry is a long one, with five to six years from initiation to mass production. Dealings with suppliers start at a fairly early stage with Carco's purchasing function working closely with both engineers and suppliers and broad pricing targets are set. These will be the basis for negotiation for the next stages. This, then, is essentially an estimate for what the cost will be for the part four years hence. Essentially these are estimates for negotiations for the next few years based on technological advances and prices. A document is then signed between Carco and the supplier and, within Carco, with the engineering and purchasing functions. There are continuous pressures for cost-cutting both in-house and on suppliers. On one engine, for example, materials costs are to be reduced from £400 to £380.

Accounting principles for the supply chain have been based, fairly recently, around the principles of 'total value management.' This is an arrangement based around working commodity teams which include staff from product development, purchasing and finance which are charged with getting the best value for parts. 'Total value' is not only concerned with price but takes into account quality and functionality of parts. Essentially, this is a change in reporting philosophy away from reporting 'bins' (for example, design cost changes, non-design purchase negotiations) to a process of benchmarking against competition for suppliers in order to decide if changes in suppliers are needed or to negotiate with current suppliers. Given that a balance has to be achieved on functionality, the term 'total value management' is used rather than lowest cost management. A process of 'continuous benchmarking' is involved. This is described as a new kind of philosophy and culture for the organisation, based on multifunctional working. In particular, Carco is attempting to advocate a closer working arrangement between the engineering function (with its focus on design), purchasing (with its focus on productivity) and finance (with its focus on cost reduction).

Outsourcing of services and auxiliary functions has occurred since the 1970s, such as janitorial services. This was done purely for cost reasons because even though previously such staff had been paid as unskilled operatives, they were still relatively highly paid.

In terms of outsourcing, Carco works to a cost-benefit time adjusted rate of 35% which amounts to 100% on most projects, given that they are typically on a pay-back period of three years. The only projects which are excepted are longer term ones such as energy saving ones which are regarded as 'political' and good for public relations. Prices of components are determined by costs plus full absorption, all overheads, plus mark-up.

Purchasing is centralised at a European-level based headquarters where cost-benefit analysis is done. The individual plants are, therefore, price and product takers, apart from certain auxiliary costs.

The vast majority of parts are subcontracted, either to be machined or assembled. Those come from Carco internally or, more typically, from external sources. Carco are attempting to set up distribution and consolidation sites close to their production plants (industrial parks), which will be run either by suppliers or by specialist warehousing and distribution firms. Essentially, this is subcontracting out stock holding costs and is termed 'bull's eye' sourcing. The financial calculation for this is that it will be cost-neutral, but eventually there will be cost savings, particularly on freight costs. The main advantage will be logistical as it will enable plants to have a month's supply of parts on their doorstep and will allow for flexible production. For example, it will mean that the manufacturing plants do not have to rely on 'premium' freight costs if they are short of parts (i.e. high speed quick delivery lorries and air freight).

In the 1990s the company introduced a world car concept with similar models sold worldwide, common subsystems (such as platforms) for cars and 'global sourcing.' This involved Carco sourcing parts from suppliers throughout the world based primarily on price. This has, to a certain extent rebounded on the company because sourcing from distant locations has posed logistical difficulties. For example, one UK plant is supplied from one particular supplier in the Czech Republic but supplies are occasionally late due to adverse weather. Similarly, a supplier formally owned by Carco and located thirty miles away from this Carco plant has threatened to cease supplying Carco because of very low margins. The alternative (and low-cost) supplier is located in Northern Mexico, but this has a five-week freight lead time (as opposed to one hour). Similarly in Carco's French plants, 68% of parts are sourced from outside France.

Parts are thus 'segmented' into those essential areas that need to be 'line sequenced' (i.e. supplied on a just in time basis) and those that are not (typically smaller parts) and which are thus sourced globally. The broad philosophy is thus to get the best in quality and functionality at the lowest cost and to achieve maximum efficiency at Carco's car manufacturing plants.

The total value management (TVM) concept is not dissimilar from the balanced scorecard approach at RetailUK. Six to seven years ago there was considerable infighting between functions over, for example, performance versus cost efficiency. The TVM concept is an attempt to break down these functional barriers and achieve the lowest costs to the company. Thus when potentially sourcing from a low cost location such as China and India, the total cost package of the decision is made involving quality and timing implications. In this case, for example, trade-offs are made between low costs and the costs of investing to ensure that production is not disrupted. Typically, this will be for parts which are not required for just in time production. For low-cost ubiquitous items such as a fastener, for example, the impact of disruption would be minimal and alternative sources could be found quickly. For a big part, where disruption could lead to plant closure different decision criteria would be made and the decision could be made by someone at a more senior level. Potential manufacturing difficulties are therefore calculated against cost benefits. This would be done in liaison with the logistics, product development, manufacturing and engineering functions.

In a hypothetical case of a part potentially sourced from the UK and a distant low-cost location, the price would be calculated plus transport and shipping costs. Transport costs may be reduced if a number of parts are sourced from that country and they can be consolidated. Other relatively easily quantifiable things such as quality risks are also included and a bottom line cost reached. Initially, however, a human judgement has to be made and Carco tends to be relatively conservative given the safety critical nature of car parts, reputation and the potential for a warranty campaign which, in the longer term, would prove more expensive. Thus hard elements (cost, quality etc.) are taken into account, as are softer elements such as supplier reputation, track record, financial record etc. There is, however, an element of calculated risks which are taken by senior staff in the organisation (vice presidents and directors).

Supply chain finance support staff at Carco essentially track the financial aspect of the business. They provide data to generate bills of material for every vehicle. These are then used for Carco's budgeting and forecasting system. These bills are also compared to budgets and forecasts. These are provided for senior managers and financial solutions are offered. In short, therefore, they provide a set of information that senior managers can use to forecast and run the business. In Europe alone, for example, twelve and a half million dollars of materials are purchased per annum. Clearly, a one percent (or even half a percent) variation on forecast represents a large amount.

The basic fundamentals of the accounting system, in relation to suppliers, have changed little in the past twenty years. Management information systems have, however, become much more sophisticated and have enabled the organisation to go beyond the narrow metrics to a 'total cost' approach. This has represented a significant change in reporting rather than accounting, but there is far more analysis and forecasting. Staff working in forecasting all have, however, an accounting background, unlike ten years ago, and in particular in management accounting.

Supply chain management at Carco is extremely complex, with thousands of different parts (approximately 2000 per car) and a major part of the accounting function is to track and forecast, with checks undertaken at the end of quarters to track major vehicle lines and assess cost savings. They also liaise with the niche producers which have retained a degree of operational autonomy.

There have been significant changes in the accounting function, mainly associated with mechanisation of accounting systems and procedures and information systems. New accounting systems fit with other automotive systems, including a parts co-ordination system and a parts controller system. This has led, in part, to a decline in the traditional accounting function with far fewer staff involved as it is much less labour intensive. Much is now controlled centrally, which is in keeping with the Carco organisational philosophy, which is extremely centralised.

A scorecard system is in operation. At manufacturing plants, for example, these are based on quality, safety, delivery, cost, morale and environment and these cascade down from plant managers. A 'traffic light' system is also in operation.



## 9. Chocco

### 9.1 History, activities and the market

Chocco are a major integrated producer and retailer of luxury confectionery. In common with many retailers, Chocco started as a family firm (in 1911), based on one shop. Although a publicly listed firm, (it was floated on 1985) it retains a degree of family ownership with a grandson of the founder sitting on the board. However, the family do not control the company, with one board member out of eleven (seven executive directors and four non-executives) and 80% of the business publicly owned. The corporate goal is to be the UK's leading retailer and distributor of specialist sweets and foods. As such Chocco were included in our sample of case study companies for a number of reasons. First, they are unusual in that they are one of few medium to large companies in the UK which both manufacture and retail their own products. Clarks Shoes are another, but even they are increasingly contracting out manufacturing to low cost labour locations. Second, Chocco operates an extensive franchise operation. This manufacture and retail mix is described as a double-edged sword. The advantage is that the company serves a niche as an un-market confectionary and is in control of its own destiny in terms of deciding on how to merchandise its product to its customers. The franchises work to a blue-print which maintains the corporate image and standards. Compared to the other private sector case study organisations in our report, Chocco is essentially a one-country operating and is relatively small, with a market value of approximately retail £70 million.

The downside of such integration is that potential market pressures which could be introduced if the manufacturing and retailing were under different ownership are absent. Moreover, although the organisation should be flexible and involved in process integration, this is also seen as a constraint (a lack of thinking 'out-of-the-box') and a lack of outside experience.

Chocco has an extremely high market share of the luxury boxed chocolates relative to its size. They are in a premium niche market, within a huge overall market for chocolates. (The only part of the chocolate market which has grown is the premium one). Thus if the company were to increase its sales of Easter eggs, for example, and take an extra 0.02% market share from competitors such as Woolworths and Tesco, this would add a 5 – 10% difference to Chocco's Easter egg turnover.

Chocco's retail operations total approximately 570 shops located across the UK. These 570 are divided into 390 shops wholly owned by Chocco and 180 run on a franchise basis. The business decision on whether to open or run a shop on an own shop or franchise basis is largely made on store turnover or potential turnover.

In terms of turnover, Chocco's own shops dominate with an annual turnover of £130 million, franchise accounts for £15 million turnover, of which mail order represents £7 million and trading approximately £11 million turnover per annum. In addition Internet sales are £6 to 7 million per annum, there is a mail order business with flowers outsourced and the company has 20 coffee shops, largely at out-of-town discount outlets. Chocco has also embarked on a series of initiatives where products (such as cakes) are licensed to third party manufacturers and distributors and sold to major supermarkets under the Chocco brand name. This represents between 10 & 15% of manufacturing, the remainder being produced in-house. This new business is, however, very different from Chocco's traditional business in that it occupies a different market segment. In Chocco's own shops, and the franchises, some 1200 different products are sold compared to 6 in the supermarkets. Moreover, the market is considerably different. Chocco's own stores, for example, have extremely seasonal demand, whereas demand for their products in the supermarket is far more even. In part, this is because chocolate bars sold through supermarkets are essentially impulse buys, whereas in Chocco's stores customers consciously go to the store to buy a product. Thus competition in the supermarkets is from other bars whereas it is from other gifts in Chocco stores.

The trading area has traditionally produced chocolates and other confectionary items, using different recipes than those used in Chocco's own brand chocolates and sold in their shops. These 'traded' chocolates are then sold by major retailers on an own-brand basis. Up until two years ago traded chocolates had largely been sold to one UK retailer on an exclusivity deal. However, this segment of the business has been targeted by Chocco as an area of major business growth. While there has been gradual but consistent growth in the own-store and franchise business, it is felt that this market has largely plateaued. New stores are unlikely.

There was an attempted international expansion into continental Europe, with shops opened in France and Belgium. This was not, however, a financial success and these shops were closed. Chocco do, however, have 9 shops in Ireland including 5 in the Republic. In the UK, while Chocco stores have a national presence, there is a greater presence in the north and midlands of England than in the south east of England, which reflects the historical origins of the firm. Product mix also varies from store location to location reflecting local demographics and socio-economic profiles at least in great numbers, and in-store sales per store, are also felt to have reached their peak. In addition, the pattern of trading in-stores has become more difficult and unpredictable. While overall volume has remained buoyant, sales have become extremely temporally squeezed into the week before Christmas and Easter (for chocolate eggs) respectively. This has proved difficult both for retail planning, but also for production planning in the manufacturing side of the business.

The traded business has been expanded, therefore, with Chocco now selling a newly developed bar to retailers. At first, this was through an 'exclusivity' deal to Retail UK. However, with that exclusivity clause ending, Chocco is now selling bars to all of major retail chains in the UK. These sales are largely seen as 'impulse' buys which do not take away from Chocco's core business (its own stores). It is envisaged that the bar business sales will rise to between £10 to £12 million per annum, or equivalent to that of the current traded business. Essentially, the bars sold to these retailers are similar to those sold in Chocco's own stores and the company eventually envisages selling box selections through retailers, with the exception of their premium range. However, in order to maintain brand 'specialness' the chocolates sold in supermarkets are marketed under another brand name. While the growth of this side of the business offers Chocco considerable opportunities, it also poses considerable logistical problems. The company has increased its customers base from one (with whom it has a long term relationship) to thirty with each supermarket chain having different systems. Instead of controlling storage, distribution and handling which Chocco controls in its own shops, this will transfer to the major retailers. Moreover, as the percentage of this business grows, the company envisages resource-balancing issues such as where to invest or how to utilise production capacity. One major advantage, however, is that the supermarket business is not seasonal, unlike sales in Chocco own stores, which are highly seasonal. At the manufacturing end of the business, such seasonality is coped with by the utilisation of annualised hours, while in the shops temporary labour, typically students, is used.

The growth of the supermarket business is also an acceptance of changing market trends, with 60% of confectionary now sold through supermarkets and major retailers. Thus Chocco made a decision that it had to increase its product range and customers. As one senior manager indicated, 'we want to get to a position wherever you can buy a kitkat, you can buy our product'. He further added, 'basically we had to bite the bullet, there was saturation in some stores, some more possible especially in franchises, but our margins are tighter and tighter. Out of town malls and supermarkets are putting major pressures on us. We're fighting to stand still'.

The business portfolio is divided into four areas – retail, trading, supply chain and mail order. Broadly, trading refers to marketing to a third party, retail refers to Chocco's own stores and franchise activities while supply chain and mail order are fairly self-explanatory.

The retail division is further divided on the basis of three geographical regions which, in turn, have seven to ten areas per region, and each one in turn has sixteen to twenty shops. Chocco has restructured its retail operations in terms of management and organisation, in order to prompt sales. Under the previous organisational arrangement, area managers would be responsible for up to 35 stores each, but this resulted in the area manager having little time for each store and largely being embroiled in routine administration, such as personnel issues. An area manager, therefore, might not visit an individual store for 3 months. Under the new structure the number of area managers has been increased and the stores-per-manager ratio cut. The rationale here is to enable the area manager to act more strategically and seek out new business opportunities. This was in response to widely varying performances against target between stores which could not easily be explained. Certain stores per area might be performing at 110% compared to others performing at 65%.

## 9.2 Franchising

Essentially, franchising at Chocco is regarded as a 'second-best' option in that the franchises are in locations where Chocco could not support a shop if it's own, either because it is in a small town or on the edge of a larger town. Franchises provide a much lower profit margin for Chocco given that the overheads are much the same, as are the product prices. The Chocco finance department would therefore combine with their property team to decide on whether the potential franchise location would damage in any way the business of any of Chocco's own stores. Franchises are often 'combination' shops where there are effectively two franchises within the one shop, one with Chocco and one with an associated business such as greeting cards. Indeed, Chocco has an arrangement with a large greetings card chain with approximately fifty shops, half of which are managed by Chocco and half managed by the greetings cards chain. As such they are joint ventures.

Chocco rapidly expanded its retail operations three to four years ago in order to increase sales volume, with a consequent increase from 300 to 400 shops. Certain of these shops, however, have not provided sufficient rates of return and the estate (i.e. the number of shops) is currently contracting slightly, with some of these shops now being transferred to franchisees.

Franchising is supported by a field team separate from the mainstream retail estate team. However, the franchises are expected to charge the same prices (although legally they can charge more or less), stock the same product mix and carry out the same events and promotions as the Chocco-owned stores. This is to achieve consistency across the board. Essentially, the franchise shops are mirror images of the Chocco-owned ones, except that they are often joint ventures selling other items such as gifts and cards. The franchise owns the property and is expected to invest in all of the shop fittings. Therefore Chocco has no capital invested in the franchise shops, although it carries out the planning and building work including the tendering to shopfitters, and then invoices the franchise. The franchisee is, however, able to pay in two instalments, the second payment being due after the first full season, which will generally be within a year of opening. A new franchise costs approximately £40,000 for shopfitting etc., including a £10,000 initial fee. This fee covers a percentage for the brand and brand name and another for training materials, support and marketing assistance. There is no fee beyond the initial one but Chocco obviously earns revenue on its products. The franchise contract is for five years with an automatic five year renewal. Occasionally, when a franchise is very successful and the ten year period is over, Chocco will transfer it to its main estate. In other cases the franchise carries on beyond the ten year period but with a three month notice period for both parties. There is an element of 'skill transfer' from Chocco to the franchisee which is part of the contract. As a Chocco representative noted 'we teach them how to sell'. This does not extend, however, into any financial training.

Essentially, Chocco locates its own stores in places where projected turnover is £250,000 plus, based on forecasts carried out by a consultant. If there are locations with sales potential but with a figure below a quarter of a million pounds, then Chocco seeks a franchise partner. A franchise development manager sifts queries from potential franchisees. Chocco advertises on a dedicated website, is a member of the British Franchise Association and advertises in relevant trade magazines. There is also a franchise element to Chocco's own website, this receives approximately 40 enquiries per month.

Chocco's franchises vary from multiple joint ventures to independent sole traders. Greeting cards operators offer business synergies for Chocco in that, customers may buy both products for, for example, Mother's Day or similar occasions. There are also a small number of franchises selling glass and china gifts. At the other extreme there are independent sole traders who operate a single, or several, franchises.

The vetting process for potential franchises depends on the individual franchisee. An initial point of departure is, however, to pick partners for the franchise on the basis of synergy and quality. As a senior manager indicated 'we wouldn't partner a butcher or a greengrocer'. New independent franchises are sent detailed information packs including financial details, property details, projected sales (with a minimum expected of £100,000 per franchise). Certain franchises do sell well below £100,000 but £35-40,000 is regarded as an absolute minimum. Individual franchise performance is monitored on a monthly basis and their performance is compared with other franchises. The potential franchisee will then have detailed discussions and negotiations with the development manager. Details and references are then taken up, and credit checks and other financial checks undertaken. Chocco representatives act as a 'go between' for the franchisee with other franchisees such as the greetings card companies. It is then up to the franchisee to develop a business plan and arrange funding with a financial institution. Chocco finance staff advise on the business plan, with particular attention placed on cash flow projections. The contract includes set price margins which are standard across all franchises and are maintained for the duration of the contract. Regular monitoring takes place of franchisees to ensure that serious problems do not arise which may impact upon the Chocco brand image. All the franchise shops are routinely visited at six week intervals and, if problems emerge, a business meeting is arranged. Franchise contracts have, occasionally, been terminated, but in general arrangements can be made and repayments rescheduled or another solution arrived at.

### 9.3 Supply chain management

Supply chain management is relatively simple compared to the other case study organisations, given the degree of vertical integration. Retail is regarded as the most important part of the operation (compared to manufacture) and as such, hypothetically, the organisation looks at its cost basis and outsourcing options to maximise returns. However, given that the organisation has a large manufacturing operation which it has invested in heavily in the past five to six years, this is more likely to be a method to promote internal efficiency in manufacture than a real threat. The extent to which this works will be returned to later. Moreover, the organisation regards its product recipes as its 'crown jewels' and would be reluctant to give a third party manufacturer access to them.

This vertical integration has a number of negative outcomes. Forecasting is regarded as not as rigorous as might be expected if a third party manufacturer was involved. There is, for example, considerable friction between manufacturing on the one hand and retail and marketing on the other because the latter ask for time scales for development and packaging design changes that would not be feasible if a third party manufacturer was involved.

While the new retail business with supermarkets has provided major new logistical problems, it also offers a model for the internal relationship between manufacturer and retail at Chocco. However, while senior Chocco managers maintain that this is a corporate goal, they concede that this does not occur in reality. For example, box design changes take place which break the time rules and which would not be accepted by a third party manufacturer. Moreover, the manufacturing division are often asked to produce goods which they would never normally produce in terms of runs of products because they are so small and would just not make money.

Formerly, the organisation (six years ago) was divisionalised between manufacturing and retail and each were reported as separate profit and loss (P&L) centres. However, the company ended this arrangement as they were missing some of the benefits of vertical integration by incentivising the two individually. In part this was because it was regarded by both centres, and particularly manufacturing, as an artificial divide, as the retail division had little option but to buy from the manufacturing division.

Although there is the potential for relocating production to a lower cost, overseas location (shelf-life is four to six months) this has been disregarded thus far for a number of reasons. Firstly, because Chocco has invested heavily (approximately £60 million) in its manufacturing facility, particularly in automation. This includes warehousing and distribution in the UK in the past decade, Secondly, because such relocation would be contra to the specialist niche brand values that the company is promoting.

Chocco employs approximately 5000 plus with between 1000 and 2000 at the manufacturing and head office site, this figure depending on the season. Seasonal peaks are found at Christmas and Easter, with smaller ones at Valentine's Day, Mothers' and Fathers' Days and Halloween. Staff in franchise shops who are not Chocco employees. Chocolates are also frozen to level manufacturing production peaks and troughs. In addition, annualised hours have been introduced whereby hourly-paid workers work a four day week from April to June and the hours are made up over the winter with a five-and-a-half day week. From September to November (the peak production time) temporary workers are employed in manufacturing (as they are in the shops at Christmas and Easter). The combination of these methods is used to manage the peaks and troughs of demand and to minimise stock levels.

Due to the heavy investment in automation shift working is used. The packing process, however, remains fairly unautomated and thus relatively labour intensive, particularly because chocolates are fragile and box sizes very considerably and labour is more flexible than automation.

The supply chain logistics are complicated by being both a retailer and manufacturer and, in addition, supplying to third party retailers. If Chocco, for example, overproduces an item for a third party retailer, these are then sold through their own shops. This has led, in turn, to having to discount chocolate bars produced for its own shops. These matters are typically negotiated between the retail and commercial divisional heads at a weekly meeting.

Overproduction is sometimes sold through Chocco's 25 factory outlet shops but occasionally, if overproduction is too great, product has to be sold throughout all of the shops. Some of these products occasionally have an extremely short shelf life which, if they were being supplied by a third party manufacturer, would not be accepted (the franchises do send such products back to Chocco). Thus decisions are made which may not be in the best commercial interests of the retail division but which make commercial sense for Chocco as a whole.

The basic philosophy of the organisation is not to subcontract out anything which is regarded as core to the business; the core being the production of confectionary, toffee and fudge. These are made to unique recipes and are thus regarded as a core component. Ice cream is a good example of this. Ice cream sales are important to Chocco, but are a very minor proportion of turnover. Originally, production was carried out in-house, but Chocco realised that this production, which is very specialised and extremely prone to seasonal and climatic fluctuations, could be produced by external suppliers who could both produce better ice cream at lower costs than Chocco could, and thus it was subcontracted out.

The financial competency of suppliers is one very important selection criterion. Chocco reviews the finances, the financial background and the credit rating of all suppliers and whether suppliers have the ability to keep to contract. One of the major questions is whether or not suppliers can cope with both Chocco's forecasting and that of its third party customers. Supplier product quality is key given that the whole Chocco brand is based on a quality niche. As one senior finance manager noted 'we don't want to lose that over a few quid's savings on a supplier'. Key Performance Indicators for suppliers are delivery on time, supply output and responding to changing forecasts. These are important given that Chocco tends to keep zero stocks, especially on big items.

#### 9.4 The perils of outsourcing: a case study

Several years ago the Chocco Board, heavily influenced by the finance director, decided to outsource its information technology (IT) function in its entirety. This included approximately 40 employees including managers and operators, and involved basic programming, personal computer work, help desk operations etc. The majority of the staff were transferred to a third party provider of IT services, Compuco (pseudonym), although a few members of staff left completely. All the transferred workers remained on site and at first there was very little change in work routine for those employees. Soon after, however, Compuco brought in managers who carried out a 'shadowing' operation to review current operations for all the main managers' posts. All ex-Chocco employees were then guaranteed a job (as they had to be, under TUPE employment legislation), but not necessarily at the Chocco site and not necessarily the same one they had before.

Prior to outsourcing, IT at Chocco provided twenty-four hour coverage. Essentially this entailed two members of staff working a night-shift to 'baby sit' the system. If anything went wrong with the IT system the 'baby-sitter' would either fix the problem or call out somebody who could. This 24-hour coverage is not provided by Compuco and consequently if anything goes wrong with the system at night, the problem may not be rectified until hours later (Compuco staff start work at 8.30). The reason given for this is that Chocco cannot afford to pay Compuco for 24-hour coverage, despite the decision to outsource being primarily a financial cost cutting one. This provides Chocco with a number of problems, not least in manufacturing, where extremely expensive equipment may lie idle because of a systems fault (with the manufacturing staff also having very little to do).

If any problem arises with IT, Chocco staff have to ring a help-desk located in the southeast of England (Chocco is located in the English midlands). The help-desk then allocates a member of Compuco staff at the Chocco site to do the job. Prior to IT being outsourced, Chocco staff would simply telephone Chocco IT staff and ask them for help. Under the new arrangement this is not possible as ex-Chocco Compuco staff are not allowed to do this as they have to account for every hour of their time. Occasionally Chocco staff do ask Compuco staff to help out in cases where a problem is very small, but it has to be very small (5 to 10 minutes work) and Compuco staff will only do this if their manager is not there.

Evidently, the outsourcing of IT has caused difficulties across Chocco's operations. However, it has also increased costs. For example, when Chocco had its own IT function in-house, IT staff were typically paid £25,000 per annum (approximately £100 per day) plus on-costs. Compuco, however, charges its staff at £625 per day. In addition, Chocco agreed to buy £1 million of extra services per annum from Compuco irrespective of whether Chocco requires them.

The outsourcing of IT has posed considerable problems for the accounting function as Compuco does not provide itemised bills, some items of which can be claimed back for tax purposes. Chocco finance functions' workload has thus dramatically increased directly as a result of the outsourcing of IT. In addition, new staff have had to be employed. A 'go between' has been employed by Chocco, for example, a part-qualified accountant who works full-time with Compuco on administration. Chocco has also employed an IT executive, with two support staff members, to liaise with Compuco staff. Despite outsourcing IT to cut costs, Chocco has an annual IT salary cost of approximately £130,000 purely to support and liaise with Compuco.

#### 9.5 Management accounting

As indicated earlier, manufacturing and services were formerly divided into two profit and loss cost centres but the company is now a single profit and loss entity within the organisation. There are sub-centres, which broadly follow the organisations functional structure. In the retail division, individual shops are regarded as profit centres and managed accordingly. While shop managers report to the area manager and ultimately to the retail director, they are in control of what they spend in the shop including staffing costs, petty cash spend and levels of reject and waste (unlike at Retail Co.). They have no control, however, over pricing or profit margins, which are decided centrally. Moreover, they have no authority over product mix or seasonal promotion activities. Thus while the shops are, nominally, profit centres, managers have a limited degree over the operational decisions they are able to make. Essentially, they are given shop-based staffing budgets based on their budgeted levels of turnover and peaks and their financial history, and they are targeted with improving these.

While individual shops have, for some time, been designated as profit centres, this was, however, described as national rather than real until fairly recently. Previously, once or twice per year a profit centre statement was prepared for each shop using gross sales, stock wastage, stock losses, payroll cost, property costs and rent, rates, security charges etc. Essentially, the lowest level of cost centre was the region. However, in the past year accounting systems have been upgraded with a full financial suite and full purchasing disciplines and software. Thus an individual shop-based statement is readily available. Purchasing activities can now take place relatively easily and this is a routine part of Chocco's accounting systems. This technology, in turn, has facilitated the company in incentivising shop managers, and also area and regional managers. Area managers have a certain degree of flexibility and can 'mix and match' across their range of shops and can adjust between them on sales targets, staffing or products.

While this new purchasing and accounting software enables Chocco to manage its shops through a far greater level of financial and stock information, finance managers acknowledge the potential of information overload in a relatively small organisation. While monthly profit and loss information is thus available for 400 shops, the finance division, together with the retail division, concentrate on 'top tens' and 'bottom tens' in terms of various indicators on specific cost issues in the shops. For example, if there are problems of petty cash spend, it is narrowed down to about five shops in any one area. Thus one function of central finance is to provide 'shortlists' to regional and area managers to indicate which shops are of concern for whatever reason. While this broad structure has been in place for a number of years, the level of information that has been available has grown dramatically.

Shop-based performance reviews are over a relatively long period. Sales are compared on a year-by-year basis with adjustments made for good and lean financial years. New shop openings are made based on demographic research, from similar shops in similar locations and from other research from market analysts such as Experion.

In Chocco's core management accounting entries and statements, manufacturing and distribution activities are all cost-centre controlled. A standard costing framework is employed which includes standard cost variances so, for example, efficiency in terms of labour use is based on a standard cost accounting approach. Similarly the supply chain is cost, as opposed to profit, centre-based with no transfer pricing. Retail is a little different with slightly more flexibility because of variable costs. Nevertheless, the shops are regarded as cost centres. However, with an increase in the amount of financial and non-financial information available, shops are increasingly also seen as profit centres and area managers expected to treat them as such and seek business opportunities for them at a local level (for example, through selling chocolates to local businesses as presents).

The company has, on its manufacturing side, considered bench-marking against other chocolate producers, but has rejected this as the major chocolate producers are manufacturing huge volumes of standard products (such as Mars bars at Cadbury's) and thus the benchmark is inappropriate. Rather, Chocco uses internal historical performance indicators to seek cost cutting either by machinery investments or alternative labour deployment measures. Standard costing are used for this.

The management of the supply chain, at least in accounting terms, has, according to senior finance staff at Chocco, been fairly rudimentary. Accurate purchasing control was extremely difficult because the management and accounting systems were poor and information was either unavailable or not available on time. This has been transformed, however, not least by the appointment of a new retail director. In particular, while the organisation had extremely advanced manufacturing technology and a sophisticated understanding of brands and customers, the way that Chocco was accounting for it was relatively backward.

The company is currently upgrading its sales database systems so that it can analyse sales information quickly and thus feedback into production possible unexpected runs of demand on certain products, or lack of sales on others. Nevertheless the lag times, particularly in box design, means that it is very difficult to increase production in the face of unpredictable demand. This is exacerbated by the shortening of the Christmas and Easter seasons mentioned earlier whereby, consumers are buying their products closer and closer to those dates.

Metrics used, on the retail side of the business, include contribution percentages, returns on capital and cash generation. There is also a quarterly estates review where the finance department studies every shop and what cash it generates. External factors are taken into consideration (using a market research company), such as local and regional socio-economic changes. Strict capital investment appraisal techniques are used, including returns on capital.

Market analysis feedback comes from both shop managers and area and regional managers. Shop managers get a questionnaire on an annual basis. In addition they get the opportunity to feed back after every 'event' that Chocco runs, through the events co-ordinators and through quarterly events meetings which a limited number of shop managers are invited to attend. Shop managers are also involved in any new product launches and on estate and merchandising issues.

A variety of accounting measures and metrics are used. For shop managers and staff, for example, rewards have recently been incentivised but this tends to be on a whole shop basis. For example, a bonus may be paid to a particular shop for outsourcing performance which is then shared out between all employees in that particular shop, or extra holiday leave is given to these employees.

Product price setting has shifted somewhat in the organisation. In the 1990s there was considerable discounting of confectionary, but this was largely abandoned as it sat uneasily with the promotion of a quality brand and product. As a senior finance employee noted 'you wouldn't buy a Mercedes because they were offering £50 in vouchers'. Discounting still occurs, to shift surplus stock after the Christmas and Easter peaks, but this is not the norm and not the prime driver of sales.

Individual shop profit ability is measured and analysed in a number of ways. The main measure is contribution to profit after cost (i.e. a contribution margin figure) after all overhead costs have been taken into consideration. Retail turnover per square metre is not used but a variation is, 'profitability per bay', based on the number of bays per shop.

For manufacturing, there is a cost-per-chocolate measure comprised of a bill of materials and the estimated yield. Activity-based costing measures have been used for the past two years (previously they used gross margin), but this has been difficult to implement because employees are uncertain about certain aspects, notably how overheads are allocated within such a costing system.

The 'balanced scorecard approach' has not yet been introduced but it is intended that it will. However, key performance indicators are extensively used. For Chocco as a whole a small number of KPIs have been devised, which were largely chosen by the shareholders. That is, they were externally driven by the capital providers. These include an increased return on sales, an internal return on capital and low gearing. In addition, the senior management have set the organisation the KPI of strengthening the brand name.

In addition every employee in the organisation has a set of individual KPIs which cascade from the top. Certain of the individual KPIs are common to all employees and certain ones are personal. For example, in the mail order side of the business, number of new customers would be one KPI. These individual KPIs involve financial and non-financial ones.

## 10. Conclusions

The point of departure for this study was the emergence of new organisational forms. Traditional ways of organising large firms evolved throughout the twentieth century, but particularly after 1980 become to be questioned by academics, management specialists and organisations. These forms were characteristically large, hierarchical and bureaucratic, and were relatively vertically integrated. Changes in the competitive environment, moves to globalisation and technological change combined to pose challenges to the traditional form, and led to advocates of change calling for flatter, more flexible and less hierarchical new forms, brought about, in part, by a concentration on core products, services and functions, and outsourcing of non-core functions.

Our first objective was thus to evaluate the extent of the introduction of new organisational forms in contemporary UK organisations. In order to answer this question, as well as the role of and implications for management accounting, two research methods were used. First, a questionnaire survey of private and public sector organisations was used to give a broad picture of change in the UK. Second, a case study methodology was employed, comprised of multiple interviews, in order to gain a more in-depth understanding of such changes and, further, the ways in which management accounting functions in such organisations were adapting their practices to such changes.

Our research results on new organisational forms, from both the questionnaire survey and case studies, points to evolutionary, or incremental change, rather than revolutionary or transformational change. As such, this confirms recent literature on the subject, outlined in chapter two. The questionnaire surveys, for example, indicated that the greatest changes are in public sector organisations and in particular the NHS, with 43% of NHS Trusts and one-third of local authorities entering into some form of strategic alliance or partnership. Nearly one half of private sector organisations, meanwhile, had been subject to merger or acquisition in the previous three years. Delaying, a prominent feature of new organisational forms, was reasonably evident across all organisations with over half of local authorities, over 40 per cent of private companies and 37 per cent of NHS Trusts reporting it. Similarly, the numbers of departments in local authorities had declined, although they had increased in NHS Trusts, perhaps reflecting the growing complexity of those operations, which is illustrated in the Truststar case study.

New forms were thus common, in particular in the NHS, but also in private firms and local authorities. The reasons for change were several-fold. Most important were the introduction of new senior management teams and due to general market conditions. Also prominent, although of less importance, were the desire to reduce staff and other fixed costs and a wish to concentrate on core activities.

Turning to the case studies, all had gone through fairly dramatic change, albeit that this was fairly gradual over a relatively extended time period (with the exception of the NHS Trust). All of the case study organisations were relatively old ones, but were also in fairly intensely competitive markets. All were also characterised by increasing complexity in their competitive environment. Carco, representing a previously traditional engineering organisation, was perhaps the best example of a change in organisational form from old to new. Significant delayering had occurred, and downsizing had been facilitated by new information and communications technology. The organisation had also shrunk considerably with the divestment of extensive in-house, but non core, activities. The organisation had, moreover, responded to the extremely competitive market for cars by the introduction of multi-functional groups in order to respond quicker to market demands. These changes had been introduced, however, over a fairly extended time period.

Truststar had also undergone a fairly dramatic transformation, largely brought about by legislative change and significant changes in the way that the NHS was structured and devolved to local levels. Financial pressures were intense for Truststar, as was the necessity to meet various government targets. The organisation had also restructured to reflect a greater interface with the private sector, with outsourced activities introduced due to government legislation, government imposed targets and the need to deal with staff shortages.

Retail UK's business had become much more complex for a number of reasons. First, there had been a fairly dramatic increase in business volume, certainly as measured by turnover, profit and, to a lesser extent, employment. Second, the company had undergone a fairly rapid diversification process, in terms of the proliferation of products and services sold, due to internationalisation of the business, and due to the mix of different size of sales outlets and modes of sale (for example, Internet sales). Moreover, the environment had become increasingly competitive, with concentration of a few dominant retailers and new entrants from outside the UK, including Walmart (the world's largest retailer) and low price German retailers. A number of organisational innovations had been introduced but, similar to Carco, the introduction of multi-functional teams, with accounting and finance prominent, perhaps the most prominent. Such teams are representative both of the complexity of the business but also the need to be responsive to customer demands.



The heightened competitive market was also a feature at Food UK, largely caused by the demands of large food retailers such as Retail UK. In particular, these large retailers are placing great demands on Food UK, in terms of fitting in with their own increasingly sophisticated supply chain management systems. For example, Food UK are required to provide far greater information for the retailers and to be far more responsive to changes in the retailer's customers demands (as reflected in their sophisticated supply chain modelling systems). In particular, the retailers are pressuring Food UK in to supplying smaller batches to them on a basis which is closer to 'just-in-time'. This is, however, at odds with the large batch production which Food UK prefers, as it provides economies of scale in a capital intensive mass-production system. Food UK's major strategic innovation, which has implications for organisational innovations, has been to reverse the previous, somewhat haphazard diversification strategy and to concentrate upon core brands which offer the greatest opportunity for profits.

Chocco's business has also been subject to heightened competitive pressures from a number of sources, not least the large food retailers. Consequently, Chocco has undergone a diversification strategy, partly in terms of the products it offers. However, the major diversification has been in the types and range of sales outlets through which it sells its products. For much of its history, Chocco has manufactured its own products, which it then sold through its own retail outlets. It then expanded into franchise operations and a limited amount of supply to third-party retailers. However, with the growing dominance of a few large food retailers in the UK market, Chocco has readjusted its strategy to reflect this, on the 'if you can't beat them, then join them' premise, and Chocco is now selling products through all of the major UK food retailers. This poses major logistical problems for Chocco, in terms of supply chain logistics to multiple customers, as compared to the past when it has largely supplied to its own shops.

The supply chain function has become an increasingly important function of large organisations in the UK. This has come about for a number of reasons. As the questionnaire indicates, outsourcing has become increasingly popular, both to the private and public sectors. Largely, this has been of non-core service contracts, such as cleaning, catering and maintenance, but also computing, IT, recruitment and training. Primarily, the reasons given for this increase in outsourcing are to save money by lowering costs and, to a lesser extent, to concentrate on core activities and to increase flexibility, quality and access to specialist skills.

This heightened importance of supply chain management and, hence, functions are also evidenced in the case study companies. Essentially, this function has become more important for different reasons in the various organisations. In Carco, for example, the amount of outsourced work has increased markedly, due to the divestment of previously in-house parts divisions. However, the management of component logistics has also been recognised as a source of major competitive advantage, given that a relatively high proportion of each car comprises of bought in parts (2000 parts per car). At RetailUK, similarly, the supply chain function has been increasingly important, given the growth of business volume, but also the proliferation of products and internationalisation of sales. Moreover, given that RetailUK buys in all of its products, supply chain logistics are a crucial competitive advantage. Internally, for example, supply chain costs are some 12 per cent of sales of RetailUK and two-thirds of this is labour costs.

The supply chain issues at FoodUK and Chocco are somewhat different. Chocco, for example, manufactures what is essentially a fairly simple range of products. The change in supply chain relations at the company is largely due to the proliferation of customers, all of whom have their own logistical systems, whereas previously Chocco only largely supplied its own retail outlets. Similarly, FoodUK has had to adopt its supply chain, both to reduce its own costs and, more importantly, to meet the demands of the large UK food retailers.

Perhaps the biggest changes in the supply chain function have been at Truststar, in that, prior to the hospital gaining 'Trust' status, there was no supply chain function as such, all purchases being negotiated centrally. Moreover, the Trust had outsourced what might be regarded as core activities (i.e. surgery) as well as the recruitment of key staff (nurses) and non core functions, through the PFI scheme.

Given the nature of the business that they were engaged in, Carco have traditionally had the most sophisticated supply chain management systems. Indeed, companies such as RetailUK have often modelled their supply chain on, and benchmarked it against, the car industry. Carco has undergone a major rationalisation of its supply base and so squeezed suppliers heavily on cost, quality and delivery, and has moved increasingly to requiring large component suppliers (multinational companies in their own right) to supply whole sub-systems, often on a just-in-time supply basis.

Both RetailUK and FoodUK have undergone radical overhaul of their supply chains. RetailUK, for example, has introduced sophisticated modelling of its supply chain, brought about by major financial investment, with the main aim of simplifying the chain. Their driving force is an organisation-wide supply chain system, which can deliver a high percentage of in-store availability (98.7 per cent). FoodUK, meanwhile, had no real supply chain function prior to 1990, but underwent a major supply chain re-engineering process in the 1990s, in order to improve customer service performance. The keys to this were integration and the use of information systems, based on a demand-led model and concentrating on key customers. Chocco's supply chain management is perhaps less sophisticated, which reflects both the relatively small size of the organisation (relative to RetailUK and FoodUK), and the fact that it is vertically integrated (manufacture and retail). Indeed, Chocco senior managers admitted that it was not, perhaps, as commercially ruthless in its internal supply chain as it should be. Nevertheless, the company had invested in its supply chain systems and was, at the time of study, investing in internal supply change management systems through, for example, improved information systems.

Truststar had to develop a supply chain management system virtually from scratch. The systems were, however, very different from those of other case study organisations, in that they outsourced services, rather than products, and were on long term contracts in some cases (the PFI). Organisationally, however, this meant major innovations, with new specialist staff engaged in developing contracting arrangements and in contract compliance.

The next issue addressed was how management accounting functions shaped these new organisational forms, and to what extent they have adapted to these new arrangements. The questionnaire survey indicated certain changes in management accounting practices, but not dramatic changes. This was, perhaps, unsurprising, given that organisational changes had been noticeable, but gradual. For the public sector, little change was obvious. The NHS Trusts, in particular, tended to use 'tried and tested' techniques such as cost-benefit analysis and a similar situation pertained in the local authorities. While non-financial measures were used in both services, they were not prominent. New cost centres tended to be the main innovations in the public sector, particularly in local authorities, where financial reporting has taken on far more prominence. Moreover, there was a relationship between the extent of outsourcing and the growth of management reporting with the NHS Trusts, for example, more likely to make specific calculations of the cost of contractual failure on organisational performance. Moreover, an increase in outsourcing led to modifications in the budgeting process, with new techniques and measurements developed in order to cope with the new requirements it imposed.

The case study evidence also points to gradual changes in management accounting. All of the organisations relied heavily on the use of key performance indicators (KPIs), with a range of financial and non financial measures and cascading forms of key performance indicators across the organisations. This was perhaps best developed in the three largest case study organisations (RetailUK, FoodUK and Carco). The ways in which these were used was, perhaps, the major innovation in these organisations. All three used one or other variation of the 'balanced scorecard', with the numerous KPIs balanced against one another as part of the overall corporate strategy, and a fourth (Chocco) was about to introduce this approach.

The balanced scorecard was innovative in that it tended to be used in a far more forward-looking way than previously had been the case, when historical data had been relied on to a far greater degree. The management accounting functions in these organisations had, therefore, undergone a shift from having primarily a financial reporting role to a financial analysis (plus reporting) role. The second change in function was an increase in integration of management accounting into the other mainstream business areas. This was part of the change in organisational form indicated earlier, that of a multifunctional team-based organisation. For new projects, for example, multifunctional teams were developed to analyse the business case and see through implementation. The management accounting function is integral to these teams, and is thus involved from the earliest stage, and is heavily involved in forecasting and financial analysis. Thus while many of the management accounting techniques are traditional ones (cost-benefit analysis, net present value, payback, discounted cashflow etc), the broad philosophy of the function has, arguably, changed in these organisations; and changed markedly. Such a change in philosophy is reflective of changes in strategy and structure which, in turn, are responses to a heightened competitive environment for these organisations.

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## Appendix 1

### Preletter to interviewees

Cardiff Business School is conducting research into the role played by management accountants in processes of organisational change. We are keen to interview key financial decision-makers, project managers and associated employees in a variety of organisations.

The main issues we are examining include:

- How decisions about whether to sub-contract and outsource from organisations are made.
- The influence of sub-contracting arrangements on management accounting systems.
- How buyer-supplier relations are managed.
- The degree to which there is a transfer of accounting and other skills and knowledge between buyer and supplier.
- How these features impact on organisational performance.

The personnel involved in the project form an interdisciplinary team, drawing on expertise in management accounting, accounting information systems, human resource management, and organisational theory.

#### The interviews

In examining these issues, we are interested in interviewing a range of people in a franchise organisation. We would particularly welcome the opportunity to interview management accountants involved in different organisational roles, management accounting systems designers and end-users, project and contract managers, and senior finance professionals and executives. The interviews would be semi-structured in form and of 60-90 minutes' duration. In order not to make unreasonable time demands on interviewees, the team would prefer to tape-record interviews, where possible. The transcriptions and use of interview material in the research outputs will be presented in a manner to preserve the anonymity of interviewees and participating organisations.

#### Output from the research

The Chartered Institute of Management Accountants (CIMA) are sponsoring the project, which consists of a large-scale questionnaire survey, in addition to the in-depth case studies. The research findings will form a CIMA monograph and article for Financial Management, and additional articles in leading academic and practitioner accounting and management journals. In each case, all participating case study organisations will be anonymised to assure confidentiality.

If you would be prepared to participate in the research, please contact \*\*\*\*\* by telephone on \*\*\*\*\* or by email to \*\*\*\*\*.

## Appendix 2

### Semi-structured interview schedule

Interviewer \_\_\_\_\_

Respondent \_\_\_\_\_

Respondent's job title \_\_\_\_\_

Company name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Tel \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_

#### Respondent's agenda

- I. Deciding to Outsource
- II. Managing Suppliers
- III. Accounting Implications
- IV. Company Performance

#### Interviewer's agenda

- V. Deciding to Outsource
- VI. Managing Suppliers
- VII. Accounting Implications
- VIII. Company Performance

#### Preamble

This interview is aimed at investigating the ways in which management accounting is influenced by developments in organisational forms. The key issues we are interested in include: the influence of subcontracting on your management accounting systems; the ways in which you manage buyer-supplier relations in the organisation; and the impact that any changes in your organisational form have had on your business performance. We appreciate that you personally may not be in a position to respond to all of the sections we cover, so we shall skip over any that are not relevant.

CIMA, the Chartered Institute of Management Accountants, have sponsored our research, which we are conducting by holding direct meetings with people like you, following the agenda that we sent you earlier. We hope that this study will contribute to our understanding of: why organisations decide to outsource; how the supplier chain is managed; and the impact that outsourcing or subcontracting has on accounting systems and corporate performance. We should like to thank you, in advance, for agreeing to help us in our work.

## I. Deciding to outsource

Outsourcing is an arrangement whereby a third party provider assumes responsibility for performing functions at a pre-determined price and according to predetermined performance criteria.

Section 1 asks you to think about the rationale behind outsourcing your organisation's functions.

1. To what extent are your business activities outsourced?  
(Probe: percentage or number of total business functions; specific examples)

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2. What effect on costs do you hope to see through outsourcing?  
(Probe: Reductions in fixed costs? Economies of scale?)

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3. To what degree is your decision to outsource influenced by your desire to free up more time for concentrating on your core business?

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4. How important is the fact that you are gaining access to specialised skills, when making the decision to outsource?

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5. What impact do you expect the increased flexibility offered by outsourcing to have on your workload?  
(Probe: Outsourcing during peak periods? Savings in fixed costs?)

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6. How do you expect outsourcing to affect accountability in the organisation?  
(Probe: Clarification of responsibilities? Helping management focus on key deliverables? Quality improvement?)

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## II. Managing suppliers

We should now like to discuss the process by which you manage the supply chain within your organisation.

**7.** How do you decide on the size and duration of the contract with specific suppliers?

(Probe: Try small, short-term contracts initially? Long-term contracts tie company down? Disadvantage if changing company direction/strategy? Need for back-out clauses?)

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**8.** How do you manage the supervision and monitoring of contracts?

(Probe: Transaction costs? Administration of tendering? Separate department? Costs allocated to specific contracts?)

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**9.** Can you identify any 'hidden' costs that have occurred through outsourcing?

(Probe: Erosion of staff skills? Other drawbacks?)

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**9.1** What has your organisation done to alleviate the problems this causes?

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**10.** What measures have you put in place to maintain control over the companies that provide outsourcing services for you?

(Probe: Supervisors? Other costs? Imposed changes in accounting systems? Required reporting of financial measures?)

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## II. Managing suppliers continued

11. What impact has outsourcing had on your existing staff?  
(Probe: Disaffected staff? Changing nature of job? Less overtime?)

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12. To what degree do you feel that you have lost some privacy, having decided to outsource?

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13. Have you experienced any breach of confidentiality since outsourcing?  
(Probe: Rights over intellectual property?)

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### III. Accounting implications

We are now going to talk about the influence that your decision to outsource has had on accounting information systems.

14. What types of accounting calculations do you undertake to assist in making the decision to outsource, and in choosing between alternative suppliers?

(Probe: NPV, DCF, breakeven, cost/benefit?)

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15. How have you modified existing accounting practices in order to make your outsourcing decisions?  
(Probe: What has changed in your organisation? Do standard techniques provide adequate analysis? Did company develop own procedures or methods of analysis?)

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- 15.1 Where do your new ideas for accounting practice come from?

(Probe: Consultants? Imitation? Internal development?)

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16. How have the ways in which you use accounting information changed since beginning to outsource?  
(Probe: Change in frequency of reporting; level of reporting; types of decision in which information is used?)

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17. How are management accountants involved in deciding which functions are 'core' activities, and which should or could be outsourced?

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### III. Accounting implications continued

18. How much control or influence does your organisation have over the outsourcing company's accounting system?  
(Probe: Receive management/financial accounts? Suggest changes, e.g. in terms of job or process costing?)

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19. How do you account for the outsourced work in your own management accounts?  
(Probe: Set budgets? Treat each outsourcing as a cost centre?)

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20. How do you evaluate the financial cost/benefit of your outsourced activities?  
(Probe: Treat each contract as a one-off? Continual monitoring of specific tenderers?)

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21. How has your own accounting information system been modified to incorporate the new outsourced activities?  
(Probe: Change in frequency of reporting? Change in nature of reporting? Responsibility? Budgeting? Introduction of new cost centres? Any new techniques?)

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22. If outsourcing contracts break down, what role do management accountants play in evaluating the costs of failure to the company?  
(Probe: Impact of failure on company/departmental performance?)

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## IV Company performance

Finally, we should like to assess the impact that outsourcing has had on the performance of your company.

- 23.** How do you feel the service and/or product(s) your organisation provides have been affected by outsourcing?  
(Probe: Change in quality? Change in financial performance?)

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- 24.** How do you specifically measure the impact of outsourcing on your organisation's performance?  
(Probe: What is regarded as success? Payback periods? Hurdle rates of return? Defined profit level? Bench-marking?)

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- 25.** Could you please indicate on this sheet the degrees to which these various features of your organisation have changed since you started outsourcing.

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- 26.** Finally, can you identify anything that you think you could have done better when setting up the initial outsourcing contract(s)?

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Many thanks for your time. That is the end of our interview. In due course, we might like to come back to you to clear up any query; and will send out copies of the summary results of our findings, once completed. Meanwhile, thanks again for your cooperation.

End of Interview

## Sheet 1 (respondent's copy)

Could you please indicate below the degree to which the following features have improved, or declined, since outsourcing began in your organisation.

The scale runs from -3 (greatly declined), through 0 (stayed the same) to +3 (greatly improved)

please circle choice for each feature (a) to (g)

### Feature

### Nature of change

Greatly  
decreased

Stayed  
the same

Greatly  
increased

(a) Quality of product/service

-3	-2	-1	0	+1	+2	+3
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(b) Extent of cost savings

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(c) Efficiency of management accounting system

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(d) Access to specialised skills

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(e) Degree of flexibility

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(f) Level of accountability

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(g) Financial performance

-3	-2	-1	0	+1	+2	+3
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**Thank you** – please now hand this sheet back to the interviewer.

## Sheet 1 (interviewer's copy)

Could you please indicate below the degree to which the following features have improved, or declined, since outsourcing began in your organisation.

The scale runs from -3 (greatly declined), through 0 (stayed the same) to +3 (greatly improved)

please circle choice for each feature (a) to (g)

### Feature

### Nature of change

Greatly  
decreased

Stayed  
the same

Greatly  
increased

(a) Quality of product/service

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(b) Extent of cost savings

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(c) Efficiency of management accounting system

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(d) Access to specialised skills

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(e) Degree of flexibility

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(f) Level of accountability

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

(g) Financial performance

-3	-2	-1	0	+1	+2	+3
----	----	----	---	----	----	----

## Appendix 3

### Covering letter for questionnaire survey

#### Information for respondents to questionnaire survey

We enclose a questionnaire seeking the views of financial decision-makers in the UK's largest companies on the role of management accountants in processes of organisational change. We emphasise that **all information provided will be treated as confidential**, and should be grateful if you could take time to complete and return the questionnaire.

This research is part of a Cardiff Business School project investigating the role of management accountants in processes of organisational change such as subcontracting and outsourcing. The personnel involved in the project form an interdisciplinary team, drawing on expertise in management accounting and management. The main issues we are examining include:

- How an organisation's decisions about subcontracting and outsourcing are made.
- The influence of subcontracting arrangements on management accounting systems.
- How buyer-supplier relations are managed.
- Whether there is a transfer of accounting and other skills and information between buyer and supplier.
- How these processes affect organisational performance.

CIMA, the Chartered Institute of Management Accountants are sponsoring the project, which includes a series of case studies in addition to the questionnaire survey. The research findings will form a CIMA monograph and article for Financial Management and additional articles in academic and practitioner accounting and management journals.

Please complete this questionnaire and return it to us as soon as possible in the enclosed Freepost envelope. We should be grateful if you could return the completed questionnaire before Date.

We are grateful to you for assisting us in this project.

#### How to complete this questionnaire

Please answer all questions where appropriate by either writing in your answer in the space provided, ticking the appropriate box, or circling the appropriate number.

The questionnaire should not take too long to complete. We would like to assure you that all information provided will be regarded as confidential.

We would be grateful if you could return the completed questionnaire to us in the Freepost envelope as soon as possible.

Thank you in advance for your co-operation.



## Appendix 4

### Private sector mailed questionnaire

#### The questionnaire is divided into five sections:

- I. Company information
- II. The decision to outsource
- III. Managing suppliers and the supply chain
- IV. Accounting implications
- V. The impact on company performance

Please answer as many questions as possible. If you are unable to answer a question, either leave your answer blank or circle the 'irrelevant' response.

### I. Company information

#### 1. Company ownership and background

Please tick in the table below which of the following best describes your company.

Main operations		No. of UK employees	
Manufacturing	<input type="checkbox"/>	0-500	<input type="checkbox"/>
Energy and water	<input type="checkbox"/>	501-1000	<input type="checkbox"/>
Construction	<input type="checkbox"/>	1001-2000	<input type="checkbox"/>
Retail/wholesale	<input type="checkbox"/>	2001-5000	<input type="checkbox"/>
Hotels/restaurant	<input type="checkbox"/>	5001-10,000	<input type="checkbox"/>
Transport/communication	<input type="checkbox"/>	10,001-20,000	<input type="checkbox"/>
Financial services	<input type="checkbox"/>	20,000-30,000	<input type="checkbox"/>
Business/IT services	<input type="checkbox"/>	30,001-50,000	<input type="checkbox"/>
Other (please specify): _____		Over 50,000	<input type="checkbox"/>

#### 2. The extent and form of organisational change

**2.1** On a scale of 1 to 5, where 1 is 'no change', and 5 is 'extreme change', how would you describe the extent of organisational change during the last 3 years?

(please circle the most appropriate response, where 0 indicates that the question is irrelevant)

No change			Extreme change		
0	1	2	3	4	5

**2.2** Which, if any of the following main changes in organisational form have taken place during the last 3 years?  
(tick all that apply)

**Formal/legal changes**Merger/acquisition Demerger/divestment Strategic alliance/partnership With an external company 

Other (please specify): \_\_\_\_\_

\_\_\_\_\_

**Internal changes**Increase in no. of divisions Reduction in no. of divisions Removal of managerial layers Shift to a new structural form Shift to a new structural model 

Other (please specify): \_\_\_\_\_

\_\_\_\_\_

Other comments on change in organisational form: \_\_\_\_\_

\_\_\_\_\_

**2.3** On a scale of 1 to 5, where 1 is 'unimportant' and 5 is 'very important', how important have the following factors been in influencing changes in organisational form?

	Unimportant			Very important		
a) General product market conditions	0	1	2	3	4	5
b) Competition from rival companies	0	1	2	3	4	5
c) Changes in customer demands/tastes	0	1	2	3	4	5
d) New leadership/senior management	0	1	2	3	4	5
e) Focus on core activities	0	1	2	3	4	5
f) Emulation of best practice	0	1	2	3	4	5
g) Reduction of fixed costs	0	1	2	3	4	5
h) Reduction in staffing costs	0	1	2	3	4	5

**2.4** Does your organisation have a specialist Management Accounting (MA) function?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

If yes, how many MA staff are directly employed?

0-5	<input type="checkbox"/>
6-10	<input type="checkbox"/>
11-20	<input type="checkbox"/>
21+	<input type="checkbox"/>

**2.5** Does your organisation use MA consultants?

	Yes	No
a) Have used	<input type="checkbox"/>	<input type="checkbox"/>
b) Currently use	<input type="checkbox"/>	<input type="checkbox"/>
c) Currently use for all MA functions	<input type="checkbox"/>	<input type="checkbox"/>
d) Currently use for all new MA projects	<input type="checkbox"/>	<input type="checkbox"/>
e) Currently use to develop new MA techniques	<input type="checkbox"/>	<input type="checkbox"/>
f) Use as a last resort	<input type="checkbox"/>	<input type="checkbox"/>
g) Plan to use in future	<input type="checkbox"/>	<input type="checkbox"/>
h) Do not plan to use	<input type="checkbox"/>	<input type="checkbox"/>

Other comments:  

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## 2. The main factors in decision-making

**2.1** On a scale of 1 to 5, where 1 is 'unimportant' and 5 is 'very important', how important to you are the following factors in making decisions about what to consider for subcontracting or outsourcing?

	Unimportant			Very important		
a) Reductions in fixed costs	0	1	2	3	4	5
b) Economies of scale	0	1	2	3	4	5
c) Focus on core business	0	1	2	3	4	5
d) Access to specialised skills	0	1	2	3	4	5
e) Improved flexibility	0	1	2	3	4	5
f) Improved organisational accountability	0	1	2	3	4	5
g) Clarification of responsibilities	0	1	2	3	4	5
h) Improvement in quality	0	1	2	3	4	5

Other comments:

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**2.2** Looking at the reasons for contracting-out, which you gave above, how do you distinguish between 'core' and 'non-core' activities or business? (please tick one box only)

- Business strategy
- Adoption of best practice
- Advice from consultants
- Cost of buying compared to cost of producing

Other

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Other comments:

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### III. Managing suppliers and the supply chain

We use the term 'supply chain management' to refer to the co-ordination of all aspects of manufacturing, purchasing, distribution and sales, whether performed within or beyond the organisation.

**1. In deciding on the nature and form of your subcontracting and outsourcing relationships, how strongly do you agree with each of the following statements, where 1 is 'strongly disagree' and 5 is 'strongly agree'?**

(please circle the relevant response, where 0 is 'irrelevant')

	Strongly disagree					Strongly agree
a) It is important to try small, short-term contracts until we get to know our suppliers better	0	1	2	3	4	5
b) Long-term contracts tie the company down and are too restrictive	0	1	2	3	4	5
c) Being tied into contracts is a disadvantage if we want to change our company strategy/direction	0	1	2	3	4	5
d) We need to incorporate back-out clauses in case we are unhappy with suppliers	0	1	2	3	4	5
e) The administration/transaction costs of monitoring contracts are burdensome	0	1	2	3	4	5
f) We need to modify our existing administration practices for our outsourced functions	0	1	2	3	4	5
g) We treat every outsourcing supplier as a separate cost centre	0	1	2	3	4	5
h) Outsourcing has led to an erosion of staff skills within our company	0	1	2	3	4	5
i) We have employed supervisors to oversee our outsourced functions	0	1	2	3	4	5
j) We impose changes on our outsourced suppliers' accounting systems	0	1	2	3	4	5
k) We require regular reporting of financial measures from our outsourced suppliers	0	1	2	3	4	5
l) Our existing staff are unhappy with our decision to outsource	0	1	2	3	4	5
m) Our existing staff have experienced a change in the nature of their job since we started to outsource	0	1	2	3	4	5
n) Since we started to outsource, we feel we have lost some privacy	0	1	2	3	4	5
o) Since we started to outsource, we have suffered a breach of confidentiality	0	1	2	3	4	5

Other comments:

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## IV. Accounting implications

### 1. Accounting techniques

1.1 How important are each of the following methods or techniques when you are assessing the decision to outsource, and/or choosing between alternative suppliers?

(Please circle the relevant response, where 1 is 'unimportant', 5 is 'very important and 0 is 'irrelevant')

	Unimportant			Very important		
a) Net Present Value (NPV) analysis	0	1	2	3	4	5
b) Discounted Cash Flow (DCF)	0	1	2	3	4	5
c) Breakeven analysis	0	1	2	3	4	5
d) Cost-benefit analysis	0	1	2	3	4	5
e) Payback period	0	1	2	3	4	5
f) Other: _____	0	1	2	3	4	5

1.2 Do you use any key non-financial measurements or calculations in your MA approach?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

If yes, please tell us about these measurements or calculations.

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 2. Changes in accounting systems

2.1 How strongly do you agree with each of the following statements, which inquire into the nature of change in your accounting systems since you began to outsource, where 1 is 'strongly disagree', 5 is 'strongly agree' and 0 is 'irrelevant'?

	Strongly disagree			Strongly agree		
a) We have had to make major changes in our MA systems	0	1	2	3	4	5
b) Standard accounting techniques provide adequate analysis for our organisation	0	1	2	3	4	5
c) We have had to develop our own methods of analysis to cope with outsourced contracts	0	1	2	3	4	5
d) Our new ideas for MA come from hired consultants	0	1	2	3	4	5
e) Our new ideas for MA come from imitating other organisations	0	1	2	3	4	5
f) Our new ideas for MA have been developed internally	0	1	2	3	4	5
g) There has been a change in the types of decision for which MA information is used	0	1	2	3	4	5
h) Deciding which functions are 'core' and which should be outsourced depends largely on cost considerations	0	1	2	3	4	5
i) We exert considerable control over our outsourcing suppliers' accounting systems	0	1	2	3	4	5
j) We set budgets as part of our master budget for each outsourced activity	0	1	2	3	4	5
k) We treat each contract as a one-off	0	1	2	3	4	5
l) We see our outsourced suppliers as on-going 'partners'	0	1	2	3	4	5
m) We evaluate each contract primarily in financial terms	0	1	2	3	4	5
n) We are continually monitoring our outsourced suppliers	0	1	2	3	4	5



**2.2** To what extent have the following changes and effects on MA taken place since you began to outsource and subcontract?

(please circle the relevant response, where 1 is 'not at all', 5 is 'greatly' and 0 is 'irrelevant')

	Not at all					Greatly
a) We have changed the frequency of reporting	0	1	2	3	4	5
b) We have increased the level of detail in our reporting	0	1	2	3	4	5
c) We have increased the level of responsibility of those staff involved in reporting	0	1	2	3	4	5
d) We have modified our budgeting processes	0	1	2	3	4	5
e) We have introduced new cost centres to account for outsourced activities	0	1	2	3	4	5
f) We have developed new MA techniques and measurements to cope with new requirements	0	1	2	3	4	5
g) MA staff are involved in evaluating the costs of a failure in contractual relationships	0	1	2	3	4	5
h) We make specific calculations on the cost of contractual failure on company performance	0	1	2	3	4	5
i) There has been a significant transfer of accounting skill and information to suppliers	0	1	2	3	4	5

Other comments:

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## V. The impact on company performance

Finally, we should like you to assess the impact that outsourcing and subcontracting has had on the performance of your company.

1. How strongly do you agree with each of the following statements which inquire into the impact that outsourcing has had on your company, where 1 is 'strongly disagree', 5 is 'strongly agree', and 0 is 'irrelevant'?

### Outsourcing/subcontracting has improved:

	Strongly disagree					Strongly agree
a) The quality of our product/service to customers	0	1	2	3	4	5
b) Our financial performance	0	1	2	3	4	5
c) Our access to specialised skills	0	1	2	3	4	5
d) Our company responsiveness/flexibility	0	1	2	3	4	5
e) The extent of our cost savings	0	1	2	3	4	5
f) Our MA systems	0	1	2	3	4	5

### We measure the success of our outsourcing contracts:

g) In financial terms	0	1	2	3	4	5
h) Against a predetermined profit level	0	1	2	3	4	5
i) By benchmarking against industry norms	0	1	2	3	4	5
j) By benchmarking against competitors	0	1	2	3	4	5
k) By benchmarking against 'best practice'	0	1	2	3	4	5
l) We are happy that we have the best possible contracts with our outsourced suppliers	0	1	2	3	4	5

Other comments:

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**Thank you for completing this questionnaire. Please now return it in the envelope provided.**

CIMA (The Chartered Institute of Management Accountants) represents members and supports the wider financial management and business community. Its key activities relate to business strategy, information strategy and financial strategy. Its focus is to qualify students, to support both members and employers and to protect the public interest.

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